

The Myanmar JOURNAL

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Letter from the Editor-in-Chief

Myanmar and Korea have many similarities and are complementary relationship. Therefore, we believe that research exchange will expand mutual understanding between Myanmar and Korea, and will be the cornerstone for mutual development.

KOMYRA and YUE have co-published The Myanmar Journal since August 2014. So far, many scholars have published numerous papers through the journal, and We are sure that this journal has helped many people understand Myanmar and Korea more clearly and closely.

The Myanmar Journal covers various issues in Myanmar and Korea. It covers various topics that can promote bilateral development and mutual understanding, not limited to specific topics such as economy, industry, society, education, welfare, culture, energy, engineering, healthcare, and agriculture.

We hope that this journal will continue to promote understanding of the current status and potential capabilities of Myanmar and South Korea and promote in-depth international exchange and cooperation.

We would like to express our deepest gratitude to the editorial board and YUE and KOMYRA for their valuable support in The Myanmar Journal publication.

February 28, 2021

Youngjun Choi *yj choi*

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The Myanmar Journal (ISSN 2383-6563) is the official international journal co-published by Yangon University of Economics (YUE) and Korea Myanmar Research Institute (KOMYRA).

This journal aims to promote the mutual cooperation and development of Myanmar and Korea through intensive researches in the entire field of society, economy, culture, and industry.

It will cover all general academic and industrial issues, and share ideas, problems and solution for development of Myanmar.

Articles for publication will be on-line released twice a year at the end of February and August every year on the Myanmar Journal webpage (http://www.komyra.com/bbs/board.php?bo_table=articles).

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The Impact of Korean Wave on Consumer's Purchase Intention of Korean Cosmetics in Myanmar

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ABSTRACT : The Korean Wave has become an influential global phenomenon since the start of the 21st century, heavily impacting the contemporary cultures, music industry, film industry, television industry, and behavioral aspects of various people throughout the world. The data used in this study are primary data, and gathered through a questionnaire method. Two hundred and twenty-five data were collected from women in Yangon, Myanmar. For data analysis, descriptive and linear regression analysis were used. The results show that the Korean wave except sympathy from Korean drama has a positive impact on country image of Korea, the country image of Korea has impact on attitudes towards Korean brands awareness among Myanmar consumers, brand awareness of Korean cosmetics has impact on brand equity and brand equity of Korean cosmetics has impact on purchase intention of Myanmar consumers. Thus, Korean wave can be a soft power of Korea which drive up country image and exports. These findings can be used as guidelines to maintain the Korean government and Korean companies for sustainable growth of industries related to Korean wave.

Key words : *Korean Wave, Korean Cosmetics, Purchase Intention, Country of Image*

I. Introduction

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Globally, Hallyu wave or Korean wave is becoming more popular. The Korean Wave (*hallyu* in Korean) refers to Korean popular culture, such as, TV dramas, movies, pop music which has got enormous popularity abroad since the late 1990s (Shim, 2006). The influence of Hallyu wave appeals world humanity to know more about Korean Culture, especially South Korean. The phenomenon of Hallyu wave not only benefit South Korean music industry, but also other industries such as electronic industry, cosmetics, television show, film industry, fashion and culinary. A lot of people especially women have interested in Korean cosmetics since they would like to be attractive just like Korean stars (Gaffar & Gautama, 2015). This is an opportunity for Korean cosmetic industry to expand their market in Myanmar. Nowadays, there are many Korean cosmetics brand enter Myanmar market, such as The Face Shop, TONYMOLY and Nature Republic and etc.

The following objectives are developed for this study:

- (i) To analyze the impact of Korean wave on country image of Korea.
- (ii) To analyze the impact of country image of Korea on attitudes towards Korean brands awareness among Myanmar consumers.
- (iii) To analyze the impact of brand awareness on brand equity among Myanmar consumers.
- (iv) To analyze the impact of brand equity on purchase intention among Myanmar consumers.

II. RESEARCH FRAMEWORK AND METHOD

1. Research Framework

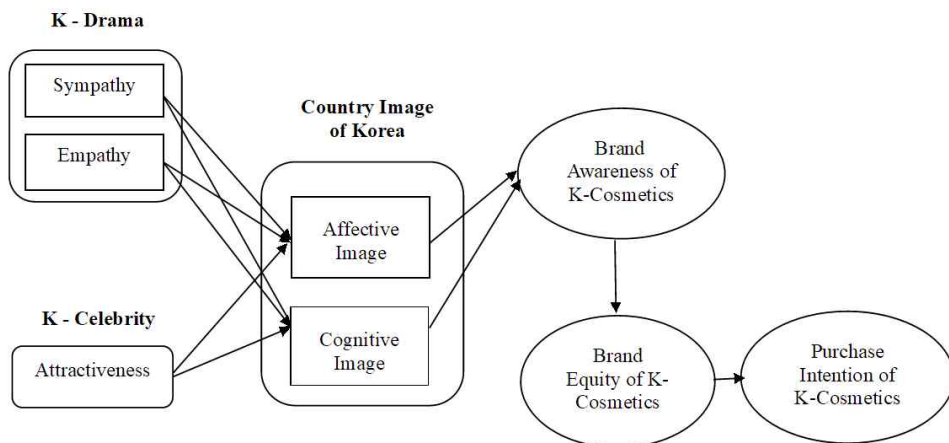


Figure 1. Conceptual Framework of the Study (Adapted from Sunmi Son, 2015)

Based on previous empirical studies, the conceptual framework was developed. The framework is shown in Figure 1.

2. Research Method

Target population of this study are women in Yangon, Myanmar. The samples of this study were collected from Myanmar consumers aged 20-35s, in Yangon showed relatively high tendency to buy and use Korean cosmetics. Convenience sampling was used for this study. The data were collected through a questionnaire method. There were 300 questionnaires distributed among target population in Yangon, Myanmar. Finally, 225 samples were used for this study.

The questionnaires are consisted of seven sections that represent screening question, Korean drama, Korean celebrity, Korea, Korean cosmetic brand, the purchase intention of Korean cosmetics and demographic factors. The Korean wave were adopted from previous studies such as Kim, Cho, & Jung (2014) and Spry, Pappu, & Cornwell (2011). Country image was adopted from Laroche, Papadopoulos, Heslop, & Mourali (2005), brand awareness and brand equity were adopted from Yasin, Noor, & Mohamad (2001) and purchase intention was adopted from Buil, Martinez, & Chernatony (2013). Each variable is measured by four-five items and there are total of 41 questions. A five-point Likert scale was applied to all measures ranging from (1) strongly disagree to (5) strongly agree. For screening question and demographic factors were not with Likert scales type.

Data were analyzed using the Statistical Packages for the Social Science version 25 (SPSS 25). The study used both descriptive and linear regression analysis to arrive at conclusion and recommendation.

III. FINDINGS

1. Respondents' Demographics

All of the two hundred and twenty-five respondents were females, 92.9 percent of them were single and 7.1 percent of them were married. About 90.2 percent were between the ages of 18-25 years old and 9.8 percent were 26-35 years old.

2. Reliability Test

The purpose of reliability test is to ensure the questions of each variable are

consistent.

Table 1 Reliability Test Results

Variables	No. of Items	Cronbach's Alpha
Sympathy form K-drama	5	0.793
Empathy form K-drama	5	0.790
Attractiveness of K-celebrities	5	0.833
Affective image of Korea	4	0.877
Cognitive image of Korea	4	0.751
Brand awareness of K-cosmetics	4	0.844
Brand equity of K-cosmetics	4	0.867
Purchase intention of K-cosmetics	4	0.903

Source: Survey Data (2019, December)

According to Table 1, all variables' values are greater than 0.6 that all answers to the questions are consistent and reliable enough to be utilized as the research instrument in this study.

3 Regression Analysis

1) Impact of Korean Wave on Country Image of Korea

In this study, multiple regression analysis was executed to analyze the impact of Korean Wave (sympathy and empathy from Korean drama and the attractiveness of Korean celebrity) on affective image of Korea. The results are presented in Table 2.

Table 2 Impact of Korean Wave on Affective Image of Korea

Variable	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	.871	.306	2.845	.005
Sympathy	.059	.084	.701	.484
Empathy	.298***	.063	4.759	.000
Attractiveness	.379***	.073	5.213	.000
R ²	.307			
Adjusted R ²	.298			
F-value	32.636			***

Source: Survey Data (2019, December)

As shown in the Table, it has been seen that two out of three variables are strongly significant at 1 percent level of confident interval. The regression model can be explained about 29 percent. According to results, empathy from k-drama and attractiveness of K-celebrities emerged as the significant variables in explaining affective image of Korea. Attractiveness of K-celebrities had the strength impact on affective image of Korea with a standardized coefficient beta of 0.379.

In this study, multiple regression analysis was executed to analyze the impact of Korean Wave (sympathy and empathy from Korean drama and the attractiveness of Korean celebrity) on cognitive image of Korea. The results are presented in Table 3.

Table 3 Impact of Korean Wave on Cognitive Image of Korea

Variable	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	1.940	.285	6.807	.000
Sympathy	-.026	.078	-.335	.738
Empathy	.162***	.058	2.788	.006
Attractiveness	.349***	.068	5.150	.000
R ²			.202	
Adjusted R ²			.192	
F-value			18.702	***

Source: Survey Data (2019, December)

As shown in the Table, it has been seen that two out of three variables are strongly significant at 1 percent level of confident interval. The regression model can be explained about 19 percent. According to results, empathy from k-drama and attractiveness of K-celebrities emerged as the significant variables in explaining cognitive image of Korea. Attractiveness of K-celebrities had the strength impact on cognitive image of Korea with a standardized coefficient beta of 0.349.

2) Impact of Country Image of Korea on Attitudes Towards Korean Brands Awareness

In this study, multiple regression analysis was executed to analyze the impact of country image of Korea on attitudes towards Korean brands awareness of among Myanmar consumers. The results are presented in Table 4.

Table 4 Impact of Country Image of Korea on Attitudes Towards Korean Brands Awareness

Variable	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	1.585	.306	5.178	.000
Affective Image	.296***	.074	3.987	.000
Cognitive Image	.230***	.086	2.684	.008
R ²			.168	
Adjusted R ²			.160	
F-value			22.369	***

Source: Survey Data (2019, December)

Results of regression analysis indicated that much of the variation of the dependent variable is explained with adjusted R² = 0.160 and F-value 22.369 (p<0.01) with two independent variables. Adjusted R² reveals that 16 percent of total variance of consumer attitudes towards Korean brands awareness is explained by country image of Korea.

At the first glance, it seems that R2 of model is rather low. However, unlike time series data R2 of the regression model on cross-section data of this type are normally low between 0.10 and 0.40 as cited in the following paragraph.

"Microeconomic household behavior is very difficult to explain. With cross-sectional data, R2 values from 0.10 to 0.40 are very common even with much larger regression models. Macroeconomic analyses using time-series data, which often trend together smoothly over time, routinely report R2 values of 0.90 and higher. You should not evaluate the quality of the model based only on how well it predicts the sample data used to construct the estimates. (Hill, Griffiths, & Lim, 2018, Principles of Econometrics. 5th ed, pg. 159)"

According to results, affective image and cognitive image of Korea emerged as the significant variables in explaining brand awareness of K-cosmetics.

3) Impact of Brand Awareness on Brand Equity

Simple linear regression was analyzed the impact of brand awareness on brand equity among Myanmar consumers. The result is shown in following Table.

Table 5. Impact of Brand Awareness on Brand Equity

Variable	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	1.483	.208	7.128	.000
Brand Awareness	.538***	.058	9.358	.000
R ²	.282			
Adjusted R ²	.279			
F-value	87.578		***	

Source: Survey Data (2019, December)

Table 5 shows that the value of R square is 0.282 that means brand awareness of K-cosmetics explained 28.2 percent variance in brand equity among Myanmar consumers. The p value was less than 0.05 that means independent variable were significant to predict dependent variable. The results demonstrate that brand awareness of K-cosmetics have positive and significant relationship with brand equity among Myanmar consumers.

4) Impact of Brand Equity on Purchase Intention

Simple linear regression was analyzed the impact of brand equity on purchase intention among Myanmar consumers. The result is shown in following Table.

Table 6. Impact of Brand Equity on Purchase Intention

Variable	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
(Constant)	.813	.150	5.400	.000
Brand Equity	.776***	.043	17.915	.000
R ²	.590			
Adjusted R ²	.588			
F-value	320.931		***	

Source: Survey Data (2019, December)

Table 6 shows that the value of R square is 0.590 that means brand equity of K-cosmetics explained 59 percent variance in purchase intention of K-cosmetics among Myanmar consumers. The p value was less than 0.05 that means independent variable were significant to predict dependent variable. The results demonstrate that brand equity of K-cosmetics have positive and significant relationship with purchase intention among Myanmar consumers.

IV. CONCLUSION

This study revealed that empathy from Korean drama and attractiveness of Korean celebrities had a significant impact on country image. Additionally, the country image of Korea had a significant impact in attitudes towards Korean brand awareness among Myanmar consumer. And then, brand awareness of Korean cosmetics had a significant impact on brand equity. This study showed that the purchase intention can be improved by increasing brand equity.

Korean government has been focusing the impact of Korean wave. By using attractiveness and popularity of Korean celebrities, Korean government and companies can find more successful channels. Positive country image exalted by Korean wave is worth much in itself, and furthermore it can promote Korean products. Possibly Korean government will able to upgrade country image by supporting Korean wave. For higher awareness, brand has to be recognized easily and quickly. Korean companies can use popular Korean celebrities for commercial advertisement. Influencing of Korean wave, Myanmar consumers would love to appreciate Korean cosmetics and Korean cosmetics company also get an opportunity to use positioning strategies.

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Influencing Factors on Consumer Satisfaction of Satt Kyar Min Hypertensive Drug

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ABSTRACT: This study is about the influencing factors on consumer satisfaction of Satt Kyar Min Hypertensive Drug in Nay Pyi Taw. The objectives of the study are to explore the influencing factors on consumer satisfaction of Satt Kyar Min Hypertensive Drug and to analyze the influencing factors on consumer satisfaction of Satt Kyar Min Hypertensive Drug. The proposed ECSI model (perceived quality, perceived value, consumer expectation and corporate image) which influenced on consumer satisfaction are considered in this study. This study uses both primary and secondary data. Primary data were collected from 200 consumers who use Satt Kyar Min Hypertensive Drug in Nay Pyi Taw by simple random sampling method. Descriptive statistics, Pearson correlation and multiple regression analysis were used to analyze the data. Before the main analysis, the consumer perception on the four influencing factors was explored based on the mean values. Consumer expectation is the largest mean value among four influencing factors. The correlation coefficient results revealed that all factors have positive correlation with consumer satisfaction. Multiple regression analysis proved that all of four influencing factors had significant positive and moderate correlation with consumer satisfaction. Multiple regression analysis also showed that perceived quality, perceived value, consumer expectation and corporate image had the significant effect on consumer satisfaction. Perceived quality, consumer expectation and corporate image are significant at 1% level while perceived value is significant at 10% level. Corporate image was the most significant factor among four influencing factors. These results provide Satt Kyar Min to focus on the weakness of perceived value and to maintain on corporate image to get more consumer satisfaction.

Key words : *Perceived Quality, Perceived Value, Consumer Expectation, Corporate Image*

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I. Introduction

Nowadays, consumers have become more critical in their choices and show increased interest in many diverse attributes of the products. Fulfilling their requirements and satisfaction is one of the most important issues of every company on the market. Customer satisfaction creates value for customer, in short supervision of their hopes and to fulfill their requirements (Guzzo, 2010). Every business organization's success depends on the satisfaction of the customers. Whenever a business is about to start, customers always come "first" and then the profit will. Those companies that are succeeding to satisfy the customers fully will remain in the top position in a market. Customer satisfaction has become important factor which determines business success. Growth of any company depends on the specifics that they understand the needs of consumers and satisfy them in good manners. It is necessary to have clear idea about what customer wants and what will give them maximum satisfaction (Maiyaki et al., 2011).

Consumers of this millennium have become more concerned about their health and also inclined to maintain quality of life which is reflected through the preferential consumption of those products that protect the good state of their health as well as provide maximum satisfaction. In pursuit of a healthy lifestyle, Myanmar has become more inclined to Herbal therapy as alternative healthcare for natural cure. Herbal therapy is catching everyone's imagination very fast and promise to be the next big thing in the medical and wellness industry.

Pharmaceutical corps (Traditional Medical Products Co, Ltd), as a very rapid growing sector in Myanmar to comply with the global competition, has to upgrade themselves and also need to use modern sophisticated strategies. Satt Kyar Min Co., Ltd which got ISO certificates and produces traditional medical products, driving to achieve sustainable development. In this study, there has been a need to recognize the customer's expectation, perceived value, perceived quality and corporate image that covers customer satisfaction analysis toward the product provided by "Satt Kyar Min Hypertensive Drug".

While competition in pharmaceutical markets is currently developing rapidly, competition exists between the pharmaceutical industries to retain their existing customers and to reach maximum number of new customers. Because of this competition, customer satisfaction plays an important role of in the retention of the existing customers in the industry. This is done by offering a wide range of high quality products that are efficient, cost effective and competitive to Satt Kyar Min Hypertensive Drug. Health is the most valuable thing in our life. The health care products are very essential for human beings. There has been a huge comeback of

Traditional Medicine in Myanmar not merely as a health care system to treat ailments but a complete philosophy that encourages the pursuit of a healthy lifestyle. The traditional medical products are especially based on organic elements, herbal medicine and nowadays people in Myanmar use Traditional medical products widely. Furthermore, Myanmar has been quite proud of their rich cultural heritage and the science of treatment with herbal products is a natural phenomenon in many Myanmar households. This study is done to get an idea of customer satisfaction; the company has not carried out any big research studies before. That is one reason why I found it interesting to do this research just for Satt Kyar Min Co., Ltd.

1. Objectives of the Study

The objectives of the study are as follows:

- (i) To identify the influencing factors on consumer satisfaction of Satt Kyar Min Hypertensive Drug.
- (ii) To analyze the effects of influencing factors on consumer satisfaction of Satt Kyar Min Hypertensive Drug.

2. Scope and Methods of the Study

This study emphasizes on influencing factors on consumer satisfaction of Satt Kyar Min Hypertensive Drug. This research was used descriptive research method. Data were gathered through both primary and secondary data source. Primary data were collected with structured questionnaire which includes general questions about consumer profile, influencing factors and consumer satisfaction. In this questionnaire, Five-point Likert scale was applied. The data collection period was during February, 2020. The survey was based on 200 respondents who have been using Satt Kyar Min Hypertensive Drug. Respondents were selected by simple random sampling method. Secondary data were gathered from relevant textbooks, previous research papers, Internet websites and other sources. Descriptive statistics was used to describe the profile of the respondents. Multiple regression analysis was used to explore the effects of influencing factors on consumer satisfaction of Satt Kyar Min Hypertensive Drug in Nay Pyi Taw.

II. Theoretical Background

Influencing factors on consumer satisfaction are perceived quality, perceived value,

consumer expectation and corporate image.

1. Perceived Quality

It is observed that customer satisfaction is dependent on perceived quality and has a positive role towards this dependence. Hence, proper care should be taken while formulating any long term policy for customer satisfaction. Perceived quality is then based on market evaluation of recent consumption experience. This construct appraises customization and reliability of a given product or service. Customization is the degree to which a product or service meets a customer's requirements, and reliability is the degree to which a firm's offering is reliable, standardized and free from defects. Fornell (1996) expressed that satisfaction is a consequence of service quality. Perceived quality is defined as the rank to which a product or service provides key customer requirements (customization) and how reliably these requirements are delivered (reliability). It is often measured through three measures: overall quality, perceived reliability, and the extent to which a product or service meets the customer's needs. Customer perceptions of quality are the single greatest predictor of customer satisfaction. Based on the above discussion perceived quality can be defined as the overall judgment of the service quality which is received from the company mobile provider.

2. Perceived Value

Perceived value has its root in equity theory, which considers the ratio of the consumer's outcome/input to that of the service provider's outcome/input (Oliver and DeSarbo, 1988). It is a kind of gain where a customer obtains in return for the paid cost (Gallarza and Sorae2006). It is a strategic instrument to attract and retain customers based on important factors for the success of industrial corporations and service providers. Consumer compared benefit received with cost in order to compare with competitors. When supposed value meets the need and want of the customer then customer feel value and want to reuse the product. When the supposed value is less than the expectation then the customer loyalty is decreased. Perceived value is the evaluation of the price paid for the excellence. Quality is measured in terms of the product efficiency. Perceived value arrangement provides a chance for contrast of the firms according their price-value ratio.

3. Customer Expectation

Expectations are the consequences of previous experience with the company's products or services. This raises customer expectations for overall quality, in product and service quality, and for fulfillment of personal needs. Customer expectations' construct is anticipated to have a direct and positive relationship with customer satisfaction. Customer expectations are the belief about service delivery that serves as standard or reference points against which performance is judged. Customer expects some level of service quality from a service provider during the transaction, therefore customer's opinion about the quality standards and also what kind of standard customer expect are essential to know Zeithaml et al. (2009).

4. Corporate Image

Talking about the image (image), usually involves the image of the product, company, brand, party, person or whatever is formed in someone's mind according to Zeithaml, image is the emission or reproduction of identity or the form of individuals, objects or organizations. In other words, corporate image creates a halo effect on customer satisfaction. In other words, corporate image creates a halo effect on customer satisfaction (Andreassen T and Lindestad, 1998). Furthermore, there are 5 types of images namely: shadow image, expected image, corporate image, and multiple images. Among them, corporate image is the image of an organization as a whole, so it's not just an image of its products and services. The image construct appraises the fundamental image of the company. Image applies to the brand name and the type of association customers get from the product/company. For the companies, image is a result of being reliable, professional and inventive, having contributions to society, and adding good reputation to its customers. It is expected that image has a positive effect on customer satisfaction. Wang (2010). posited that corporate image, through a filtering effect, impacts a customer's evaluation of service quality, value, and satisfaction. In this study corporate image can be defined as the image of the company service provider which that influence the customer perception.

III. Research Design

The study follows descriptive research. There are two main categories for the methods of collecting data, such as quantitative and qualitative. Primary data were collected from 200 consumers of by simple random sampling method. The questionnaire was developed from previous literature. The study includes four influencing factors as independent variables and customer satisfaction as a dependent

variable. In this study, five-point Likert scale was used to collect primary data. After conducting the survey, the collected data were processed and analyzed by using SPSS version 23. Correlation analysis was used to analyze the relationship between influencing factors and consumer satisfaction. Multiple regression analysis was used to analyze the effects of customer satisfaction on influencing factors.

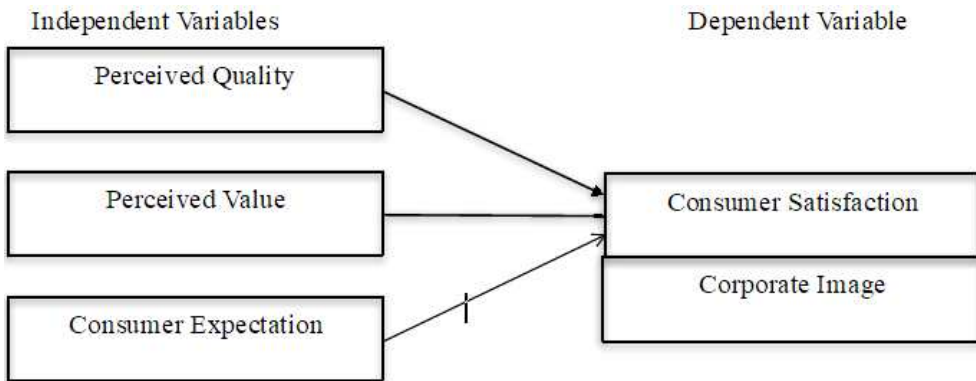


Figure 1. Conceptual Framework

1. Respondents' Demographic Profile

Demographic characteristics of the respondents are analyzed by gender, age, education level and occupation.

Table 1, Demographic Characteristics of the Respondents (N= 200)

Sr. No.	Statement	Category	Frequency	Percentage
1	Gender	Male	95	47.50
		Female	105	52.50
2	Age (Years)	Under 50 and 50	49	24.50
		51-60	74	37.00
		61- 70	70	35.00
		above 70	7	3.50
3	Education	High School Level	41	20.50
		University Level	45	22.50
		Graduate Level	90	45.00
		Post Graduate Level	24	12.00
4	Occupatio	Staff	44	22.00
		Owners of Business	50	25.00

	n	Managers	31	15.50
		Dependent	75	37.50

Source: Survey Data (February, 2020)

As shown in Table (1), gender can be classified into two groups, male and female. 47.50 percent of respondents are male and 52.50 percent of respondents are female. This means that respondents can be assumed more in females, rather than males. By the age of respondents, 24.50 percent of respondents are under 50 and 50 years, 37 percent of respondents are between 51 and 60 years, 35.00 percent of respondents are between 61 and 70 years and 3.50 percent of respondents are above 70 years. Therefore, it is found that age between 51 and 60 years is more than any other group.

The education level of respondents is categorized into four groups. They are high level, university level, graduate level and post graduate level. 20.50 percent of respondents are high school level, 22.50 percent of respondents are university level, 45.00 percent of respondents are graduate level, 12.00 percent of respondents are post graduate level. Thus, it can be assumed that most of respondents are graduate level.

According to survey data, occupation is categorized into four distinct groups. They are staff, owners of business, managers and dependent. 22.00 percent of respondents are staff, 25.00 percent of respondent are owners of business, 15.50 percent of respondents are manager and 37.50 percent of respondents are dependent. Therefore, it is shown that most of respondents are dependent. The frequency of usage of respondents are shown in Table 2.

Table 2, Respondents by Frequency of Usage

Sr. No.	Statement	Number of Respondents	Percentage
1	Once a day	95	47.50
2	Twice a day	51	25.50
3	Thrice a day	20	10.00
4	Once every two days	15	7.50
5	Few times a month	19	9.50
	Total	200	100.00

Source: Survey Data (February, 2020)

According to Table (2), majority of 95 respondents with 47.50 percent use Satt Kyar Min Hypertensive Drug once a day, 25.50 percent use twice a day, 10.00 percent use thrice a day. 7.50 percent use once every two days and 19 respondents with 9.50 percent use few times a month. Therefore, it can be concluded that most of respondents use Hypertensive Drug once a day.

Table 3, Respondents by Recommendation

Sr. No.	Statement	Number of Respondents	Percentage
1	Friends	77	38.50
2	Family	67	33.50
3	Relatives	25	12.50
4	Myself	31	15.50
	Total	200	100.00

Source: Survey Data (February, 2020)

According to Table (3), 77 respondents take the drug by the recommendation of friends are 38.50% and 33.50% of the respondents take the drug by the recommendation of family and 12.5% take the drug by recommendation of relatives. Respondents who take the drug by own decision are 15.50%. It can be concluded that the respondents take the drug by recommendation of friends is the most.

2. Reliabilities Analysis of Variables

In the reliability testing, this study uses Cronbach's Alpha that proves to be the most accurate method. Reliability values of the variables are described in Table (4).

Table 4, Reliabilities of the Variables

Sr. No.	Variables	Number of items	Cronbach's Alpha
1	Perceived Quality	9	0.703
2	Perceived Value	10	0.779
3	Consumer Expectation	10	0.873
4	Corporate Image	8	0.770
5	Customer Satisfaction	6	0.708

Source: Survey Data (February, 2020)

In Table (4), the results of reliability analysis of the variables shows that all items each variable support the acceptable level of reliability test. Perceived quality of Satt Kyar Min Hypertensive Drug is measured in 9 statements. Perceived value and consumer expectation are measured in 10 statements each. Corporate image is measured in 8 statements. Consumer satisfaction is measured in 6 statements. Based on Table (4), it shows that the coefficient alpha values of perceived quality and perceived value are 0.703 and 0.779 respectively. The coefficient alpha values of consumer expectation and corporate image are 0.873 and 0.770 respectively. The Cronbach Alpha value of consumer satisfaction is 0.708. Since all measured variables are higher than 0.6, all measured variables are consistent and reliable

3. Summary of Consumer Perception on Influencing Factors

Overall mean value of perceived quality, perceived value, consumer expectation and corporate image are presented in Table (5).

Table 5, Summary of Customer Perception on Influencing Factors

Sr. No.	Description	Overall Mean Value
1	Perceived Quality	3.74
2	Perceived Value	3.94
3	Consumer Expectation	4.16
4	Corporate Image	3.63

Source: Survey Data (February, 2020)

According to Table (5), the most influencing factor on consumer satisfaction is consumer expectation having maximum mean value 4.16. It can be concluded that the consumers expect Satt Kyar Min Hypertensive drug to be effective, to be safe, to be potent, to have very few side effects and to find good quality products. Moreover, consumers expect to be more effective than the indicated diseases. It can be concluded that consumer expectation is the most influence factor on consumer satisfaction among 4 items. The mean value of perceived value is 3.94 and the consumers agreed Satt Kyar Min Hypertensive Drug as a good product for the price, reasonable price and economical. The consumers also agreed the Satt Kyar Min Hypertensive Drug would improve the way perceived. It can be concluded that perceived value is also influenced on consumer satisfaction. Overall mean value of perceived quality is 3.74. It can be concluded that Satt Kyar Min Hypertensive Drug uses active ingredients, packaging (size, color, number in tablets, quality material) is effective for maintaining humidity, overall perceived quality is effective for taking the drug and it also gets the ISO certificates and traditional medicine registration. The consumers agreed the perceived quality of Satt Kyar Min Hypertensive Drug is reliable. Corporate image has the least mean value 3.63. Although the consumers agreed the Satt Kyar Min Co., Ltd is innovative and pioneering, believable and accurate, sincere and trustworthy, open and responsive to consumers, whether organization is providing environmental protection or not. It can be concluded that the corporate image of Satt Kyar Min Hypertensive Drug is reliable.

4. Correlation between Influencing Factors and Consumer Satisfaction of Satt Kyar Min Hypertensive Drug

The results of the correlations of the variables are shown in Table (6).

Table 6, Correlation between Influencing Factors and Consumer Satisfaction

Sr. No.	Description	Person Correlation	
		Coefficient	P-value
1	Perceived Quality	0.503**	0.000
2	Perceived Value	0.477**	0.000
3	Consumer Expectation	0.455**	0.000
4	Corporate Image	0.499**	0.000

Source: Survey Data (February, 2020)

**Correlation is significant at the 0.01 level (2-tailed)

Dependent variable: Consumer Satisfaction

According to Table (6), the influencing factors and consumer satisfaction are significant at 0.01 levels. Since, values of Pearson correlation of perceived quality, perceived value, consumer expectation and corporate image are 0.503, 0.477, 0.455 and 0.499 respectively, it can be concluded that all the variables are positive relationship with consumer satisfaction. Moreover, the values of Pearson correlation are between 0.3-0.7, it can be concluded that all four variables are moderately correlated with consumer satisfaction. The correlation results highlight that the factor, perceived quality, is the most related on consumer satisfaction.

5. Multiple Regression Analysis of Influencing Factors on Consumer Satisfaction

The results of multiple regression analysis are shown in Table (7).

Table 7. Results of Multiple Regression Analysis of Influencing Factors on Consumer Satisfaction

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.059	1.287		3.153	0.002
Perceived Quality	0.142**	0.041	0.217	3.418	0.001
Perceived Value	0.051*	0.031	0.112	1.664	0.098
C u s t o m e r Expectation	0.115**	0.024	0.297	4.809	0.000
Corporate Image	0.231**	0.043	0.312	5.400	0.000
R					0.683
R ²					0.467
Adjusted R ²					0.456

Source: Survey Data (February, 2020)

**= Significant at 1% level, *= Significant at 10% level

Dependent Variable: Consumer Satisfaction

According to Table (7), the results of multiple regression analysis showed that the perceived quality ($\beta=0.142$, $t=3.418$, $p < 0.01$), consumer expectation ($\beta=0.115$, $t=4.809$, $p < 0.01$), corporate image ($\beta=0.231$, $t=5.400$, $p < 0.01$) were significant and

had a positive impact on consumer satisfaction at 99% confidence level. The result of perceived value is ($\beta=0.051$, $t=1.664$, $p < 0.10$) and it is found that perceived value has positive effect but it is significant to influence consumer satisfaction at 99% confidence interval. Therefore, it can be concluded that all the variables had a positive influence on consumer satisfaction. Perceived quality, consumer expectation and corporate image have a significant influence at 1% significant level while perceived value is positively significant at 10% significant level.

IV. Findings and Discussions

This study attempts to explore the influencing factors on consumer satisfaction of Satt Kyar Min Hypertensive Drug in Nay Pyi Taw. The second objective of the study is to analyze the influencing factors on consumer satisfaction of Satt Kyar Min Hypertensive Drug in Nay Pyi Taw. The influencing factors of consumer satisfaction play an important role in pharmaceutical industry because obtaining consumer satisfaction and maintain consumer relationship is crucial for long term success of the pharmaceutical industry. Consumers were surveyed by using structured questionnaires including the demographic profile of gender, age, education, occupation, frequency of usage and recommendations. The respondents for this study are 200 consumers who take Satt Kyar Min Hypertensive Drug by using simple random sampling method. Secondary data were collected from Satt Kyar Min Co., Ltd documents, relevant text books, research paper and Internet websites. According to demographic characteristics of sample consumers, it is observed that female consumers share larger percentage than male consumers. Most of the respondents are in the age between 51-60 years. In education, most of the respondents are graduate level. Regarding to occupation, most of the respondents are dependents.

The respondents take Satt Kyar Min Hypertensive Drug once a day is the most in regarding to frequency of usage. In recommendations, the respondents take the drug by recommendations by friends is the most percentage. The mean values of the selected variables were explored. The results of the statements concerning in consumer perception on perceived quality, it is found that customers agree 8 statements among 9. The consumers believed that overall perceived quality of Satt Kyar Min Hypertensive Drug is effective because of having ISO certificates and traditional medical registration. The consumers answered neutral on the availability of Satt Kyar Min Hypertensive Drug widely. According to results in consumer perception of perceived value, it is found that consumers agreed 9 statements among 10. Consumers enjoyed Satt Kyar Min Hypertensive Drug because of good product

for the price by the results but the customers answered neutral that the Satt Kyar Min Hypertensive Drug would be made impression on people. The consumers expect Satt Kyar Min Hypertensive Drug to have very few side effects. The respondents also agree the factor that expectation of Satt Kyar Min Hypertensive Drug is giving extensive information on the package although it has minimum mean value, 3.72. It is found that consumers agreed all the statements related to consumer expectation. By the results concerning in corporate image perception, the customers agreed 7 statements among 8. The consumers believe that Satt Kyar Min Co., Ltd is believable and accurate having the maximum mean value. The consumers answered neutral that Satt Kyar Min Co., Ltd is contributing the society. Among four influencing factors of consumer satisfaction, consumer expectation has the largest overall mean value because of Satt Kyar Min Co., Ltd always provide consumers' needs and expectation. This study analyzed the relationship between influencing factors (perceived quality, perceived value, consumer expectation and corporate image) and consumer satisfaction by using Pearson correlation method. The results show that all influencing factors are significantly correlated with consumer satisfaction having positive relationship.

The higher the correlation between four influencing factors and consumer satisfaction, the more the consumers will prefer to use Satt Kyar Min Hypertensive Drug. Among the four influencing factors, perceived quality gained the largest correlation with consumer satisfaction. Perceived quality is the most influencing factor to create consumer satisfaction. Consumer satisfaction can be enhanced by upgrading four influencing factors of consumer satisfaction. Moreover, this study also analyzed the influencing factors of consumer satisfaction on Satt Kyar Min Hypertensive Drug by using multiple regression method. It is found that perceived quality, consumer expectation and corporate image have significant and strong effects with consumer satisfaction at 1% significant level. Among the significant factors, corporate image is mostly preferred by consumers. Perceived value also has significant influence on consumer satisfaction at 10% significant level. In conclusion, it was discovered that the overall satisfaction on influencing factors (perceived quality, perceived value, consumer expectation and corporate image) of Satt Kyar Min Hypertensive Drug has gained the satisfaction level of consumers. It is satisfied in all influencing factors because Satt Kyar Min Co., Ltd tried the best to serve their consumers to get higher satisfaction level.

V. Suggestions and Recommendations

This study based on the findings, some recommendations and suggestions are provided in order to improve consumer satisfaction on Satt Kyar Min Hypertensive Drug. Consumer is a part of successful business and consumer satisfaction is very important for the business. The firms need to know whether the consumers get satisfaction or not. According to mean value of four influencing factors of consumer satisfaction, it presents that consumer expectation gets the maximum mean value. Thus, Satt Kyar Min Co., Ltd should maintain its fulfillment of consumer expectation to achieve consumer satisfaction. The more fulfillment of consumer expectation will lead to the more consumer satisfaction. As the result of multiple regression analysis, all four influencing factors of consumer satisfaction (perceived quality, perceived value, consumer expectation and corporate image) describes that the significant positive relationship with consumer satisfaction. Among them, corporate image is the most significant factor to create consumer satisfaction. Satt Kyar Min Co., Ltd should maintain its own identity. Moreover, CSR activities will lead to increase the consumers' awareness and attitude in order to develop a strong corporate image and Satt Kyar Min Co., Ltd should provide CSR activities. Satt Kyar Min Co., Ltd should be more focus on perceived value because it is the least significant among four influencing factors. Thus, Satt Kyar Min Co., Ltd should provide consumers with effective perceived value in order to create higher level of consumer satisfaction. On the other hand, Satt Kyar Min Co., Ltd should also keep upgrading its quality by GMP (Good Manufacturing Practices) so that consumers can get the maximum satisfaction. Managers of Satt Kyar Min Co., Ltd should focus on getting more potential consumers and maintaining existing consumers. Moreover, it is need to obtain competitive advantage. It seems that consumers have difficulties in buying Satt Kyar Min Hypertensive Drug because of low distribution channel.

It cannot get widely in some area. It is need to share information of Satt Kyar Min Hypertensive Drug since some of the people not knowing about Satt Kyar Min Hypertensive Drug. Marketing and sale department should focus on sharing information about this drug. Managers of Satt Kyar Min Co., Ltd should try to build strong customer relationship between consumers and company. Therefore, Satt Kyar Min Co., Ltd should focus on compete with other competitors by building strong customer relationship with customers, effective perceived quality and value, fulfilling consumer expectation and innovative, pioneering, believable corporate image which can result to consumer satisfaction. Employees of Satt Kyar Min Co., Ltd should try to establish long-term relationships with consumers and wholesalers and work in close cooperation and in touch by sharing information needed constantly. Satt Kyar

Min Co., Ltd should create a status that taking Satt Kyar Min Hypertensive Drug would make impression on people.

VI. Needs for Further Study

The findings of this study are important for organizations. However, some limitations should be focused by further research to explore better benefits for Satt Kyar Min Hypertensive Drug and to fulfill the gap of the study. Data was collected only from Nay Pyi Taw region with simple random sampling method. This study only focuses on the specified influencing factors on consumer satisfaction for Satt Kyar Min Hypertensive Drug. This study provides some influencing factors of ECSI model which are perceived quality, perceived value, consumer expectation and corporate image while complaints is remained to study. Further research should focus on the effects of the remaining factor on consumer satisfaction. Additionally, the other customer satisfaction models can be used to measure customer satisfaction and these models will provide a broader point of view and different results for Satt Kyar Min Hypertensive Drug. The different results will be explored to support the valuable experiences for the firms. Moreover, four influencing factors (perceived quality, perceived value, consumer expectation and corporate image) influence on not only consumers but also on traditional practitioners. Further studies can also be conducted on traditional practitioners' side. Thus, further research should focus on different influencing factors and different measurement theories to fulfill the gap of the study.

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Service Marketing Mix and Students Satisfaction at National Management Academy

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ABSTRACT : This study explores how service marketing mix; nproduct, price, place, promotion, people, process, and physical evidence, effects on students' satisfaction of private education institution in Yangon. Data are collected 156 students from National Management Academy by using simple random sampling method with structured questionnaire. Among the 7Ps, four out of 7Ps of service marketing mix: price, place, promotion, and people are satisfied among the students. Moreover, overall service marketing mix practices get positive result, so that most of the students are satisfied that 7Ps of marketing mix offers from NMA. It is highlighted that NMA should improve product, process, and physical evidence in its marketing mix practices to retain and attract current and new students. To long-term survival in the highly competitive private higher education market in Yangon, NMA needs to offer more alternative choices of courses, more efficient registration method, assessment methods, and attractive and responsive home page, more comfortable classroom, excellent lecture facilities and teaching materials.

Key words: *Service marketing mix, Satisfaction, Product, Price, Place, Promotion, People, Process, Physical Evidence*

I. Introduction

Any community is dedicated to providing its citizens with educational facilities. Attitudes to make sure that people have access to quality education derive from the

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public understanding of education as a mechanism which could be used to bridge the gap between individuals and not within society.

Human capital development currently plays an important role in every industry of developing countries. The strength of the nation depends on its intellectual and knowledgeable citizen. Without quality human capital, the nation would be weak, since there is no human factor capable of implementing new strategies and insights. Training and education build assets in the form of expertise and skills that improve efficiency, manpower capacity and are referred to as human resources.

All business organization, including private higher education institutions, has the marketing objective of achieving service end-user student satisfaction. In modern competitive environments, services are becoming increasingly essential in the competitive formula of both enterprises and countries. Educational programs are becoming services for individuals who mix global and local levels, and the standardized offer is changed by local specificities.

The effort to develop a marketing mix strategy derives from the fact that, in today's globalization, all academic institutions seek to obtain the highest possible degree of customer satisfaction in order to maintain a strong position in their market. Customer satisfaction has a positive effect on the profitability of the business. Happy customers form the backbone of every successful business, as customer satisfaction contribute re-purchase, and positive word of mouth (Hoyer & MacInnis, 2001). In order to maintain high customer satisfactions, business need to realize when and how satisfy their customers are with their goods and service. Today, various businesses adopt different forms of marketing mix campaign depending on the target market demand.

This study mainly focuses the students' expectations and perceptions on the marketing mix and analyzing their satisfaction of private higher education institution in Yangon. It is done in the form of case study and the primary data are collected from students in National Management Academy. NMA is one of the well-known private institutions in Yangon. It was established since 2016 under the name of Parami Education and expanded the higher education in 2018 as National Management Academy. Now, it has been offering seven ABE endorsed diploma and Swiss MBA.

II. Rationale of the Study

In the current scenario, education is a crucial factor that leads to the economy of the country and thus the education sector has expanded dramatically worldwide.

Myanmar's economic style is actually practicing a market-oriented economy. The private sector is more critical than it was in the last decade, and the private sector can still play a vital role. New skills are required in the global competitive market. Professional workers with experience become a market requirement for the growth of business organizations in all industries. Skilled human capital emerges through a method of qualified education. Education is life long process that encompasses any part of an individual's life and is a process that forms the standard of living.

In today's fast-paced academic environment, where students have several choices in their hands, factors that encourage academic institutions to acquire and maintain students should be examined. Higher education institutions, that wish to achieve a competitive advantage in the future, will need to continue looking for innovative and unique ways of attracting, sustaining and developing stronger relationships with students, which are not enough to rely on academic excellence of them but must also be followed by a process of delivering quality services to students.

In a world of global competition is increasing, private higher education institutions are more than ever designing and implementation marketing campaigns aimed at achieving long-term competitive advantages. In Myanmar, the private higher education sector has been dynamic and diverse in recent years. This has resulted in an improvement in education services that have become more competitive, especially in Yangon. In order to overcome the threat of rising competition, some research should be conducted to advise private higher education institutions on how to attract students and increase student registration.

Therefore, the aim of this research is to examine the role of 7Ps of service marketing mix to achieve student satisfaction in private higher education institutions through the study of National Management Academy (NMA) students in Yangon. This study investigates the influence of marketing mix tools on the satisfaction of students, also with the purpose of assessing the importance of the impact of each marketing mix competitive academic environment where students have many options available to them, factors that enable educational institutions to attract and retain students should be seriously studied. Higher education institutions, which want to gain competitive edge in the future, may need to begin searching for effective and creative ways to attract, retain and foster stronger relationships with students. As a private organization, it has to depend on the interaction and mechanism of the market. As a result, competition to woo as many students as possible or so-called "potential customer" may become more and more intense. competitive academic environment where students have many options available to them, factors that enable educational institutions to attract and retain students should be seriously studied. Higher education institutions, which want to gain competitive edge in the future, may need to begin searching for effective and creative ways to attract, retain and foster

stronger relationships with students. As a private organization, it has to depend on the interaction and mechanism of the market. As a result, competition to woo as many students as possible or so-called "potential customer" may become more and more intense.

III. Literature Review

Marketing mix is a set of technical marketing tools that can be managed and integrated by the organization to deliver the desired result on the target market (Kotler, 2009). Marketing mix is the one factor that needs to be maintained and enhanced so that customers still are satisfied that it has an effect on customer loyalty. The four Ps are classical product marketing mix: product, price, place, and promotion. Marketing mix can be modified in the service sector and is appropriate to a certain degree. Additional Ps have added to provide improved better performance: people, process, and physical evidence.

In 1995, Kotler and Fox developed a form of the marketing mix tailored for educational organizations to overcome the weakness of the product marketing mix. In this marketing mix, the programs replace the products in the marketing mix. The most basic decision to be made by higher education institutions is to develop programs that fulfill the desires and needs of students. It is a primary marketing practice for educational institutions. The challenges of the marketing of education arises that the academic institution provides professional services that students cannot inspect before buying.

In this study, price refers to the fees to be charged by prospective students. For the higher education institution, the price is significant, as it is increasing to rely upon tuition as a simple source of income. In addition, price has a significant impact on marketing campaigns, as most students are worried with the financial consequences of taking classes. The rise of tuition fees has a significant negative impact on student enrollment (Dearden, et al., 2011). Potential students would usually judge the price, when comparing educational institutions, as being more costly or affordable (Kotler & Fox, 1995).

Place is the distribution strategy; that is, making education accessible and effective in terms of both time and physical-geographical distribution of teaching and learning (Samani, et al., 2017). The advancement of alternative modes of education has significantly improved: students are no longer allowed to go to the classroom and to gain feedback from their lecturers in order to satisfy the requirements of the course. During this pandemic period, distance learning opportunities have now been

established through internet, zoom application, google meet, and Microsoft teams.

Promotion is another aspect that affects customer satisfaction. Educational organizations need to convey its offerings to the target market through promotional campaign. According to Boyd (2000), promotional strategies or coordinated communication approaches and marketing systems designed to bring businesses and their products to prospective customers communicate product characteristics that fulfil the need to drive sales that eventually lead to long-term success. Promotion is divided into four elements: advertising, sales promotion, personal selling, and public relations. Numerous tools are available for each of these components that could be used to interact with potential students, including online ads, social media, educational exhibitions, partnership with other organizations, or seminar (Blumenstyk, 2006). As the rate of social media by the younger generation is high, Boyd (2008) indicated that engaging social networking sites as a higher marketing tool may be an appealing tool.

People are an essential part of a marketing mix and can help motivate a prospective student (Bressington, 2006). Since most services are delivered by people and experienced by people because of their attitude and behavioral traits, they make a significant difference in customer satisfaction. In this study, people refer to the teachers and admin staff with whom the service offering is a customer relationship. Higher education institutions provide current and potential students as a focal point for prospective students to inquire about their perspectives on the institutions. Members of staff are an essential part of educational marketing, since education is a high-touch service process focused on personal contact with students and faculty members. The staff image is related to the manner in which they communicate and address the needs and questions of the students. In 2008, Ivy suggested that the number of Ph.D. and professorship titles may have an impact on students. He pointed out that other people who may have an effect on student enrolment are public figures and well-known profiles of academic staff. When students search information, the first experience can be focused on initial interaction with people at a specific university. The marketing mix, which involves people, can dramatically improve with professional staff. Eanche (2011) claimed that people are the most critical part of service marketing that can affect a future client. People who communicate with students from the moment they are enrolled, to the time they are admitted, even upon completion of their courses, must be careful to make a reasonable use in their words when dealing with students.

Process refers to the flow of activities or interactions that take place where there is contact between companies and consumers. The provisions of services cover the administrative and formal activities of the organization. This is linked to the registration method, including applications for admission, examination of subjects,

assessment methods, in addition to issuing exam results and graduation (Ivy, 2008).

Physical evidence refers to the physical tangible items that an organization makes accessible to its customers, ranging from infrastructure, brochures, or their organization's home page. Kotler and Armstrong (2010) argued that the first impression of the institution is provided by physical evidence and that they typically see buildings as well as other facilities. In 2010, Ivy and Fattal suggested that the environment, in which services both tangible and intangible, are provided encourages students to interact, create and convey customer satisfaction (Pratminingsih, 2011).

Customers are the main stakeholders in commercial enterprises (Chen, 2016). Students are the most important stakeholders of higher education institutions, since they are the main generators of income from education. In an environment that considers higher education as a significant service and students as customers, students' satisfaction is becoming a primary strategic goal for many institutions of higher education (Lee & Anantharaman, 2013). Student satisfaction is not a short-term assessment, but an enduring attitude developed by repeated higher education experiences. Students assess their institutions on a variety of factors, including product, people, price, and physical evidence (Chen, 2016).

IV. Objective of the Study

The purpose of this study was to examine students' satisfaction level on the services marketing mix (product, price, place, promotion, people, process and physical evidence) of NMA.

V. Method of the Study

This study was based on descriptive method. Primary data were collected from 156 students who were attending the class in NMA by using online survey form. Simple random sampling method was used with a highly structured questionnaire by using extensively 5 point Likert scales to assess expectations and perceptions of 7Ps of the service marketing mix and then analyze the students' satisfactions on those marketing mix. There are three parts in the questionnaire. The first part is demographic characteristics of respondents. The second part is student's expectation on 7Ps of marketing mix before attending the class and the last part is student satisfaction on these marketing practices. Secondary data were gathered from previous research papers, journals, text books, and internet websites.

VI. Analysis of the Study

The numbers of respondents by genders are studied in Table 1.

Table 1. Gender of Respondents

Sr. No.	Gender	Respondents	Percentage
1.	Male	61	39.1
2.	Female	95	60.9
	Total	156	100

Source: Survey Data (Sept, 2020)

As shown in Table 1, the male respondents are 39.1% and the female respondents are 60.9%.

Respondents are classified on the basic of age groups. There are four age groups. The following Table 2 presents number of respondents by their age group.

Table 2. Ages of Respondents

Sr. No.	Age	Respondents	Percentage
1.	20 years and below	14	9.0
2.	21-29 years	103	66.0
3.	30-39 years	36	23.1
4.	40 and above	3	1.9
	Total	156	100

Source: Survey Data (Sept, 2020)

As presented in Table 2, 9% of respondents are 20 years old and below, 66 % of respondents are 21-29 years old, 23.1% of respondents are 30-39 years old, and 1.9% of respondents are 40 years old and above. Therefore, NMA should focus their marketing mix activities to attract and retain young adult because most of the students are young adult.

Respondents are studied on the basic of their educational levels by dividing into two levels.

Table 3. Education Level of Respondents

Sr. No.	Education	Respondents	Percentage
1.	Undergraduate	42	26.9
2.	Graduate	114	73.1

	Total	156	100
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Source: Survey Data (Sept, 2020)

Respondent occupations are classified into 5 groups: university student, government staff, company staff, business owner, and NGO staff.

Table 4. Occupation of Respondents

Sr. No.	Occupation	Respondents	Percentage
1.	University Students	32	20.5
2.	Government Staff	5	3.2
3.	Company Staff	104	66.7
4.	Business Owner	8	5.1
5.	NGO Staff	7	4.5
	Total	156	100

Source: Survey Data (Sept, 2020)

In Table 4, maximum numbers of respondents are company staff with 66.7%. The least group of respondents are government staff with only 3.2%. Monthly incomes of respondents are classified into five groups.

Table 5. Monthly Incomes of Respondents

Sr. No.	Monthly Income	Respondents	Percentage
1.	Ks 200,000 and below	21	13.5
2.	Ks 200,001 - 300,000	26	16.7
3.	Ks 300,001 - 400,000	57	36.5
4.	Ks 400,001 - 500,000	38	24.3
5.	Ks 500,001 and above	14	9.0
	Total	156	100

Source: Survey Data (Sept, 2020)

As presented in Table 5, the largest percentage, 36.5% of respondents have a monthly income between Kyats 300,001 and 400,000. The smallest percentage, 9% of respondents has a monthly income between Kyats 500,001 and above. The following table describes the overall mean scores that are obtained from comparing respondents' expectations and perception on all marketing mix of NMA.

Table 6. Overall Mean Gap Score and Students Satisfaction

Sr. No.	Marketing Mix	Expectation (E)	Perception (P)	Gap Score (P-E)	Overall Satisfaction
1.	Product	4.32	4.25	-0.07	Not satisfied
2.	Price	4.20	4.26	0.06	Satisfied
3.	Place	3.94	3.99	0.05	Satisfied
4.	Promotion	4.04	4.21	0.17	Satisfied
5.	People	4.54	4.57	0.03	Satisfied
6.	Process	4.15	4.06	-0.09	Not satisfied
7.	Physical Evidence	4.18	4.08	-0.10	Not satisfied
8.	Average Score	4.19	4.20	0.01	Satisfied

Source: Survey Data (Sept, 2020)

According to the overall score for all service dimensions presented in Table 6, only three marketing mix get negative results. There is slightly difference between customer expectation and customer perception on product, process, and physical evidence.

Among 7Ps of marketing mix, the highest positive mean gap score is found in promotion. Students perceive high promotion incentives than their expected on promotion from NMA. Therefore, it can be said that students are well satisfied promotion activities of NMA.

Price gets the second highest positive mean gap score and it implies that perception is higher than expectation. Place and people also get positive mean gap score. Thus, it can be concluded that perception of customers exceeds with the expectation of students in those marketing activities.

According to these results, three out of 7Ps of marketing mix: product, process, and physical evidence are not satisfied because students' expectations on these activities are higher than they perceived from NMA.

VI. Findings and Discussions

In this study, most of the students are female with consists of 95 respondents and the rest of 61 students are male. It is found in the study that most of the students are between 21 and 29 years old. According to level of education, most of the students completed the bachelor degree. Therefore, it can be said that they want to learn further studies to get additional knowledge and apply in their career.

Regarding the occupational status, the majority of students are working in private firms/businesses. The second majority of respondents are university students. The left

are government staff, NGOs staff, and business owners. Therefore, they attend the class to get business knowledge.

According to monthly income, most of the respondents earn between Kyats 300,001 and 400,000. Based on their income of target customers, NMA should introduce and offer new diploma that can afford their target students easily. And then, it should also provide attractive installation program to acquire and maintain potential students.

The results from calculation gap difference between desired expectation and perception of all respondents are analyzed to evaluate what marketing mix activities exceed, meet or fall short from their perspectives. If students' expectations exceed their perceptions, dissatisfaction will result, and students' perceptions meet or exceed their expectations, satisfaction will result.

In this study, the mean score of product expectation is greater than the mean score of its perception. Therefore, it can be said that students did not fully satisfy on product providing from NMA. To achieve high satisfaction of students, NMA should offer more variety of courses that tailor individual students, suitable class schedules, program duration, and upgrade the quality of course.

Regarding the price, place, promotion, and people, all of them have encountered positive gap scores. Therefore, it can be concluded that most students met desired expectations and satisfied with those marketing activities provided by NMA. NMA should maintain and enhance these marketing strategies to sustain students' satisfaction level, and achieve competitive market position.

Process is with the negative mean score, expectation exceeds perception in this strategy. Thus, it can be concluded that expectation of students exceeds with the perception of students in process strategy. To overcome this negative result, NMA should enhance registration process, payment methods, examination process, and exam results announcement process.

In addition, classroom facilities, cleanliness of classrooms, and teaching materials should be enhanced because the average score of expectation is 4.18, of perception is 4.08 and the gap score for overall mean is -0.10 in physical evidence.

However, students are really satisfied with the overall marketing mix strategies of NMA because of the overall mean score has positive result. The average score of expectation is 4.19 and the average score of perception is 4.20. The gap score for overall mean is 0.01. Therefore, it can be concluded that most students are delighted with marketing mix strategies of NMA.

1. Suggestions and Recommendations

The suggestions and recommendations for improving private higher education

institution and services of NMA are presented after reviewing the findings and discussion. Taking into consideration the importance of customer satisfaction as one of the key strategies for companies to establish competitive advantages, as well as emerging business forms and methods, the importance of the crucial role of marketing in implementing the objectives of the business and sustaining competitive conditions is becoming more important.

For achieving sustainable market position, NMA should improve all of its 7Ps of service marketing strategies by offering more suitable courses for labor market, reasonable prices and installation plan, attractive promotion activities, efficient registration methods, assessment methods, the service of being professional and experience lecturers, polite and friendly staff, attractive and responsive home page, more comfortable classroom, excellent lecturer facilities, and teaching materials.

2. Need for Further Research

Further studies are proposed to take a further step in investigating students' satisfaction or using different respondents in government universities/ private higher education institutions, which will more detail and more extensive fields of research. In addition, it suggests that other studies should be conducted within the context of more general education, ranging from primary education, secondary education, higher education, and vocational education, with a view to improving the Myanmar education system by providing efficient and consistent education for all.

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The Effect of Leadership Styles on Employees' Job Satisfaction of 5-Star Hotels in Yangon

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ABSTRACT: This paper intends to explore the dominants leadership styles and to analyze the effect of leadership styles on employees' job satisfaction and intention to stay at 5-star hotels in Yangon. Descriptive research approach is applied in this research. The primary data are collected from employees to evaluate their perception on leadership styles and their job satisfaction. The secondary data are collected from the relevant text books, international research papers, journal articles, and from the related websites. From analysis, it is found that the most dominant leadership style is transformational leadership style, followed by transactional leadership style whereas there is no effect between Laissez-faire leadership style and employees' job satisfaction. And the result shows that employees are strongly satisfied under transformational leadership style reflect employees to intention to stay continue with the hotel. As per findings from result, the management of 5-star hotels in Yangon should pay more attention in giving more trainings and workshops to train and build the human capital to improve their abilities, performance and encourage them. Also, management should practice more on reward system by developing key performance indicator (KPI) to achieve key business objectives, so that employees become more enthusiastic and are motivated to fulfill the hotel's goals which will be more satisfied at their job and more desirable to stay with the hotel.

Key words : *Transactional leadership style, Transformational leadership style, Laissez-faire leadership style, Employee satisfaction, Intention to stay, KPI*

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I. Introduction

Organizations are ever changing of the globalization, advances in technology, political and economic environments. To respond these changes successfully, organizations must have valuable assets like machines, materials, money and manpower. Among these assets, human resources are the foremost precious assets for any organizations whether private or public or non-government even charitable organization because an organization's success or failure is reckoning on them. Furthermore, irrespective of whether the size or market of the companies, they all strive to keep the best employees, recognizing their contributions and influence on organizational effectiveness. In order to overcome these obstacles, organizations should build a positive and healthy relationship with their employees and lead them to task fulfillment. In spite of that, not so many companies consider the human capital as their principal asset. If the employees are not satisfied with their jobs and not motivated to strive for the fulfillment of their tasks, the organization will never be successful (Dobre, 2013). Effective leadership and employee job satisfaction are two factors that have been regarded as fundamental for organizational success. A capable leader provides direction for the organization and lead followers towards achieving desired goals.

Nowadays, most of the organizations have been faced employees' turnover which rate is higher every year and that has been always come as top issue in every business including hotel industry. When employees left their jobs, there would be costly for the business. Not only time consuming but also surely some more expenses to find a suitable employee and give training for the replacement. The effect of leadership styles on employees' job satisfaction is very important. The satisfied employee may be more productive and able to take full responsibility, can perform well, can serve with best services to customers, and they will intent to stay in organization. However, dissatisfied employee will be surely pessimists who will give negative impact to external as well as internal of organization, show more absent, show job stress and look for new jobs.

If employees are satisfied with their jobs, they will not leave their jobs. However, if they are not satisfied with their jobs, they will leave. So, when there will be employees' turnover rate is high, there cost and time will be followed after. (Yin-Fah, Foon, & Leong, 2010) described that employees' turnover is a serious issue especially in the field of human resources management. In addition, it is very costly and the cost is due to termination consequent advertising, recruitment, selection and hiring. (Terborg & Lee, 1984). Thus, the management in organization should find the key driver of employees' satisfaction and hard working. Conceptually, leadership style

would be key engine of employee satisfaction. This study mainly focus on 5-star hotels in Yangon employees' perception on their leaders' leadership styles and their job satisfaction, and then continue study that reflect employees' intention to stay in hotel or employees will leave their job.

1. Statement of the Problem

The hotel industry in Myanmar is one of the crucial industries that take part in an essential player in the socio-economic development of Myanmar. According to the Ministry of Hotels and Tourism, international visitor arrivals to Myanmar registered a compound annual growth rate of 26.5% between 2001 and 2019. Amidst a rapidly changing political situation and the anticipation of an open economy, business travel has risen to unprecedented levels. With continued political and economic reform and increased accessibility to the country, international visitor arrivals are expected to sustain robust growth in the future. As a result, hotel industry is booming and competition among hotels is fierce.

The hotel industry is service oriented and consequently customer satisfaction is a vital factor that plays in a key role. To provide customer satisfaction, employees need to be satisfied themselves and committed to their job and retention to their hotel. High level of satisfaction is likely to reduce absenteeism, staff turnover, increase the performance. Employee satisfaction and intention to stay depend on the leadership styles of the managers. Leadership and job satisfaction are recognized as fundamental components influencing the overall effectiveness of an organization (Kennerly, 1989). In addition, (Packard & Kauppi, 1999) mentioned that a leader's style has a definite influence on an employee's job satisfaction. Therefore, recognizing, adopting, and practicing the appropriate leadership styles are vital for future leaders as it effects on employees' job satisfaction, commitment and productivity.

Nowadays, to retain the employees and attract them are playing as vital role and it has become more challenging. The factors of globalization and intercontinental have brought together to make human resources more demanding. Almost every organizations today faces the matter is how to retain its human resource assets in a competitive market and they struggle to offer attractive benefits, high pay, and incentives. Different types of leader play a critical role in ensuring employees satisfaction and organizational commitment. More than half of the employees are feeling unhappy with their work and would choose to leave an organization. This is a very alarming figure considering that business is getting more competitive, and it is harder for employers to maintain their talents. The three leadership styles included in the study investigation have unique characteristics. This study explored the role of leadership and how it related to job satisfaction and the intention of employees to

leave or stay their current job.

2. Objectives of the Study

This study aims to conceptualize the leadership styles and to explore the effect of leadership style on employee satisfaction in 5-star hotels. The specific objectives are:

(i) To explore employee dominant leadership style of 5-star hotels managers in Yangon.

(ii) To analyze the effect of leadership styles on employees' job satisfaction in Yangon.

(iii) To examine the relationship between employees' job satisfaction and intention to stay in hotels.

3. Scope and Method of the Study

This paper focuses on employees' perception on their leaders' leadership styles, employees' job satisfaction and intention to stay of employees at 5-star hotels in Yangon. This study emphasize on leadership styles of 5-star hotels in Yangon in terms of focusing on three types of leadership styles: transactional, transformational, and laissez-faire leadership style in accordance with its relationship to employees job satisfaction and their intention to stay. Descriptive research method is used in this study. This study used not only primary data but also secondary data. To collect primary data, employee survey is conducted by using structured questionnaire. Questionnaire consisted of 21 items based on leadership styles by Multifactor Leadership Questionnaire (MLQ), 12 items based on job satisfaction and 10 items based on the intention to stay. There are more than 300 hotels in Yangon which including 3-star and 4-star hotels. Among them, this study selected 20 hotels which are identified as 5-star hotel located in Yangon. Employees are selected using convenient random sampling techniques where at least twenty employees are selected from each hotel. Questionnaires are distributed 400 employees for 20 hotels in Yangon. The secondary data are collected from reference books, international research papers, journal articles and internet websites.

II. Theoretical Background

This section includes the theoretical background of leadership styles, employees' job satisfaction and intention to stay. The relationship between leadership and job

satisfaction is increasingly important in understanding today's globalized society. Leadership is the ability to influence and guide followers to achieve the organization goals. There are different types of leadership styles. This study distinguished between three different leadership styles; namely transactional, transformational and laissez-faire leadership. The characteristics and dimensions of these three leadership styles will be presented.

1. Definition of Leadership

Leadership has no single definition which universally accepted. It is broaden and complex. (Burns, 1978) describes leadership as follows: " Leadership is the reciprocal process of mobilizing, by persons with certain motives and values, various economic, political, and other resources, in a context of competition and conflict, in order to realize goals independently or mutually held by both leaders and followers". Leadership is one of the most observed and least understood phenomena on earth (Burns, 1978). (Maxwell, 1998) uses a simpler definition and states that the leadership is nothing more (or less) than influence. (Schermerhorn, 1999) believed that leading is a process used to motivate and to influence others to work hard in order to realize and support organizational goals. (Hersey, 2001) believed that leadership influences individuals' behavior based on both individuals' and organizational goals. Leadership is a critical concept of any organization. The concept varies upon the circumstances. Strong leaders will be needed for any organization to inspire and retain their employees.

2. Leadership Styles

Leadership style is the way where direction is provided by a leader to the team to accomplish their tasks, and how the leader should lead the team through all kind of communications to the team. The leading style of the leader motivates and trains the followers. Leadership style is defined as the pattern of behaviors that leaders display during their work with and through others (Hersey & Blanchard, 1993). Between leaders and employees, there is interaction leadership style which includes controlling, directing, the techniques and methods are used by leaders to motivate employees to follow their instructions. Leaders have their personal background such as knowledge, values, and experiences shape their feelings about appropriate leadership style; employees also have different backgrounds, expectations, and experiences. Some factors in the organization environment can also influence leaders' leadership style, however leaders can adapt their leadership style to the perceived

preferences of their employees (Wood, 1994). Leadership styles can be determined as three type of leadership style: Transactional, Transformational, and Laissez-faire Leadership. The styles are distinguished by the influence of leaders on employees.

(a) Transactional Leadership

Transactional leadership is a style of leadership focuses on organization with supervision and performance. The leaders promote compliance by employees through both rewards and punishments. With that rewards and punishments system, transactional leaders are able to keep their followers to be motivated. Transactional leadership pays more attention on finding faults and deviations. That leadership styles refer to leaders reward or discipline employees, depending on the competence of their performance.

(b) Transformational Leadership

Transformational leadership is defined as motivation of followers by appealing to higher ideals and moral values (Burns, 1978).According to Burns, transforming leadership is a process in which leaders and followers help each other to advance to a higher level of moral and motivation. Transformational leadership encourages autonomy and challenging work to increase employees' job satisfaction. Steady pay, secure benefits, and lifetime employment were no longer guarantee for meritorious performance.The four dimension of transformational leadership are 1) idealized influence, 2) inspirational motivation, 3) intellectual stimulation, and 4) individualized consideration.

(c) Laissez-faire Leadership

In contrast to transactional and transformational leaderships, Laissez-Faire leadership is a passive kind of leadership style. Laissez-faire leadership style refers to a leader that gives empower to their followers. The leader generally gives his or her followers or employees complete freedom to make decisions or to complete a task in whichever way they deems fit and appropriate (Robbins, Decenzo, & Coulter, 2010). It is being interpreted as a kind of non-transactional leadership style in which prompt decisions are not made with delay in action taken, coupled with ignoring of leadership responsibilities and non-exercise of authority. In this leadership style, employees can make decisions, determine goals, and solve problems by their own and this results in low productivity and increased subordinate frustration (Swansburg, 1996; Warrick, 1981).

3. Job Satisfaction

Job satisfaction has been defined as a perceived relationship between what one wants from one's job and what one perceives it as offering (Lund, 2003). Employees' general attitude toward his or her job is also referred as job satisfaction (Rezaiean, 2010). The satisfied employees are more likely to show up for work and with high performance level, then they will continue to stay with organization. Organizational support is critical to employee satisfaction, loyalty, leadership behavior and the way of employees perceive their leaders support also play a core role to attain the desired work results. Successful organizations have satisfied employees whereas poor job satisfaction can negative impact on organization. Job satisfaction is divided into two kinds of satisfaction: internal and external. As external satisfaction, employees express their satisfaction from payment, promotion, employer's encouragement, and interaction with colleagues. And form internal satisfaction, employees show their efforts on responsibilities, social status and position, situation, independence and self-esteem based on tasks and works. An organization will be successful if effectiveness of strong leadership is closely related with higher employees' job satisfaction level. Hence, employees that have great level of job satisfaction are presumed to exercise more commitment in their given assigned work toward the company benefit.

4. Intention to Stay

"Retain" defined as the employees continuously maintain current position or job. The retention is expected the employees to become continuously an organizational member or stay at the organization. Intention to stay can be also defined as employee intention to stay in the presence organization with their current employer. Interacting with the working environment and continuously involve in organization, and the willing to continue stay at the organization is employees' intention to stay. An organization cannot be success without support and contribution from their employees. Employees retention are always playing as vital role for every organization because the cost related to human capital is an important part of the organization. The dissatisfied employees will leave the organization if the multiple factors related to the company are not met with their expectation. (Branham, 2005) mentioned that there are seven main reasons why employees leave their job , those are lack of recognition, low pay rate, inadequate career, poor management, unfulfilling job, untrustworthy leadership, and disordered work cultures. If employees leaving their job that leads to occur unrecoverable costs on orientation and training as well as incur cost for new employees. It is always essential to understand the factors impacting employees intention to stay.

5. Relationship between Leadership Styles and Employees Job Satisfaction

Leadership is about creating the way for people to contribute to make something extraordinary happen. Effective leadership is to integrate and maximize available resources within the internal and external environment to attain organizational goals. Job satisfaction is defined as a pleasurable emotional state result from the appraisal of one's job ; an affective reaction to one's job; and an attitude towards one's job. Study conducted by (Voon, 2011) indicates that transformational leadership style possesses a stronger relationship with job satisfaction, while transactional leadership style possesses a negative relationship with job satisfaction among employees. The research study suggested that transformational leadership should be considered suitable for managing government organizations (Voon, 2011). The study conducted by (Saleem, 2015) aimed to examine the effect of leadership styles on job satisfaction and understand if supposed organizational politics had an intermediating role or not. To achieve the purpose, the researcher utilized descriptive research design and conducted a quantitative research. The researcher selected the sample through non-probability convenience sampling. The findings of the research revealed that transformational leadership have positive influence on job satisfaction while transactional leadership have negative influence on job satisfaction. It was also suggested by the researcher that apparent organizational politics moderately mediate the association between both the leadership styles and job satisfaction (Saleem, 2015).

6. Relationship between Employees' Job Satisfaction and Intention to Stay

Employees job satisfaction and their intention to stay is directly correlated. Employee satisfaction is critical for organization as increased employee job satisfaction leads to increased customer satisfaction, lead to the greater potential for organizational profitability. Many studies conducted on the factors that impact on job satisfaction and demonstrate that many factors affect the satisfaction of employee with the job. The internal, and external factor, including demographic information, management style, and organizational culture impact on job satisfaction. Managers can try to decrease turnover through analyzing the root cause of employees stress and initiating actions to reduce the stress. Employees sometimes conflict on handling beyond their expertise area or responsibilities can result the lack of job satisfaction, which can lead to high turnover intention and they will leave the organization soon. One of study conducted by (Kalifa, 2016)concluded that the longer an employee works for an organization, the less the employee considers leaving the

organization.

There are many studies about employee job satisfaction and the researchers conducted the study for a positive correlation between the employee job satisfaction to a low level of turnover intent which stay continue in organization.

7. Conceptual Framework

This study is to examine the relationship between leadership styles, employees' job satisfaction and their intention to stay with their hotels. Employees' job satisfaction and their intention to stay of hotel can be changed according to the leadership style of their managers. The conceptual framework of this study can be seen in below Figure 1.



Figure 1. Conceptual Framework of the Study

Source : Own Compilation

III. Analysis and Results

1. Reliability Test

The reliability test is critical before doing the analysis as it is conducted in order to ensure consistent measurement through different items in the questionnaire. This method indicates reliability through examining the internal consistency of the research questionnaires which are posted in Likert scale.

Table 1. Reliability Analysis

Description	Cronbach's Alpha	Numbers of Items
Leadership Styles	0.836	21
Employees' Job Satisfaction	0.817	12
Employees' Intent to Stay	0.780	10

Source: Survey Data (2020)

Cronbach's Alpha is important and the range of Cronbach's Alpha should become from 0.0 to 1.0 but for research purpose, some researcher suggested that the minimum standard for reliability should be 0.70 or higher. Table 1. presents the analysis result of Cronbach's alpha of all the factors are more than 0.7. Therefore, it can be interpreted that the data is considered to be reliable and valid.

2. Leadership Styles of 5-Star Hotels in Yangon

"Multifactor Leadership Questionnaire (MLQ)" is consisting of 21 questions for seven factors on a 5 point Likert Scale is used to explore the leadership styles of 5-star hotels in Yangon The questionnaires contain different elements drawn from the full range leadership development model developed by Bass and Avolio (1994) and is adapted accordingly for the purpose of this study. The leadership styles explored by the questionnaire include transformational, transactional, and laissez-faire leadership style. The data was collected from 400 respondents of hotels, who answered the survey completely, using convenient random sampling. The data analysis was done using SPSS (Statistical Package for Social Sciences) and the validity was established through suitable statistical means. The results are shown below.

Table 2. Dominant Leadership Style of 5-Star Hotels in Yangon

SN.	Factor	Mean
1	Transformational Leadership Style	3.64
2	Transactional Leadership Style	3.61
3	Laissez-faire Leadership Style	2.61

Source: Survey Data (2020)

As shown in the Table, as the dominant leadership styles of 5-star hotels in Yangon is transformational leadership style. It means value is 3.64. The mean implies that the leaders exhibited transformational leadership style most frequently. For transactional leadership style, the mean value score is 3.61. Therefore, it can be concluded that some leaders exhibited transactional leadership style sometimes. For

Laissez-faire leadership style, the mean value score is 2.61. As the result, leaders exhibited laissez-faire style sometimes which is the least practicing.

3. Employees' Job Satisfaction

Table 3. shows that the mean scores range are from 3.13 to 4.06. All the mean values are above the 3. It means the most of the employees at 5-star hotels in Yangon are satisfied their job.

Table 3. Employees' Job Satisfaction of 5-Star Hotels in Yangon

SN.	Job Satisfaction	Mean	Std. Dev
1	Feeling of personal accomplishment	3.94	0.65
2	Satisfying for the chance salary increases	3.55	0.89
3	Having personal growth such as updating skills and learning different job	3.76	0.93
4	Having the tools and resources to do the job well	3.85	0.84
5	Satisfied with job	3.46	0.88
6	Satisfying with coworkers	3.93	0.67
7	Rewarding for the quality of the effort	3.89	0.88
8	Satisfying involvement in decisions	3.13	1.07
9	Satisfying receiving information from management	4.06	0.78
10	Having positive image for friends and family	3.43	0.87
11	Working assignments are fully explained	3.64	0.76
12	Encouraging for new and better ways of doing things	3.90	1.76
	Overall Mean	3.71	

Source: Survey Data (2020)

According to the survey results, the overall total mean score is 3.71 which are above 3. The factor of satisfaction receiving information from management which is highest because employees feeling that hotel is transparent sharing all updated things about decisions, new changes, mission, and goals which can employees aware that how they should align with the new changes and how to perform well. The factor of the work gives the feeling of personal accomplishment is second highest mean score because employees are motivated to maintain and improve their work, so that they create a productive work environment. They are also empowered to decide independently to perform their work. Empowerment is a part of important the influencing factor of employee job satisfaction.

The factor of satisfaction with coworkers is third highest mean score because team-work is a signature of employees' high satisfaction as it can reach the goals not delaying by working as team and each other can help to solve the .This results can be in increasing employees performance, productivity, and that can reflect

organization profitability, reduce turnover, and overall improvement in the workplace. The feeling of encouragement to come up with new and better ways of doing things is the fourth highest mean score 3.90 because employees are motivated and not afraid to take risk to try new things in better ways. This can result the development for organization as well as for employees' career development.

Having reward for quality work is the fifth highest score because reward is what the employees obtain from their contribution on hard working and superb performance. If the employees are not getting any reward or recognition from their leaders for their effort, it will result demotivation, reduce productivity, and high turnover. This factor is also in out of five highest score since employees are high satisfied and reflect on better performance and they get rewards on their effort. Involving in decisions making that affect the work is the lowest mean score because employee's participation does not involve in decision making process. The employee participation has impacted the workplace both positively and negatively which may affect employee's productivity, job satisfaction, and employee's commitment to the hotel.

4. Analysis on Leadership Styles and Job Satisfaction

In this analysis, the effect of different leadership styles on employee job satisfaction is tested by using multiple linear regression model. The dependent variable is employee job satisfaction, and independent variables are three leadership styles: transactional, transformational and laissez-faire leadership. The results from regression analysis are shown in Table 4..

Table 4. Effect of Leadership Styles on Employees' Job Satisfaction

Influencing Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	1.104	.348		3.174	0.002	
Transformational Leadership Style	0.476***	.070	0.577	6.843	0.000	1.355
Transactional Leadership Style	0.150	.093	0.137	1.620	0.108	1.360
Laissez-Faire Leadership Style	0.126	.072	0.128	1.747	0.084	1.019
R				0.666		
R Square				0.443		
Adjusted R Square				0.427		
F-Value				28.121***		

Source: Survey Data (2020)

As shown in Table, it is found that the transformational leadership style is the

most significant at 1 percent level which is highly significant coefficient value because sig value is 0.000. The employees of 5-star hotels in Yangon are satisfied with the transformational leadership styles. They like their managers lead them by providing clear vision, encourage them on creativity, cooperation and open communication, coaching them to reach organizational goals. Employees are also becoming trust and respect their leaders as role model. They are motivated and fearless to take the challenges to achieve to accomplish the goals.

5. Intention to Stay

Table 5. shows that the mean scores range are from 3.38 to 4.05. All the mean values are above the 3. It means most of the employees at 5-star hotels in Myanmar have intention to stay and working with hotel.

Table 5. Intention to Stay

SN.	Intention To Stay	Mean	Std.Dev
1	Believing of career promotion based on performance	3.87	0.959
2	Well recognition of the achievements at work	3.90	.908
3	Providing the better pay in correlation with the putting effort	3.95	0.975
4	Provide the proper guidance at work	3.51	0.993
5	Getting well support and guidance in managing work posture issues.	3.75	1.079
6	Satisfying with the working hours and schedule	3.41	0.970
7	Having no overloaded at work	3.76	1.049
8	Being confident about professional and personal development by working in the organization	3.96	0.908
9	Being convenient location of work and go home	3.28	1.395
10	Utilizing skills and knowledge in variety of work	3.65	1.009
	Overall Means	3.70	

Source: Survey Data (2020)

According to the results, employees are confident about their professional and personal development by working in this hotel is highest mean score because employees are motivated to improve their talent, ability to realize the meaning of life, and potential development in hotel. Therefore, the employees reach greater confidence level and it reflects to their professional and personal life development. The second highest factor is providing the better pay in correlation with the putting effort because they understand well and satisfied that the income is related with their effort and performance. Some people think the employees leave their job due

to their income level is low, in fact there are other factors such as promotion, organization nature, working conditions, other than salary which impact on employee turnover.

The third highest factor is achievements at work are well recognized because employees are hard-working, significant improvement their ability and demonstrate the value of their contribution, which turns to achievements that are recognized by the management. Recognition is also an important factor of employees' intention to stay continue with the hotel. It shows that employees' intent to stay is positively impact on the employees. This survey results show that employees are satisfied their job and intention to continue to stay in the hotel. And also, the manager leadership styles are appropriate for the employees. In overall, most respondents think that all factors have influenced on employees' intention to stay in hotel.

6. Analysis on Employees' Job Satisfaction and Intention to Stay

In this analysis, the effect of job satisfaction on employee's intent to stay is tested by using multiple linear regression method. The dependent variable is intention to stay, and independent variables are employees' job satisfaction.

Table 6. Effect of Employees' Job Satisfaction on Intention to Stay

Influencing Factors	Unstandardized Coefficients		Standardize d Coefficients	t	Sig.	VIF
	B	Std. Error	Beta			
(Constant)	1.804	0.403		4.478	0.000	
Job Satisfaction	0.512***	0.108	0.416	4.758	0.000	1.000
R	0.416					
R Square	0.173					
Adjusted R Square	0.166					
F-Value	22.643***					

Source: Survey Data (2020)

As shown in Table (3.6), the significant level is 1 percentage which is positive relationship between employees' job satisfaction and their intention to stay at hotels. The specific model could explain the variation of the employees' job satisfaction since the value of R² is 17.3%. In 5-star hotels, most of the employees are happy and satisfied at their work. They are satisfied with their personal values fit with hotel, salary, recognition, and team-work which towards the higher job satisfaction level in their hotel and in turn results increasing the productivity and employees more likely to stay continue in the hotel.

IV. Conclusion

1. Findings and Discussions

In this study, the correlation between transformational and transactional are positively related with job satisfaction, although employees mostly accepted the transformational leadership at 5-star hotels. The relationship between laissez-faire leadership and employees' job satisfaction are negative. As per result of survey in this study, most of the employees are satisfied to follow transformational leaders. The employees are willing to creative and not afraid to take the challenges to accomplish their job. The work nature also needs to creative on thinking to expand the market and also need to learning continuously about hotels. The employees are willing to take the challenges to solve the problems in new solutions, are encouraged them to change their awareness of problems, and their capacity to solve the problems. Their transformational leaders give them clear vision, lead them to achieve the goals. They are satisfied to work with the leaders who are influencing on transformation leadership style. Employees have intention to continue stay and work in 5-star hotels with transformational leaders.

Transformational leaders provide coaching their subordinates, inspire and empower to perform well their assigned tasks. The leaders are also well leading the organization and motivate the employees to challenge the things, which towards they are becoming role model of employees and high performers. Transformational leaders pay attention the employees individually to develop trust among the organization's members. Some of the employees from 5-star hotels believed that their leaders practice rewards (or) punishment system upon the accomplishment of organizational goal. Employees get the rewards upon accomplishment of their assigned tasks. In addition, some of the employees believe that their leaders are hardworking, strictly, follow the rules and correct actions to improve the performance. They are satisfied to work with their leaders who are influencing the transactional leadership style and have intention to stay continue and work at hotels. Based on the analysis result, all of the components of transformational leadership style have more significant positive impact on employees' job satisfaction than transactional leadership style. On the other hand, laissez-faire leadership has a negative impact on employees' job satisfaction in most of the hotels. Therefore, this study showed that 5-star hotels in Yangon mostly practiced the transformational leadership style and employees are satisfied under this leadership and intention to stay in hotels.

2. Suggestions and Recommendations

Leadership plays a critical role in every organization. It begins with the initial effort made to recruit a new employee; proceeds through the entire induction process; and continues until the employees leave the organization. Managers or leaders provide the employees to achieve organizational goals and objectives. The growth and success of every organization depends on its employees' drive to thrive through their efforts, motivation, performance, development of value and ability of employees, and their satisfaction on their current persistence. According to the findings, the transformational leadership styles and transactional leadership styles are most effect in 5-star hotels. If management notes the advantages of transformational and transactional leadership styles, there will be more effective in organization to achieve the organizational goals. Therefore, management should plan to develop more on leaders' skills to apply it. The leaders focus on employees' performance, concentrate the growth and development of employees' value and quality. Motivation and increasing the ability by giving proper training will also be required to increase productivity and job satisfaction with high performance. The proper training for in-house or on-site trainings should be given to employees, then the required ability will be increased to perform the assigned task or project well.

The recognition and emphasize praising is also one thing of increasing job satisfaction. should give the recognition the employees on their performance accomplishment and should practice more on system or incentive reward plan by using KPI to increase employees' Management performance as well as productivity, which employees will be more satisfy in their job and intention to stay. Employees' involvement in organization is important to achieve job satisfaction. Therefore, management should give change by solving the guests complains together with employees and find the root cause and make discussion, and let them decide departmental decision within a range. That will reflect positively on their job satisfaction and continue to stay and work in hotels.

In relation to survey result of the job satisfaction on employee's intention to stay, employees are more satisfied with their quality job, team-work, and personal development. Management should support job autonomy, job security and workplace of facilities. Promotion and increasing the salary is the highest effect on employees' job satisfaction. Therefore, management should consider on promotion and incremental system to spend their career life in the hotel happily. If the competitors persuade with high salary, employees may be possible to move to competitor. Therefore, management should keep on monitoring to set the preventive action not to lose qualified and talent employees.

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Controlling Factors of Economic Growth and Urban Area Extension of Mawlamyine City

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ABSTRACT: Mawlamyine City was an ancient Mon city, colonial city like a little England, important Sea port and inland outlet (Thanlwin River) transportation. Commodities were easily carried via Mawlamyine sea port from northern part of Myanmar and southern part of Myanmar. City area was developed also along the Thanlwin river bank. Its timber, rice and rubber once exported to foreign countries and towns of Myanmar and also connected to Thailand across border trade. Population increased year by year and also urban area extending with economic activities. Mode of Transportation changed from water transport to road transportation. In this study, influencing and controlling factors are observed. The population distribution, urban area extending especially villages to wards, rubber plantation areas were changes into residential and road areas, emerging industrial zone and mode of transportation changes are examined.

Key words : *colonial city, urban area extending, rubber plantation, industrial zone*

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I. Introduction

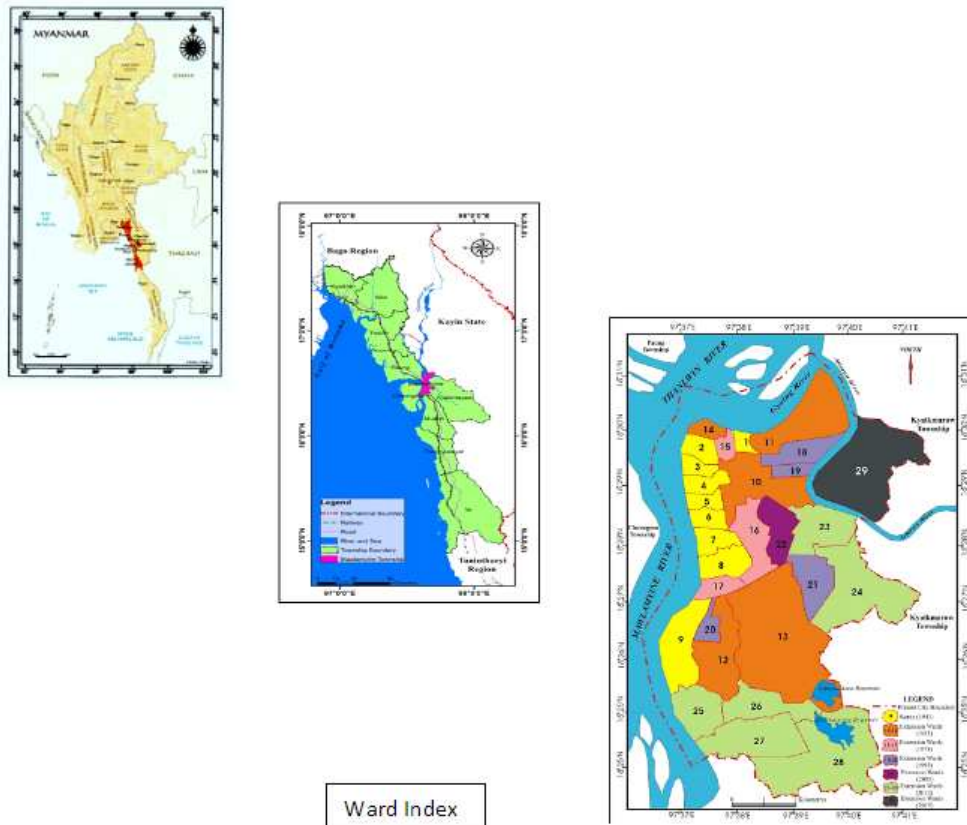
One-third of the world population is living in the urban area. According to 1914 census, over 29 percent of the total population of Myanmar lived in towns and cities and vice versa over 70 percent lived in rural or hinterland of towns and cities for agricultural activities. Urban and rural push-pull factors strongly effect the growth of urban population and decreased in rural population and agricultural activities. Rural people move to urban area and migrate to neighbouring countries and aboards for job opportunities and this situation adversely effects rural food supply or agricultural activities. Most of the young and working people migrate to other areas for their lives. After regaining the independence of Myanmar (around 1948), the arm conflicts against the government menaced the rural area. Thus, people of the rural areas moved to Mawlamyine City for security.

II. Methodology

Primary data was collected by field observation and open talks in study area. Secondary data was obtained from various documents and respective departments such as Immigration and Manpower Department, Meteorology and Hydrology Department, Land Use and Land Records Department and documents such as books from Geography and History Department Libraries of Mawlamyine University. Graphs, tables and figures are also used to present the changing condition of urban area.

III. Background of Mawlamyine Area and its Environs

Mawlamyine City is the Capital of Mon State and is located at the mouth of Thanlwin River. Geographically it is situated on the confluence of Thanlyin, Gyaing and Attaran Rivers. It is located between 16° 24' and 16° 31' North latitudes and also between 97° 36' 30" and 97° 41' 30" East longitudes. It has an area of 106.63 square kilometres and consists of 29 wards in 2021. The shape of Mawlamyine City is compact shape and has bounded by Thanlwin and Gyaing Rivers in the north, Kyaikmaraw Township in the East, Mudon Township in the south and Mawlamyine (Thanlwin) River in the west. The relief of Mawlamyine City was built on the undulating relief features as hill area and lowland area. (Figure 1.).



No.	Name	No.	Name	No.	Name	No.	Name
1.	Kyaikhpone	8.	Maunggan	15.	Aukkyin	22.	Zeyarmyine
2.	Hpettan	9.	Mutpun	16.	Myenigone	23.	Ngantae
3.	Shwedaung	10.	Hlaing	17.	Kvinyat	24.	Chaukmile
4.	Sitkegone	11.	Shwemyinethiri	18.	Zeyarthiri	25.	Kyauktan
5.	Mayangone	12.	Thirimyine	19.	Tharyaraye	26.	Sangyi
6.	Pabedan	13.	Zegyo	20.	Thirimingalar	27.	Gwegone
7.	Bogone	14.	Mandalay	21.	Myinetharyar	28.	Naungkari
						29.	Nyaungbinzeik

Figure 1. Location of Mawlamyine, Mon State, Myanmar

Source: Based on Map of Myanmar Survey Department, Yangon Region

Central hill area includes Taungnyo Range (30 m to over 240 m above sea level), continuation of Mottama Mountain Range and Taungwyne Range (over 150 m above sea level), near the Kinmonchone Reservoir in the southeast of the City. This reservoir aims to water supply for 60000 populations in 1905. Yankin Ridge (over 90 m above sea level) is the another mountain range in the central part of the City and eastern side of Yankin Ridge is steep and western side is gently sloping towards the plain.

The lowland area consists of eastern and western plain of Yankin Ridge. It is a undulating plain of the Mawlamyine City. Attaran River flows in Gyaing River in the north and it sources from southeastern part of the Mon State. Eastern plain is less than 7 m above sea level and western plain is between 7 m to over 15 m above sea level. Residential areas are found on these undulating plain areas of Mawlamyine City.

The Thanlwin River is the important river in Mawlamyine area. Tributaries of the Thanlwin River are Gyaing and Attaran Rivers which joint in the Thanlwin in north and northeast. The Thanlwin branches off into the Gulf of Mottama from Daye Bauk in the north and Mawlamyine Bauk in the south which is 28 miles apart. Mawlamyine City has many creeks such as Zank creek in Kyaikpane ward, Shwedaung creek in Shwedaung ward, Bogone creek in Bogane ward, Kwin creek in Kwin ward, Nagawuntha creek (through Mawlamyine University Campus) in Zegyo ward and Mutpun creek in Mutpun ward.

Mawlamyine City enjoys tropical monsoon type of climate, hot and wet climate, relatively high temperature and heavy rainfall. Temperature is high all the year round and hottest month is April (37.3°C). The annual average mean temperature is 27.5°C, the mean maximum temperature is 33.92°C and the mean minimum temperature is 21.08°C during 1988–2018. Total annual rainfall is 4966.48 mm. Mawlamyine receives abundant rainfall from southwest monsoon winds and when a cyclone develops in the Andaman Sea or when a depression crosses over this area from the Gulf of Thailand during the pre-monsoon and post-monsoon periods. During the rainy months from May to September may rainfall continuously for a week or more. With heavy rainfall, low-lying areas near the coast and along the creeks are flooded during high tides. All rivers and creeks are tidal in nature. But rolling topography and slopes favours the excessive water to drain away quickly.

Three types of soils are classified such as (1) Lateritic Yellow Forest Soil is found on the Yankin Ridge and Taungwyne Range, (2) Lateritic Soil occupied in the upland and foothill areas and (3) Meadow Gleyey Soil is made up of areas along Thanlwin and Attaran coastal plain. Natural vegetation is found on the eastern and southern parts of Yankin Ridge stretching along the central part of the City. Coastal area is also found mud and silt that cover the tidal areas. At present, only a few evergreen forests are found in the foothill areas. Most of the natural vegetation cleared for human settlement. Khaye (*Mimusopselengi*), Mango (*Autocarpus*), Marin (*Boneaburmania*), Banyan tree (*Ficusbenglensi*) and some other coconuts plants are found in residential areas. Other species are Myaya (*GreuciaMiceoes*), Thabye (*EogenicJamlolam*), Taungtahale (*Sandorcumindicum*), Thitto (*Sandoricumindicum*), Padauk (*Pterocarpusindicus*), Pynma (*Large-Strovemania* Flax region) and Kanaso (*Baccauredssapida*).

IV. Historical Background of Mawlamyine City

Historically Yamanya Yazar Mon King established Mawlamyine area on the confluence of three rivers such as Thanlwin, Gyaing and Attaran Rivers. Mawlamyine was an ancient Mon city and it was established in 1573 at Yamanya Region. The low hills that flank the town on the east and west are seen with ancient pagodas, including the Kyaikthanlan, renowned for its view, and Uzina, with life-sized figures representing the four events that influenced the Buddha to become a hermit. The city lies in an area that has a sizable "Mon" population.

Before 1826, Mawlamyine was only the old settlement area in the surrounding of Kyaikthanlan, Kyaikpane and Mutpun Pagodas. Mawlamyine (former Moulmein) became the first capital of lower Burma during 1826 and 1852 after the Tanintharyi (former Tenassarim) coast and along with Arakan (now Rakhine) was ceded to Britain under the Treaty of Yandabo (24th February 1826) at the end of the First Anglo-Burmese War. The British government established roads, government offices, churches and residential areas. Between 1826 and 1862, colonial Mawlamyine was the centre of British Burma and the first port city. Mawlamyine became a geographically important port city in Southeast Asia as timber and rice trade port since 1824. Mawlamyine was a like small fishing village with sparse population along an only one village road (nearly 4 km long). The wide winding road and the ridge road were constructed in 1827. Upper and lower main roads, Daingwunkwin, Nyaungbinseik and Ngantae roads were also completed in 1844. Now Mawlamyine City is the fourth Capital City of Myanmar and next to Naypyidaw, Yangon and Mandalay after 2006.

V. Population Distribution, Economic Growth and Urban Extension

Old settlement area of Mawlamyine first settled down at the confluence of three rivers such as Thanlwin, Gyaing and Attaran rivers before 1826. Total population of Mawlamyine area was over 15000 persons in 1832.(Table 1 and Figure 2.) These people were probably government servants, workers, traders, fisherman, and so on. Next over 20 years, total population reached 23683 persons in 1855. After the construction of roads, population has increased steadily. Next 17 years, Indian and Chinese labours immigrated to Mawlamyine area for paddy cultivation and timber extract. Therefore population has reached 46472 persons in 1872. The British Government extracts forest resources and exports 50000 tons of teak and 35000 tons of hardwood via Mawlamyine port into Britain every years. Mawlamyine was once an

important sea port and inland outlet (Thanlwin River). At that time, shipyards, rice mills and saw mills were emerged in Mawlamyine area. Most of the timber and sawmill activities sprang up in Daingwunkwin area and Indians began to operate in these works.

According to censuses by British Government, the population of Mawlamyine City was 53107 persons in 1881 and next 20 years its increased to nearly 5000 persons and it has over 58000 persons in 1901. Mawlamyine area was declared a Mawlamyine City in 1907. Population decreased to 57582 persons of which nearly 900 persons moved into cultivated area especially rubber and rice field near Mawlamyine City in 1911. Population increased to 61303 persons in 1921, over 65000 persons in 1931 and 68024 persons in 1941. These increases were immigration from Indian and native Mon people as rubber plantation owners and workers. Rubber plantation were grown with expand in Minywa, Ngantae, Chaukmile and road sides of Mawlamyien-Kyaikkhami road (road constructed in 1833) since 1920. Rubber price was decreased during 1931-1932. Twelve Japan warplanes bombed a British military base in Mawlamyine and the city was captured by the Japanese Army and Burma Independence Army on January 21, 1942. Mawlamyine Airport was opened at food-hill of Taungwyne Taung (now Zegyo Ward) in 1942.

Table 1. Population Growth and Ward Extension in Mawlamyine City

No.	Years	Population	Number of Ward
1.	1832	15700	
2.	1855	23683	
3.	1872	46472	
4.	1881*	53107	
5.	1901*	58446	
6.	1911	57582	
7.	1921	61303	
8.	1931	65506	
9.	1941	68024	
10.	1943	88024	9
11.	1953	102777	14
12.	1963	164125	14
13.	1973*	171470	17
14.	1983*	185572	17
15.	1993	217048	21
16.	2003	225969	22
17.	2006	238388	22
18.	2009	254259	22
19.	2012	278789	28
20.	2014*	253734	28
21.	2015	249680	29
22.	2018	248492	29

* Census Year

Source: Previous Documents.

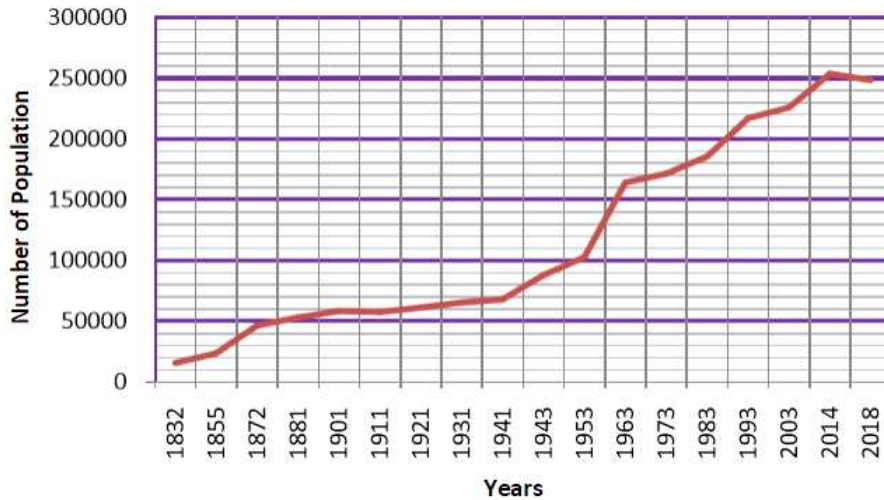
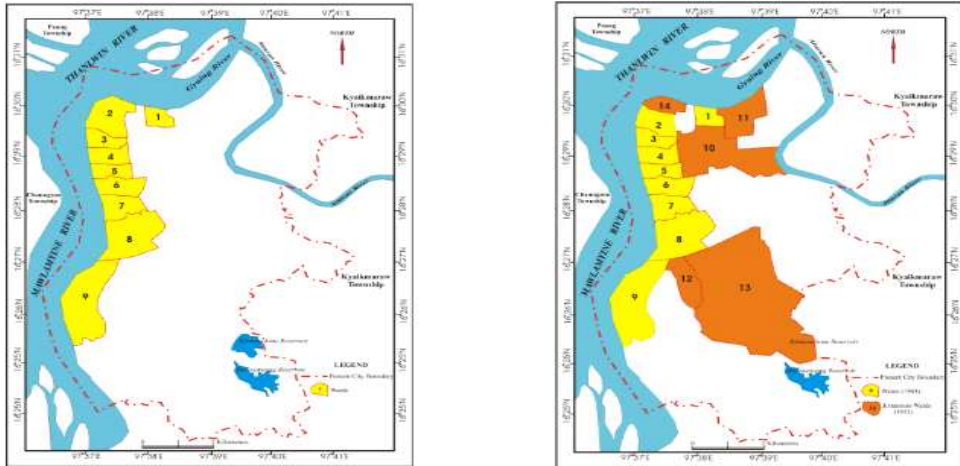


Figure 2. Population Growth of Mawlamyine City in 186 years (1832-2018)
Source: Based on Table 1.

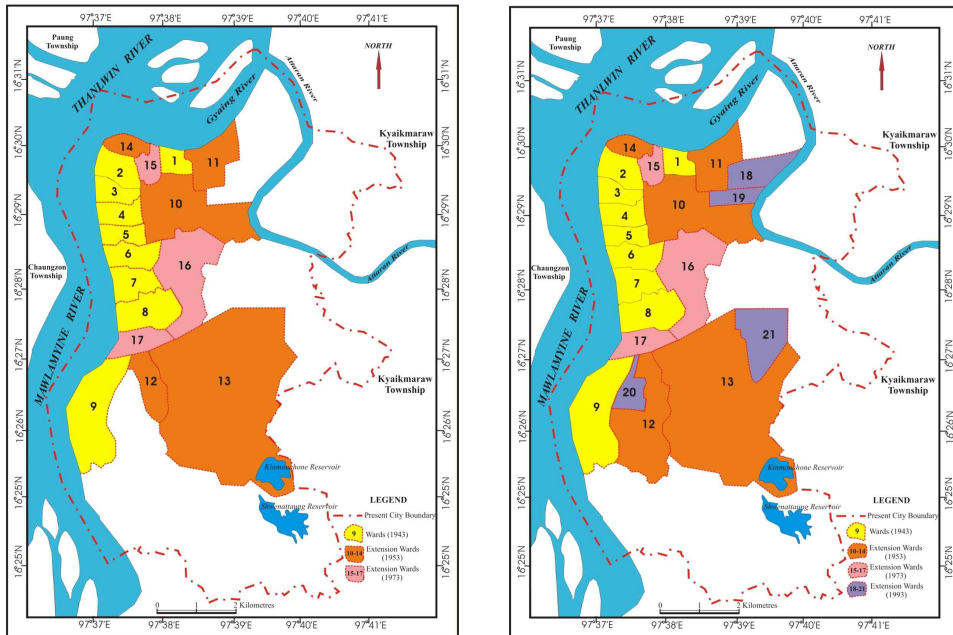
Residential areas along coastal area of Thanlwin (Mawlamyine) River were divided as Nine Wards in 1943. Therefore over 20000 persons were increased during 1941-1943. Kerosene and Petroleum for motor car were very rare during Japan under control. Therefore rubber oil processed for motor car engine in Maungngan Ward and rubber oil price was 5 Kyats per gallon. The whole Myanmar (Burma) was independence in 4th January 1948. In this situation colourful armies were emerged together with Independence. Therefore city population was increased year by year during 1948 to 1953 because of rural people migrated to urban area as a push and pull factor. Kyaikpane ward was subdivided into two: Mandalay and Kyaikpane Wards in 1953. For higher education, Mawlamyine Degree College was first established at 15th June 1953. University students have no government hostel but authorities rented a private owned house as a hostel for students. These students were included into urban dwellers. Mawlamyine Degree College was upgraded to Mawlamyine University and relocated at Zegyo ward near Mawlamyine Airport at 16th May 1959. (Figure 3 and 4.)



No.	Name	No.	Name	No.	Name
1.	Kyaikhpone	6.	Pabedan	10.	Hlaing
2.	Hpettan	7.	Bogone	11.	Shwemyinethiri
3.	Shwedaung	8.	Maungngan	12.	Thirimyine
4.	Sitkegone	9.	Mutpun	13.	Zegyo
5.	Mayangone			14.	Mandalay

Figure 3. Mawlamyine City Area in 1943 / Figure 4. Mawlamyine City Area in 1953
Source: Based on Map of Myanmar Survey Department and Documents

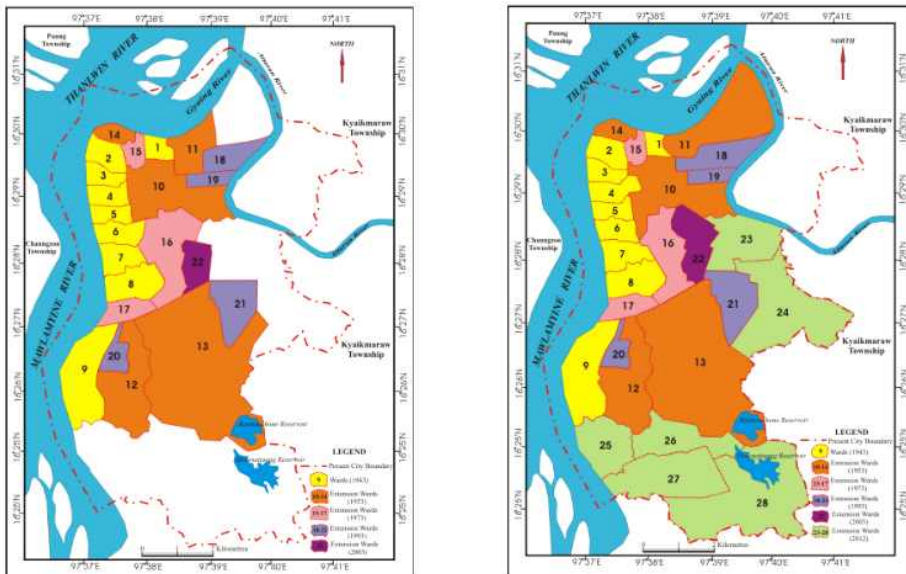
Rubber plantation areas increased between 1960-1961 and also urban population were increased to 164125 persons in 1963. During 1920 to 1962, there were 64 types of industries in Mawlamyine city. Mawlamyine city has extended to 17 wards at 27th July 1972. Maungngan ward was subdivided into Maungngan and Kwinyat wards. According to census years, population of Mawlamyine City was increased from 171470 persons in 1973 to 185572 persons in 1983. These increases are natural increase. City area expanded from 17 wards to 21 wards in 1993. Residential area extension with small scale industries cleared the rubber plantation areas. These areas emerged residential area with economic activities such as Myaingtharyar, Zayarthiri and Tharyaraye wards. These conditions affected to the high price of land plots in Mawlamyine City.(Figure 5 and 6)



No.	Name	No.	Name	No.	Name
1.	Kyaikhpane	8.	Maungngan	15.	Aukkyin
2.	Hpettan	9.	Mutpun	16.	Myenigone
3.	Shwedaung	10.	Hlaing	17.	Kwinyat
4.	Sitkegone	11.	Shwemyinethiri	18.	Zeyarthiri
5.	Mayangone	12.	Thirimyine	19.	Tharyaraye
6.	Pabedan	13.	Zegyo	20.	Thirimingalar
7.	Bogone	14.	Mandalay	21.	Myinetharyar

Figure 5. Mawlamyine City Area in 1973 / Figure 6. Mawlamyine City Area in 1993
 Source: Based on Map of Myanmar Survey Department and Documents

Next 10 years, in 2003, Zayarmyine ward was extended in east part of Myaynigone ward and city population has 225969 persons. Mawlamyine Railway Station was built in Zayarmyine ward at 27th April 2003 and opened at 17th April 2006. Urban area was extended again next six wards. These wards were changed from villages namely Ngantae, Chaukmile, Kyauktan, Sngyi, Gwegone and Naungkari during 2009 to 2012 and city population reached 278789 persons in 2012. (Figure 7 and 8)



No.	Name	No.	Name	No.	Name	No.	Name
1.	Kyaikhpone	8.	Maungngan	15.	Aukkyin	22.	Zeyarmyine
2.	Hpettan	9.	Mutpun	16.	Myenigone	23.	Ngantae
3.	Shwedaung	10.	Hlaing	17.	Kwinyat	24.	Chaukmile
4.	Sitkegone	11.	Shwemyinethiri	18.	Zeyarthiri	25.	Kyauktan

Figure 7. Mawlamyine City Area in 2003 / Figure 8. Mawlamyine City Area in 2012
 Source: Based on Map of Myanmar Survey Department and Documents

According to 2014 census, total population of Mawlamyine City was 253734 persons and has 28 wards. During 2012-2104, urban population decreased over 25000 persons due to migrate into Yangon, Mandalay, Naypyidaw and foreign countries (especially Thailand, Malaysia, Republic of Korea and Japan) for job opportunities. Because of the outmigration continuously done in Mawlamyine city, population decreased year by year during 2012-2019. In 2015, Nyaungbinzeik village was changed to Nyaungbinzeik ward. It has over 7800 persons in 2018. Nyaungbinzeik was an Industrial Zone since 1990s which is situated on the Mawlamyine-Hpa-an Road. (Figure 9.)

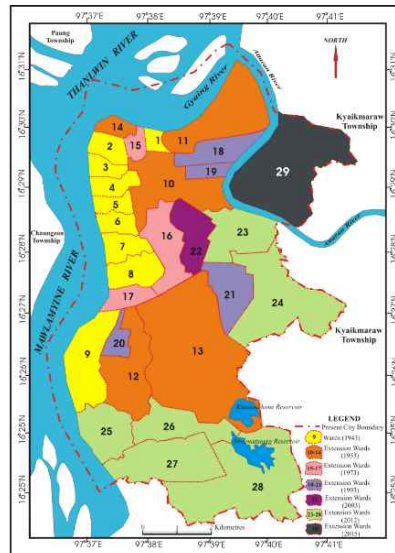


Figure 9. Mawlamyine City Area in 2015 and in 2021

Source: Based on Map of Myanmar Survey Department and Documents

Mawlamyine area became a Municipal Town, according to the Municipal Act of 1874. In this time, total population was over 46000 persons and people were dispersed along coastal plain of the Thanlwin (Mawlamyine) River. Government declared as Mawlamyine City in 1907 which has estimated population over 58000 persons. In 1943, these residential areas were begun systematically divided in nine wards. Next 10 years later, there were five wards extended and population reached 102777 persons. During 1953 to 1973, population increased to 68699 persons and three wards were extended. There were 17 total wards of Mawlamyien city in 1973. Next 20 years, in 1993, Mawlamyine city has 21 wards in total. In 2003, city area was extended and it has 22 wards. Wards were extended to 28 wards in 2012 and 29 wards in 2015. Now, Mawlamyine city consists of 29 wards. It has an area of 106.63 square kilometres in 2021. Largest ward area is Kyauktan ward, second largest ward is Zaygyo, third largest is Nyaungbinzeik (Industrial Zone) and smallest ward is Aukkyin. (Table 2.)

Table 2. Population Distribution and Density of Mawlamyine City in 2018

No.	Ward name	Area (Acres)	Area (Sq-km)	Number of Population	Population Density (Persons/sq-km)	Number of Households
1.	Kyaikhpone	1788	7.23	5828	806	1171
2.	Hpettan	252	1.01	11262	11150	2024

3.	Shwedaung	129	0.52	8647	16628	1584
4.	Sitkegone	161	0.65	7022	10803	1396
5.	Mayangone	153	0.61	4263	6988	1690
6.	Pabedan	174	0.70	4783	6832	877
7.	Bogone	234	0.94	7474	7951	1490
8.	Maungngan	343	1.38	8119	5883	1690
9.	Mutpun	814	3.29	10227	3108	2179
10.	Hlaing	788	3.18	21865	6875	4428
11.	Shwemyinethiri	1118	4.52	20681	4575	4142
12.	Thirimyine	765	3.09	12951	4191	2661
13.	Zegyo	3071	12.42	14633	1177	2950
14.	Mandalay	873	3.53	5891	1668	1002
15.	Aukkyin	124	0.49	7431	14862	1404
16.	Myenigone	418	1.69	7508	4442	773
17.	Kwinyat	191	0.77	10336	13423	2075
18.	Zeyarthiri	280	1.13	12459	11025	2370
19.	Tharyaraye	281	1.13	7970	7053	1489
20.	Thirimingalar	133	0.53	6164	11630	1353
21.	Myinetharyar	523	2.11	12970	6146	2703
22.	Zeyarmyine	521	2.10	4170	1985	837
23.	Nqantae	742	3.00	5730	2480	1166
24.	Chaukmile	1171	4.73	5884	1238	1161
25.	Kyauktan	4608	18.64	4613	247	896
26.	Sangyi	691	2.79	1496	538	302
27.	Gwegone	666	2.69	4569	7698	905
28.	Naungkari	2771	11.21	5738	511	1447
29.	Nyaungbinzeik	2774	11.22	7808	695	1477
	Total	26388	106.63	248492	x x x x x	49774

Source: Based on data from Immigration and Man Power Department, Mawlamyine, 2018.

Population distribution is uneven and highest population ward is Hlaing with the population of 21865, second highest population ward is Shwemyinethiri with the population of 20681 and third is Zaygyo ward with the population of 14633. Lowest population ward is Sangyi with the population of 1496. Most of the population concentration is along the transportation route especially Lower Main Road and Upper Main Road. Densely populated area is Shwedaung ward with 16628 persons per square kilometre, second is Aukkyin ward with 14862 persons per square kilometre and third is Kwinyat ward with 13423 persons per square kilometre. Sparsely populated area is Kyauktan ward with 247 persons per square kilometre in 2018. Out of the total population of 232,073 persons in 2019, over 80,000 persons were under 18 years, over 120,000 persons between 18 and 60 years and 24,128 persons in 60 years and above. Among them, the population between over 18 and 60 years are defined workable age groups. Thus, workable population is 55 percent and dependent population is 45 percent. Therefore, dependency ratio of Mawlamyine City was 81.81 percent in this year 2019.

Most of the people living in the city are Bamar with over 76 percent and second most is Mon with nearly 22 percent of total population. Kayin, Shan, Rakhine, Kayah, Kachin, Pa-O and Chin also lived in Mawlamyine City. Others are Indian, Chinese, Bangladesh, Pakistan and so on. In 2018, Over 88 percent of the people are

Buddhists in religion, nearly 7 percent Islam, nearly 4 percent Hindu, 1 percent Christians and others in religion. According to Education condition, Government Education Centres, Private Education Centres and Vocational Training Schools also flourished in Mawlamyine City. There are three Universities, sixteen Basic Education High Schools and six Basic Education High Schools (Branch), six Middle Schools and two Basic Education Middle School (Branch) and seventy-six Primary Schools, nine Monastic Education Centres and nine Private High Schools in 2019. Education sector is very important for local development in Mawlamyine City.

VI. Conclusion

Mawlamyine City exports agricultural products and fisheries products to Yangon and other areas of Myanmar. Mawlamyine City and its hinterland area rely on agricultural land. Perennial crops such as rubber, oil palm, durian, mangosteen are grown on hinterland areas and some urban area. Its commodity transport depended on water transportation between southern Myanmar and Yangon. Direct connection was Mawlamyine to Dawei with road and rail on coastal plain. When the Attaran Suspension Bridge was opened at 26th March 1998, Mawlamyine-Hpa-an (Kayin State) road was easily commodity transport via Hpa-an-Myawady to Thailand (Maesouk).

Another important bridge is Thanlwin Bridge which was opened at 18th April 2005. New railway station and new highway bus station were emerged after the Thanlwin Bridge opened. By using this bridge, the road transportation system between Yangon-Dawei-Myeik, even to Kawthaung (Southern point of Myanmar) can be easily and directly connect and transport commodities and passengers. Yangon-Mawlamyine-Dawei railway transportation was developed after this bridge. Mawlamyine-Naypyidaw-Mandalay, Mawlamyine-Yangon, Mawlamyine-Dawei-Myeik and Mawlamyine-Hpa-an-Myawady (Kayin State)-Maesouk (Thailand) road connections were developed the Mawlamyine and its vicinity. Government policies effected to the growth of urban population because of rural areas near Mawlamyine City boundary were changed into wards. Mawlamyine-Chaungzon Bridge was opened 9th May, 2017. This bridge connects with Mupon ward (Mawlamyine City) and Kaukmupon village tract (Chaungzon Township). Chaungzon Township is located at the Bilugyun (Bilu islands), in the western part of Mawlamyine City. Therefore, village tracts of Chaungzon Township easily access to Mawlamyine City and others. These hinterland areas support the commodities for Mawlamyine City's economy.

Mawlamyine City is also a nodal point and also agricultural and fisheries products are easily transport to upper Myanmar, Thanintharyi Region and Thailand via

Hpa-an-Myawaddy (Kayin State). With the urban area extension population growth effects the development of urban infrastructures and also together economic activities. Mawlamyine City had 221 cottage industries in 2019. The cottage industries can be divided into five types and also subdivided into 29 types. Five main types are Construction Materials Industry with 89 factories, Food and Beverages Industry with 57 factories, Consumer's Goods Making Industry with 25 factories, Clothing and Wearing Industry with 18 factories and Miscellaneous Industry with 32 factories. There is an Industrial Zone in Mawlamyine City which is located in Nyaungbinzeik ward and five miles away from Mawlamyine City. Nyaungbinzeik Industrial Zone has over 260 factories in 2019. Several state-owned enterprises and private-owned cottage industries, ten wholesale and retail markets, one market centre (Ocean Super Centre), one building materials and accessories sale centre (Pro-1), over one thousand six hundred retail shops with various types of commodities, sixteen government and private banks, twelve trading companies, fifty-seven commodity exchange centres, six private-owned hotels and large number of guest-houses, seven government general hospitals and one government traditional hospital, eight private-owned hospitals, twenty-three private-owned general clinics, over one hundred and twenty special clinics, thirteen private-owned petroleum filling stations, several restaurants developed and so many economic activities with the consequences of urban growth in Mawlamyine City.

In the future, the focus will be on the incorporating industrial areas into expansion of Mawlamyine City. It has become easier to connect with other cities and to focus on transportation. Today, Mawlamyine City remains a hub for trade exchanges with towns and cities of southern, northern, eastern and western part of Myanmar, and as the urban population grows, so does the potential for more business.

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Factors Affecting Consumer' Buying Behavior and Buying Decision on Local Coffee

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ABSTRACT : This study intends to examine the factors affecting consumer buying behavior and buying decision on local coffee in Mandalay. This study mainly used in descriptive method by conducting survey to sample 156 respondents in Mandalay in order to examine factor affecting consumer' behavior and buying decision by using Five Points Likert Scale. The study found that most of the respondents are male, single and government staffs and company staffs whose education level are graduated and post graduate. Psychological factors influenced consumers' buying behavior in term of attribute of goods and strong emotional feeling. Consumer buying decision are influenced by psychological factors and social factors in general psychological factors in particular. Psychological factors are more prominent than those in social factors especially need cognition, evaluation of alternatives and purchase decisions. It can be concluded that consumer' buying behavior and buying decision are mainly influenced by psychological factors. The study recommended that source of information should be extended in order to make rational decision of consumers on their buying behavior.

Key Words : *Need recognition, Source of information, Need recognition, Psychological factors and Social factors.*

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I. Introduction

People in Myanmar usually drink Tea and Coffee in everyday, especially for breakfast time, working time and recreation time due to their preferences. Coffee become popular for people in Myanmar society. In the domestic market, consumers can get different varieties of local produced coffee including pure coffee and instant coffee and imported coffee. People traditionally consume pure coffee for a long time but instant coffee existed in coffee market in last three decades. People prefer instant coffee mix due to convenient for drinking and bringing to their destination.

Majority of people however prefer local produced pure coffee to imported coffee due to its reasonable price, strong sense of smell, and taste, and decent smell. And people perceived that pure coffee is also good for health due to no instant in sugar content, and milk, however instant coffee has characteristics of ready to drink. Whether coffee is pure or instant is not important but the flavor and aroma and health benefits are influencing the preference of consumers. As a health benefits, it has advantages of staying awake and relaxation of workloads for all staffs and officers in government, private, NGOs and INGOs organizations as well as students and housewives.

Coffee thus typically plays a role for consumption habit in daily life of every society. Due to the fact that coffee demand are increasing trend in local market due to increase in coffee consumption. This study attempt to examine the factors affecting consumer buying behavior and to find out the influencing factors for consumers buying decision in Mandalay, Myanmar.

II. Literature Review

1. Factors Affecting Consumers' Buying Behavior

Consumers buying behavior is mainly influenced by personal factors, social factors, and psychological factors.

(a) Personal factors

Consumers' buying behavior is influenced by personal factors such as age, gender, occupation, income, personality and lifestyles of the consumers. According to Kotler & Armstrong (2010), nontraditional conditions also influence on consumers' buying behavior. Consumers' tastes and preferences can alter their buying behavior depending on their lifestyle and lifetime. Occupation and income mainly influences

consumers' buying behavior on goods they are affordable. The consumers' buying behavior on luxury goods or necessity goods depends on their different income levels.

(b) Social factors

One of the important factors for affecting consumers' buying behavior is social factors consisting of family, reference groups, status and role (Perreau, 2014). Every consumers may be as an individual and/or a member group or a reference group. Reference groups like family members, friends, neighbors, work group or other consumer related groups are directly influencing consumers' image and their buying behavior and also provides some ideas for altering their buying behavior on goods. Among the social factors, family members also influence the buying behavior of consumers and their perception (Kotler & Armstrong 2010; Khan 2006) because they can mainly influence the consumers' attitudes and opinions in order to judge their buying behavior. Social status and role thus influence the consumers' behavior on their purchase of goods as well as their selection of a particular goods. Lee, Bonn, & Cho (2015) analyzed the motivation of consumers in order to purchase organic coffee in Seoul and found that the purchasing behavior of consumers are influenced by health, environmental conservation, and social pressure.

2. Psychological factors

One of the influencing factors for consumer buying behavior is the psychological factors including consumers' beliefs and attitudes, their learning, consumers' perception and their motivation. The consumer behavior is influenced by their motivations in order to obtain their goals. How much extent consumers have motivation depends on their physical perception.

Learning can alter behavior of consumers through their practices and experiences. The consumer belief and attitude depends on their knowledge, opinion, and emotional feelings and reasoning. If consumers have good knowledge about particular product, their attitude and belief influenced on their buying behavior on particular product and they have strong attitude and beliefs towards a particular goods. Perceived value reflected the consumers' response of their emotion which is directly influenced by intention to purchase of a particular goods (Edward, Wang & Yu 2016).

3. Consumer Buying Decision

Consumers' decision making process is a process that concerns with diverse situations that determined the consumers' buying decision on particular goods (Berry, 2000). For instance, most of the consumer prefer coffee due to benefits of anti-oxidant and reducing a number of risk concerning with health consisting of osteoporosis (Choi et al., 2016) and more healthier if they started drinking it since young age (Ruxton, 2012) and overall productivity for a given day. As a result of benefits, consumers made buying decision on a particular goods.

Consumers buying behavior is mainly determined by different factors including personal factors, social factors, cultural factors, and psychological factors. This behavior enhance the consumers' buying decision. The consumers' buying decision are determined by five factors. These factors are as follow;

- (i) Need recognition
- (ii) Information Search
- (iii) Evaluation of Alternatives
- (iv) Purchase Decision
- (v) Post Purchase Evaluation

(a) Need Recognition

Need recognition is the first step of the process of consumers' buying decision. Need recognition depends on internal factors and external factors. Internal factors includes human basic needs and external factors consist of advertisement (Kotler & Armstrong 2010). Sellers are trying to pursue consumers in order to an increase in demand for a particular goods (Solomon 2004).

(b) Information Search

The second stage of consumers' buying decision is information search. Consumers usually search information about particular goods after need recognition. According to the Solomon (2004), some consumers purchase a particular goods without searching any information but they usually required to search information for choosing their alternatives. Consumer can access to information about particular goods from diverse source including family members, friends and relatives, and internet and social media as well as from commercial source which can provide a greater information about a particular goods such as price, categories, and quality. The source of information provides consumers in order to make right decision to purchase on particular goods.

(c) Evaluation of Alternatives

The consumers have to evaluate particular goods in terms of the determinant factors such as price of the particular product, taste and preferences, availability as

well as bundle of attributes, for example coffee, such as flavor, strength, aroma, colour, and number of cups per pack. Moreover, consumers evaluate alternative commodities depending on the attributes of goods. According to the economic theory, consumers' want are unlimited. Due to the fact that consumers intend to make a rational decision to purchase a particular goods that provides maximum satisfaction on their needs depending on more critical attributes. Some consumers did not evaluate alternative goods, instead they made buying decision by themselves depending on their habitual practice and their perception. The consumers' evaluation of alternatives have time consuming and stress for them.

(d) Purchase Decision

After evaluating alternative goods, final decision comes to an end to purchase a particular goods. This influences consumers' intention to purchase a particular goods that they prefer most. This is because consumers has already reviewed all the alternative goods. The consumers' purchase decision is determined by other situational factors such as discount prices as well as beliefs on quality of goods (Kotler & Armstrong 2010). Consumers sometime make quick decision on purchase a particular goods depending on their mental such as high quality should pay high price as a common thought (Solomon 2004). Consumers have more confidents to purchase local coffee due to lower risk of local ones. The consumers can delay buying decision due to negative feedback from other consumers and the level of motivation to comply or accept the feedback.

(e) Post-Purchase Evaluation

After the transaction has been done, post-purchase evaluation stage come in. The post-purchase evaluation is important for future decision making to purchase the product for consumers.

Sethitorn (2015) researched on drinking yogurt and consumers' buying behavior in Thailand. The study found that intention of purchasing behavior is influenced by a taste and preferences of a particular goods. This is due to the fact that consumers always think about a particular goods they purchased, meaning that whether or not it is tasted and/or it is match with their desire. If it is match their desire, they will make their decision on repeated purchases. Tanja Lautiainen (2015) analyzed the factors affecting consumers' buying decision for selection of a coffee brand by conducting survey using a self-administered questionnaire. The study found that a consumers' decision-making process is influenced by personal, social, and psychological factors.

Lee, Bonn, & Cho (2015) examined the motives of consumers in order to

purchase organic coffee in Seoul. The study found the purchasing behavior of consumers are influenced by health, environmental conservation, and social pressure. Edward, Wang & Yu (2016) analyzed the consumer-perceived value and product attribute of ready-to drink in Taiwan. The research found that there exists the positive affect of attributes, packing and brand labelling on value of perception and thereby leading to stimulate repurchase. Perceived value reflected the consumers' response of their emotion which is directly influenced by their consumption of coffee and intention to purchase. Factor influencing consumers' attraction for consuming coffee are packaging and brand labeling for a particular product. This is because consumers have a preference on packing and labeling (Prendergast & Pitt, 1996) with color and shape (Sorenson & Bogue, 2006; Lee & Liao, 2009; Mendez et al., 2011, Edward, Wang, & Yu, 2016). If it becomes more attractive, more effective decision on purchase of coffee will be made by consumers (Kotler & Gertner, 2002). This is reasons why coffee shops decorated with different attractive design and different style of coffee and quality to be attractive for consumers (Berry, 2000).

Torjusen et al. (2001) researched on consumers and producers' perception on organic food in Hedmark County. The research found that sense of taste, sense of smell and having fresh of coffee is significant for choosing beverages regardless of method of production. Chen & Sun (2014) made research on shortage of product and its effect on consumers' buying decision on game. The research found that intention to consumer buying behavior is strongly influenced by classification of quality and packaging. Grundey (2010) found that perceived value of emotion is determined by packaging of a particular goods which stimulate the sense of pleasure for consumers (Underwood, 2003).

Kupiec & Revell (2001) measured the quality of consumer's decision. The research found that consumers to some extent thought about whether or not a particular goods should be purchased depends on maximum satisfaction that they will receive. In the study of Caffeine by Roger (2012), study found that caffeinated beverage like coffee made consumer awake and effective to do their work activities and fresh of their sense. Ruxton (2012) researched on the effect of caffeine on health. The study found that consumers with younger age are better for health and significantly get advantages such as anti-oxidant and minimize risks of health matters consisting of osteoporosis (Choi et al., 2016). The same result is found by Lindsay, Carmichael, Kröger, & Laurin, (2012) in which coffee consumers are higher capabilities of their mental compare to non-coffee consumers. Irani & Hanzae, (2011) found that the probability of buying coffee depends on consumers' maximum satisfaction. Godiya Jis Jelison (2017) used the data of 210 coffee consumers in Wattana District in Bangkok to investigate the determinants of consumers' behavior on buying coffee, using multiple regression analysis. The study found that consumers' value is positive and

significant effect on consumers' buying behavior of coffee. Subjective norm and service quality has negatively insignificant on consumers' buying behavior of coffee.

III. Method and Limitation of the Study

This study mainly uses descriptive method. The survey was conducted to sample 156 respondents including company staffs, government staffs, students and dependents in Mandalay which is located in middle part of Myanmar by using structured questionnaires. Sample respondents were chosen by using random sampling method. The questions constructed with two parts: consumer buying behavior and buying decision. Consumer buying behavior includes personal factors, social factors, culture factors and psychological factors. Consumer buying decision was analyzed by four factors including need recognition, information search, evaluation of alternative and purchase decision using Five Point Likert Scale in which one for strongly disagree and 5 for strongly agree. This study excludes post purchase behavior on particular goods.

IV. Discussion and Results

1. Influencing Factor for Consumer Buying Behavior

(a) Personal Factors

According to the age distribution of respondents, majority of respondents are female accounting for 57.7% and female (42.3%). Among the respondents, a total of 91% of respondents falls range between 21 and 40 years old. About 71% of respondents are single and the rest are married, divorce, widower. Regarding with education level, about 90 % of respondents are graduated and postgraduate. A total of 75% of respondents are occupied as government staffs and company staffs. Over half of the respondents earned income kyats 200000 to 400000. According to the preference of coffee, about 86% of respondents usually drink coffee and two to three family member of respondents within household usually drink coffee every day. Most of the respondents typically purchase coffee at supermarkets. Nearly half of the respondents, 43% purchased 3 in 1 coffee mix and about 40% purchased pure coffee which are local produced.

(b) Social Factors

According to the social factor, family, reference group and role and status are taken into account. Within the family, about 80% of respondents bought coffee due the reasons of senses of the needs and uses of coffee. According to the reference groups who influence the buying behavior of coffee on respondents, about 70% of the respondents are referenced by friends and co-workers, the rest are by neighbors.

(c) Culture Factors

How much value on coffee as a culture, nationality and religious for sub-culture are taken into account as culture factors. About 85% of the respondents who are Bamar nationality keep in valued on coffee. Among the Bamar nationality, about 96% of respondents can be seen as Buddhist.

(d) Psychological Factors

To explore the psychological factors, Five Point Likert Scale are mainly used in which score are given as 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree and 5 for strongly agree.

Table 1. Psychological Factors

No.	Description	Mean	Standard deviation
1.	Drinking coffee make me satisfaction to fulfill all my needs so I made decision on buying behavior.	3.16	.919
2.	Coffee make me fresh due to its smell, color, and tastes so I made decision on buying behavior.	3.76	.737
3.	Coffee motivated me to change my good behavior so I made decision on buying behavior.	3.42	.865
4.	Coffee make me more incentive due to strong beliefs so I made decision on buying behavior.	3.31	.759
5.	Coffee make me more incentive due to strong emotional feeling so I made decision on buying behavior.	3.46	.911
	Overall Mean	3.42	

Source: Survey Data (November, 2019)

According to the psychological factors, coffee make more fresh (3.76), strong emotional feeling (3.46), and good behavior (3.42) due to its smell, color, and strong taste. The overall mean value for psychological factors reflects 3.42. As a result of mean value for 3.42, it can be said that psychological factors influence consumers' buying behavior.

2. Influencing Factors for Consumers' Buying Decision

(1) Psychological Factors and Consumer' Buying Decision

(a) Perception of Respondent' Psychological Factors on Need Recognition

Table (2) shows the perception of respondents' psychological factors on need recognition.

Table 2. Perception of Respondents' Psychological Factors on Need Recognition

No.	Statements	Mean	Standard Deviation
1	Packaging and design are attractive.	3.47	1.068
2	Local coffee are well-known variety with high quality.	3.65	0.989
3	Local coffee are well-known due to advertisement in social media.	3.35	1.162
4	Local coffee are recognized due to exhibition and promotion events	3.44	1.097
	Overall Mean	3.48	

Source: Survey Data (November, 2019)

According to the Table (2), respondents recognized local coffee with high quality and designing package as their needs, indicating the mean value of 3.65 and 3.47 respectively. The overall mean value is 3.48.

Perception of Respondents' Psychological Factors on Information Search

Table (3) shows perception of respondents on psychological factors for information search.

Table 3. Perception of Respondents' Psychological Factors on Information Search

No.	Statements	Mean	Standard Deviation
1	Local Coffee market and Supermarkets	3.01	.916
2	Coffee shop and Corner shop	3.16	1.133
3	Online websites and social media	3.37	1.119
4	Exhibition, and promotion events	3.10	1.179
5	TV advertisement, Newspaper, Journals, magazines, pamphlets and billboards	3.04	1.037
	Overall Mean	3.14	

Source: Survey Data (November, 2019)

According to the Table (3), respondents search source of information about coffee based on five sources such as markets, shops, social media, events and advertisements. Among five source of information, online website and social media were influencing on buying decision for respondents. This is because respondent can obtained detail information about coffee and more easily to purchase it via online. Online website and social media became convenient for respondent to consume it. It reflects the mean value of 3.37.

(b) Perception of Respondents' Psychological Factors on Evaluation of Alternatives

Table (4) shows perception of respondents' psychological factors on evaluation of alternatives.

Table 4. Perception of Respondents' Psychological Factors on Evaluation of Alternatives

No.	Statements	Mean	Standard Deviation
1	Local coffee brand are so tasted.	4.12	1.035
2	Local coffee brand are flavored and good Aroma.	4.20	.993
3	Local coffee brand are high quality.	4.10	.921
4	Local coffee brand are safety for health.	4.08	.940
5	Local coffee brand are reasonable price.	3.80	.897
6	Local coffee brand are popularity in the market	3.63	.984
7	Local coffee brand are well -designed and packaging	3.53	1.012
8	Local coffee brand are available for many cups per packet.	3.39	1.126
	Overall Mean	3.86	

Source: Survey data (November, 2019).

According to the Table (4), it is found that respondents perceived coffee as tasty (4.12), flavored and good aroma (4.20), high quality (4.10), safety for health (4.08), reasonable price (3.80), popularity in local market (3.63) and well-designed packaging (3.53). Due to the above respondents' perception, the overall mean value is 3.86. It indicates that psychological factors influenced evaluation of alternatives for consumers.

(c) Perception of Respondents' Psychological Factors on Purchase Decision

Table (5) shows perception of respondents' psychological factors on purchase decision.

Table 5. Perception of Respondents' Psychological Factors on Purchase Decision

No.	Statements	Mean	Standard Deviation
1	I decided to buy local coffee due to its good taste and smell.	4.04	1.077
2	I decided to buy local coffee due to good ingredients for Health	4.05	.962
3	I decided to buy local coffee by myself due to my confidence.	3.96	.986
4	I decided to buy local coffee due to its well designed and packaging.	3.61	.954
5	I decided to buy local coffee due to reasonable price compared to other alternatives.	3.56	.978
6	I decided to buy local coffee due to its promotion events	3.10	1.082
	Overall Mean	3.72	

Source: Survey data (November, 2019).

According to the Table (5), it is found that respondents decided to buy coffee as a result of good taste and smell (4.04), good ingredients for health (4.05), having confidence themselves (3.96), well-designed packaging (3.61), reasonable price compared to other alternatives (3.56). The overall mean value reveals 3.72. It reflected that psychological factors influenced the consumers' buying decision on local coffee.

2) Social Factors and Consumer' Buying Decision

(a) Perception of Respondents' Social Factors on Need Recognition

In Table (6) shows perception of respondents' social factors on need recognition.

Table 6. Perception of Respondents on Social Factors on Need Recognition

Sr. No	Statements	Mean	Standard Deviation
1	encouragement of family members	3.29	1.067
2	Encouragement of friends and colleagues	2.99	1.050
3	Encouragement of sellers	2.99	1.153
Overall Mean		3.09	

Source: Survey Data (November, 2019)

According to the table (6), coffee consumers noticed their need recognition in terms of their family members, friends & colleagues, and sellers. Among those, encouragement of family members are mainly influenced on need recognition for coffee consumers. This is because people believed on their family members who are closely relationship with them. It reveals the mean value of 3.29. However, the result found that social factors do not greatly influence on the need recognition of consumers in terms of the overall mean of 3.09.

(b) Perception of Respondents' Social Factors on Information Search

In Table (7) shows perception of respondents on social factors in information search.

Table 7. Perception of Respondents' Social Factors on Information Search

No	Social Factors (Information Search)	Mean	Standard Deviation
1	Family members	2.99	1.053
2	Friends and colleagues	3.43	.991
3	Sellers	3.24	.999
Overall Mean		3.22	

Source: Survey Data (November, 2019)

According to the Table (7), most of the respondents searched information about

coffee based on three sources of information including families, friends, and sellers. The result shows that respondents obtained most of the information about coffee through friends and colleagues, indicating the mean value of 3.43. This is because most of the respondents employed as government staffs as well as company staffs. This is why they have wide social network that provide information about local coffee to the respondents. It reflects the overall mean value of 3.22.

(c) Perception of Respondents' Social Factors on Evaluation of Alternatives

In Table (8) shows perception of respondents on social factors in evaluation of alternatives.

Table 8. Perception of Respondents' Social Factors on Evaluation of Alternatives

No	Particular	Mean	Standard Deviation
1	Family members' review on its attributes	3.36	.929
2	Friends and colleagues' review on its attribute	3.32	.858
3	Sellers' review on its attribute	3.12	1.126
Overall Mean		3.27	

Source: Survey Data (November, 2019)

According to the Table (8), most of the respondents evaluated the buying decision of coffee depending on the reviews of family members, friends & colleagues and sellers. The result shows that respondents evaluated buying decision of coffee based on the reviews of members of the family in terms of its attributes. The more appraisals are made by the family members and friends and colleagues on attributes of the coffee, the more likely to make buying decision on coffee to respondents. It reflects the mean value of 3.36 and 3.32 respectively. The overall mean value for social factors on evaluation of alternative reveals 3.27.

(d) Perception of Respondents' Social Factors on Purchase Decision

Table (9) shows perception of respondents on social factors in purchase decision stage.

Table 9. Perception of Respondents' Social Factors on Purchase Decision

No	Statements	Mean	Standard Deviation
1	Family members urge me to buy	3.13	.948
2	Friends and colleagues urge me to buy	3.21	.900
3	Sellers urge me to buy	3.10	1.137
Overall Mean		3.15	

Source: Survey data (November, 2019).

According to the Table (9), most of the respondents make final purchase decision

mainly depending encouragement of friends and colleagues followed by family members and sellers. It reflects the mean value of 3.21, 3.13 and 3.10 respectively.

3. Summary of Consumer Buying Decision on Coffee in term of Psychological and Social Factors

Table 10. Consumer Buying Decisions on Coffee in terms of Psychological and Social Factors

Factors	Mean value for Psychological factors	Mean value for social factors
Need Recognition	3.48	3.07
Information search	3.14	3.22
Evaluation of alternatives	3.86	3.27
Purchase decisions	3.72	3.15
Average Mean	3.55	3.18

Source: Survey data (November, 2019).

According to the Table (10), consumer buying decision are influenced by psychological factors and social factors in general psychological factors in particular. This is because most of the factors including in psychological factors are more prominent than those in social factors especially need cognition, evaluation of alternatives and purchase decisions. It can be concluded that consumer buying behavior and their buying decision are mainly influenced by psychological factors, reflecting the overall mean value of 3.55.

V. Conclusion and Recommendation

1. Conclusion

The study found that most of the respondents are male with age between 21 and 40 years. Majority are single and their education level is graduated and post-graduate. Respondents employed as government staffs and company staffs whose income are between kyats 200000 and 400000. Most of the respondents have consumed local coffee according to their psychological factors in which smell, colour, taste and preference and strong emotional feeling are prominent in reflecting the mean vale of 3.76 and 3.46 respectively.

Looking at the consumers' buying behavior, taste and preferences and strong emotional feeling are the most prominent in psychological factors. In studying the influencing factors for consumers' buying decision, psychological factors and social factors determined the consumers' buying decision in general social factors in

particular. In analyzing the consumers' buying decision in terms of psychological factors, need recognition, evaluation of alternatives, and purchase decision are found as the most influencing factor for consumers' buying decision. In terms of need recognition, consumers made buying decision in terms of high quality of the goods (means value of 3.65) and packaging design (mean value of 3.47) are greater influenced on buying decision. The information from online website and social media reflected the consumers' buying decision in terms of the mean value of 3.37. The psychological factors strongly influenced on evaluation of alternatives with reference to flavored and good aroma (4.20), taste and preference (4.12), high quality (4.10), safety for health (4.08), and reasonable price (3.80) respectively. Consumers' purchase decision largely depends on psychological factors with smell (4.04), good for health (4.05), and consumers' confidence themselves (3.96) respectively.

In analyzing social factors on the consumers' buying decision, only information search, and evaluation of alternatives are found as the influencing factor for consumers' buying decision. In terms of information search, consumers made buying decision in terms of friends and colleagues, reflecting the mean value of 3.43. The social factors mainly influenced on evaluation of alternatives with reference to reviewing of family members (3.36) and reviewing of friends and colleagues (3.32) respectively. The study found that consumers' buying decision depends on encouragement of friends and colleagues, indicating the mean value of 3.21. According to the research result, social factor are not strongly influenced by consumers' buying decision on coffee.

In sum, psychological factors are mainly influenced on consumer' buying behavior and buying decision on local coffee, reflecting the overall mean value of 3.55. The social factors cannot mainly influenced on consumer' buying behavior and buying decision in terms of the overall mean value of 3.18.

2. Recommendation

According to the social factors, promoting and encouraging advertisement in social media and promotion event become apparent. Advertisements should be extended to search information about local coffee on social media such as radio, television and online etc. So that consumers can get enough information about local coffee such as its quality, price and designing package thereby leading to make right decision on their consumption behavior and buying decision. The greater availability of information about local coffee enhances the consumers to make right decision on buying behavior and tends to increase in demand for local coffee. The consumers' accessibility of perfect knowledge and information make more competitive in local coffee market in the future.

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A Study on Consumer Buying Decision Making Process on Mazda (Demio) Automobile in Yangon Region

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Abstract : The study analyzed consumer buying decision making process of automobiles with special reference to Mazda (Demio) car users. The main objective of the study is to describe the consumer buying decision making process on Mazda (Demio) automobiles. Mazda automobile users 100 were selected as respondents and they were interviewed with structured questionnaires by using purposive sampling method. The study found that majority of consumers would like to buy Mazda (Demio) automobile due to their personal and social use. Regarding the source of information, the study observed that information was mainly received from Demio Facebook groups, family, friends, colleagues and followed by car DB application and majority of consumers took the length of time between 2 weeks and one month. Only a very few consumers just took over 6 months to buy Mazda (Demio) automobile. Regard to the evaluation of alternatives, the study noted that consumers are willing to buy Mazda (Demio) automobile because they want Car Design and suitable price. At the stage of making actual purchase decision, the study observed that majority of consumers bought normal type with two dashboards and Sky active type because it is popular design. Concerning with the post purchase evaluation, the study found that most users evaluated the Mazda (Demio) automobiles based on save fuel consumption that they expected. The second most is the performance and followed by product quality and after- sale maintenance's study show that user strongly satisfied the save Fuel consumption and they dissatisfied with the Interior decoration. Thus, the Mazda automobile company need to improve interior decoration of the car and need to put advancing technology in car system.

Key words: *Automobiles, Mazda, Demio, buying decision making process*

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Note: This paper was supervised by Dr. Moe Moe Yee, Rector, Co-operative University (Sagaing)

I. Introduction

Consumer behavior is that consumers display in searching, for buying, using, evaluating and disposing of products and services that they expect to satisfy their needs. It blends elements from psychology, sociology, social anthropology and economics. Consumer decision making is the process that people go through when deciding what products to buy. Not only relaxation of the rules and regulations, transparency concerning car importation, but also ease of financing being provided to establish dealers are the main factors to enable and enhance attractiveness of automobiles industry in Myanmar.

The demand for cars in Myanmar market is different from other countries in one way of another. Myanmar people in the past used to buy cars as an investment of their business rather than a necessity or luxury of their lives believing that they will make huge profits when they sell it. Myanmar Government also restricted the number of cars supply in the market so that car traders have upper hand in the market. There were some changes car import policies from the year 1989 and forwards when the government pursued market-oriented policy. One trend which looks unlikely to reverse is the growing strength of domestic car manufacturers. With the Myanmar government drawing up policies aimed at encouraging domestic companies to develop their own brands, either by themselves or as part of their joint venture with foreign companies such as Japanese, Chinese and India companies. In the implementation of both efforts, transportation and easy access to vehicles are some of the most important factors in materializing these purposes. The global automotive industry is increasingly characterized by global mergers and relocation of production centers to emerging developing economies.

Under the market-oriented economy, there has been enormous increase in the numbers of Automobile showrooms in Yangon Division. There have a lot of competition for Automobile business. The rationale behind this study is to choose the Mazda Demio automobile. Mazda demio is a super mini car produced and manufactured by Mazda since 1996. This 5-door compact hatchback is light in weight, which adds to the quality of its performance. The Mazda Demio provides excellent fuel economy, yet is still fun to drive. It offers superb handling and a tight turning radius. It is also known for requiring little maintenance and being extremely economical. It's no wonder the Mazda Demio won the 2008 World Car of the Year award. However, Mazda linked a deal with domestic firm's automobile alliance and cycle and carriage automobile Myanmar to import its vehicle to the Myanmar market, through rivals claimed domestic interest in the brand falls below its competitors in Myanmar. Some dealers shrugged off Mazda's entrance to Myanmar, claiming that

through the brand is relatively well known in the country, it sits below Toyota and Nissan in consumer buying decisions.

Understanding the buyer's decision-making process are not easy task as it is very difficult to conclude what is going in consumer mind. Thus, this study empathizes consumer buying decision making process on Mazda (Demio) that provide great business activities and suitable marketing strategies and competitive advantage to Mazda automobile business for both profitability and ongoing run.

II. Objective of the Study

The main objective of the study is to analyze the consumer buying decision making process on Mazda (Demio) Automobile in Yangon Region.

III. Scope and Method of the Study

This study focused on consumer buying decision making process on Automobiles by using descriptive method. The users of Mazda (Demio) automobiles are emphasized as target population of the study. The study applied both primary and secondary databases. The primary data were obtained by using survey structured questionnaires. The sample were selected by using purposive sampling method and sample size was 100 Mazda (Demio) car users. And the secondary data was obtained from the consumer buying behavior literature, books, reports, journals as well as Google web site.

IV. Literature Review

1. Concept of Consumer Buying Behavior

Consumer buying behavior is the behavior of final consumers, individuals who buy goods and services for personal consumption. All of these final consumers combine to make up the consumer market. The consumer market consists of all the combinations of final consumers. These consumers, from all over the world, with a wide range in terms of age, income, educational level, gender and tastes. In addition, they purchase an incredible variety of goods and services Armstrong & Kotler (2003). Armstrong & Kotler (2003) observed that consumers make many buying decisions

every day. The consumer purchasing decisions answers questions about what consumers buy, where they buy, and why they buy. Neal, Quester, & Hawkins (2000), found that past decisions, time related events, such as ageing, and external events, such as an illness of job change, lead to lifestyle changes that pose additional consumption problems and result in new purchases.

2. Model of Buying Decision-Making Process

The model of consumer decision-making process “Five-stage model of the consumer buying process” involves five steps that consumers move through when buying a product or service. A marketer has to understand these steps in order to properly move the consumer to the buying the product, communicate effectively to consumers and close the sale. The first stage is problem recognition, the second stage is information search, the third stage is evaluation of alternatives, the fourth stage is purchasing decision and the last stage is post- purchase behavior Leon Schiffman and Lesile Lazar Kanuk (2004).

V. Analysis and Findings

Total of 100 respondents are involved in this research to describe the consumer buying decision making on Mazda (Demio) cars. All of the car users were informed about the objectives of the study and proposed to participate in this survey. In this section presents the demographic profile of the respondents such as age, gender, occupation level, income level.

Table 1. Demographic Profile of Respondents

Gender	Number of Respondents	Percent
Male	30	30
Female	70	70
Age(Years)	Number of Respondents	Percent
21 - 30 years	10	10
31- 40 years	50	50
41- 50 years	35	35
Over 50 years	5	5
Occupation	Number of Respondents	Percent
Government Staff	25	25
Merchant	15	15
Company Staff	60	60
Income (Kyats)	Number of Respondents	Percent
100000-300000	5	5
300001-500000	70	70
Above 500000	25	25

Source: Survey Data, 2020

A sample involve 30 male customers and 70 female customers describing that the female customers are the highest with 70 percentages while the remaining respondents are male 30. Age of respondents is classified four groups such as between 21-30 years, 31-40 years, 41-50 years and above 50 years old. The age level between 31 and 40 years old is largest share (50%) while the customers with above 50 years old share are the smallest (5%)

Users occupation is divided three groups. Company staff are the largest with 60 percent, Government staff are the second largest with 25 percent and the smallest with Merchant are 15% respectively.

Income level is classified into three groups. The survey includes the user who have income 300001-500000 Kyats for 70 percent (the largest), and the user who have income above 100000-300000 Kyats for 5 percent (the smallest).

VI. Descriptive Analysis on Consumer Buying Decision Making Process

This section analyses the five stage of consumer buying decision process such as need recognition, information search, evaluation and selection of alternatives and post-purchase evaluation.

Table 2. Needs for buying Mazda (Demio) Automobile

Types of needs	No. of respondents	Percentage
Office use	5	5
Personal and social use	50	50
Family use	30	30
Others	15	15
Total	100	100

Source: Survey Data, 2020

Table 2 presents 50% of user bought the Mazda (Demio) cars for the personal and social use and 30% for family use. 15% is for other and the remaining 5% is for office use.

Table 3. Information search for Mazda (Demio) Automobiles

Particular	Yes	No
Family, friend, colleagues	70	30
Demio Facebook groups	80	20
Car magazines	10	90

Car DB application	60	40
Programs on television	0	100

Source: Survey Data, 2020

In Table 3, consumers searched source of information from Demio Facebook groups most. The second is from family, friend, and colleagues. The third is from car DB application. The others are from cars magazines.

Table 4. Length of time for initial decision to buy car

Length of time	No. of respondents	Percentage
2 weeks- 1 month	50	50
1 months- 3 months	30	30
3 months- 6 months	15	15
>6 months	5	5
Total	100	100

Source: Survey Data, 2020

According to the Table 4, majority of users took between 2 weeks and 1month followed by between 1month and 3 months, the third length of time is between 3 months and 6 months, more than 6 months are taken by 5 respondents.

Table 5. Evaluation Criteria of Alternatives to make Buying Decision

No	Particular	Mean Value
1.	Comfort and Safety	3.57
2.	Car Design	4.55
3.	Interior Decoration	3.82
4.	Brand image	4.35
5.	Suitable price	4.46
6.	Models of cars	3.72
7.	Advancing Technology	3.31

Source: Survey Data, 2020

Table 5, the highest mean values is 4.55 and the factor is car design. Therefore, Car Design is very important to make buying decision. The next is better suitable price which mean values is 4.46 and brand image is mean values 4.35. The other factors such as car models, comfort and safety and advancing technology which are 3.72, 3.57 and 3.31, respectively. Therefore, car design are the main evaluation of alternative to make buying decision.

Table 6. Purchase Decision on Demio Type by Respondents

No	Type	No. of Respondents	Percentage
1.	Normal type with one dashboard	20	20
2.	Normal type with two dashboards	50	50
3.	Sky active	30	30
	Total	100	100

Source: Survey Data, 2020

In Table 6, Normal type with two dashboards is the most popular and consumers choose that type. The second is Sky active which is chosen by 30 respondents. The others are normal type with one dashboard.

Table 7. Purchase Decision on place by Respondents

No	Location	No. of Respondents	Percentage
1.	Import by own arrangement	30	30
2	Online markets	20	20
4.	Car Dealers	50	50
	Total	100	100

Source: Survey Data, 2020

According to Table 7, majority of the users concerned with car dealers are 50%. The second is the users who import by own arrangement with 30% and the others are online market with 20% respectively.

Table 8. Post Purchase Evaluation on Demio by Respondents

No	Particular	Mean Value
1	Product Quality	3.72
2	Performance	3.83
3	Safety	3.11
4	Interior Decorations	2.31
5	Save Fuel Consumption	4.22
6	After-sale maintenance	3.54
7	Easier spare parts	3.78
8	Advancing Technology	2.98

Source: Survey Data, 2020

According to Table 8, the Fuel consumption is the highest mean value that is 4.22. The second most is the performance that's mean value is 3.83 followed by easier spare parts that is 3.78 mean value. The product quality gets the mean value 3.72. The mean value of after sale maintenance is 3.54, safety factor is 3.11,

Advancing technology is 2.98, and Interior decoration is 2.31. According to the Table 8, consumers strongly satisfied the fuel consumption of cars that consumers bought, and they dissatisfied the interior decoration of the car.

VII. Conclusion

After studying on the consumer buying decision making of automobile, the market should focus on female group which are affluent aged group of user groups because they have enough knowledge about automobiles and own experiences. However, marketers can focus on male users because nowadays male users are more interesting on automobiles than female. The marketer should focus Company staff and Government staff because they are willing to buy Mazda (Demio) automobile due to their design and suitable price. After sale service is also needed to focus by marketers not to be worried about spare parts and maintenance. According to the need of recognition, the study found that majority of consumers would like to buy Mazda (Demio) automobile due to their personal and social use.

Regarding the source of information, the study observed that information was mainly received from Damio Facebook groups, family, friends, colleagues and followed by car DB application. Concerning the length of time consumers take before they buy Mazda (Demio) automobile, this study learned that majority of consumers took the length of time between 2 weeks and one month. Only a very few consumers just took over 6 months to buy Mazda (Demio) automobile. Regard to the evaluation of alternatives, the study noted that consumers are willing to buy Mazda (Demio) automobile because they want Car Design and suitable price. At the stage of making actual purchase decision, the study observed that majority of consumers bought normal type with two dashboards and Sky active type because it is popular design. Concerning with the post purchase evaluation, the study found that most users evaluated the Mazda (Demio) automobiles based on save fuel consumption that they expected. The second most is the performance and followed by product quality and after- sale maintenance's study show that user strongly satisfied the save Fuel consumption and they dissatisfied with the Interior decoration. Thus, the Mazda automobile company need to improve interior decoration of the car and need to put advancing technology in car system. Moreover, the Mazda automobile company more need to sustain safety. This company more compete in automobile make if these factors will be improved by the Mazda automobile.

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A Study on the Philanthropic Organizations in Mandalay City

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ABSTRACT: The objective of this paper is to analyze the services of the philanthropic organizations in Mandalay City. Mandalay is the second largest business city and the most religious city in Myanmar. Philanthropic organizations in Mandalay are non-profit organizations but these organizations cannot afford to serve their services without sources of funds. In this study, both primary data and secondary data are used. The research sample was determined by cluster sampling method for survey. The descriptive analysis, multiple regression analysis, key informant interview method and Pearson correlation were also used in this study. The results showed that the funeral services and education services were direct relationship with sources of funds but emergency services and health care services were indirect relationship with sources of funds. The more if the organizations serve funeral services and education services, the more they will get more sources of funds. Even though emergency services and health care services are receiving sources of funds, these sources of funds did not cover with expenses on these services. These organizations should open vocational training to make more funds and should collect voluntary contributions from individuals and families around the city and region.

Key words: *Philanthropic Organizations, Non-profit Organization, Sources of Fund, Voluntary Contribution and Services.*

I. INTRODUCTION

Philanthropy is a voluntary and non-profitable. Philanthropy is a "love of

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humanity" in the sense of caring, nourishing, developing and enhancing "what it is to be human" on both the 'benefactors' and 'beneficiaries' parts. Philanthropy is practiced daily in the United States, and around the world, as a systematic way to improve the quality of human life through the promotion of welfare and social change. Philanthropic practices have been built into social and belief structures since ancient times.

In the world, philanthropic organizations engaging the issues and activities are broad, including hunger eradication, poverty alleviation, disaster relief, aid to children, assistance for the disabled, the elderly and victims of sexual abuse and violence, media and public mobilization campaigns, and volunteering work in education and training work related to culture, the arts, and the environment. It is difficult to list all the organizations carrying out philanthropic activities in the world. Philanthropy concerns for human welfare and advancement, usually expressed by donations, money, property, or work for people in need. Philanthropic organizations have become more critical part of creating a healthy, sustainable culture within a society. Philanthropic organizations are the ways for societies to give back to their communities by generously offering and providing employee time, facilities, and their products and services, among financial donations and other things. Philanthropic forms were usually small and for local purposes.

In Myanmar, philanthropic organizations have been existed since Myanmar Dynasty. Philanthropic organizations formed in Myanmar to perform social and religious functions, including health, education, and social services. Many of them are religious-based and provide support for funerals and family or community emergencies. Philanthropic Organizations may simply be a few people with a similar sense of philanthropic purpose on the basis of faith or patronage for the disadvantaged.

The key aspects of nonprofits are accountability, trustworthiness, honesty, and openness to every person who has invested time, money, and faith into the organization. Nonprofit organizations are accountable to the donors, founders, volunteers, program recipients, and the public community. Non-profit organizations such as churches may also provide services that the government fails to provide to the poor. They may operate hospitals that meet the needs of the poor who cannot afford to go to private-run-hospitals. They may also run homeless shelters or soup kitchens. Non-profit organizations can also promote cultural and educational causes. They can run art classes in poorer or minority neighborhoods in order to encourage artistic expression in children as well as to expose them to their indigenous culture. Non-profits provide services that should be met for public sector, but are not being addressed due to lack of funding or other reasons.

1. Rationale of the Study

Pauline Tan investigated the Philanthropic Foundations in Asia insights from Singapore, Myanmar and China (2008). This study looked at an emerging trend in which wealthy families, individuals, and corporations in Asia set up foundations to institutionalize their giving. This giving was motivated by a myriad of factors beyond prestige and status, including the desire to give back to society, religion, family and personal values, the desire to drive change, personal experience, and affiliations. This study found that philanthropic foundations in Asia can be characterized by their operational model, governance structure, and philanthropic focus. In emerging economies in Asia like Myanmar and China, these foundations tend to give nationally and operate their own programmes. On the other hand, foundations in developed economies like Singapore and Hong Kong tend to give both regionally and nationally via grants to civil society organizations that operate programmes, as opposed to running programmes themselves. Further, families tend to retain significant control of foundations in Singapore and Hong Kong, while programme funding serves funding serves as the preferred funding model.

Dang Nguyen Anh and Le Kim Sa (2009) investigated that Philanthropy in Vietnam. The research draws out what do people give to, why do they give, and how do they give in order to identify potential and options to improve philanthropic giving and activities in Vietnam. Businesses in both cities complained about a lack of transparency, openness and confidence in the sector. As well as misidentification of targets and a failure to communicate sufficiently make the need for charitable activities. This paper arises important issues which should be considered further in building a legal and operating environment supportive of increased philanthropic giving in Vietnam in the coming years.

Dr. Sibylle Studer, Ma Sara Sttihlinger and Georgvon Schnurbein investigated the papers presented at the 2014 conference of the European Research Network on Philanthropy in Riga Juli. The non-profit support organizations used time donations as puffer to serve non-profit organizations with low purchasing power and thereby enhance the professional quality and impact of the non-profit sector. In this study contributed to the understanding of the emergence of non-profit support organizations in the realm of increased pressure for professionalization. Non-profit support organizations enhanced the non-profit sectors' capability to cope with this pressure and might constitute a further differentiation of the non-profit sector.

Philanthropic activities have taken place in various forms and at different scales, in many cases starting from the smallest things. Many aid organizations operate and participate very effectively in philanthropic activities. Nowadays, philanthropic organizations are important to help the people in need. Famous people including

sport stars, actors, singers and musicians participate in fundraising events of philanthropic organizations in larger members. These events often focus on supporting school constructions or scholarships for disadvantaged children. The images of philanthropic organizations have been increased around the world. The philanthropic organizations are important to assist the areas affected by natural disaster, help fundraising for a humanitarian cause, or fulfill the dreams of disadvantaged children.

In Myanmar, Buddhism in particular has features – some social, some religious – that tend to emphasize donations to those in needs as the primary religious activity of a Buddhist. This charitable behavior is for oneself, for others and for the nation as a whole. Buddhist people formed the philanthropic organizations to perform the social activities. Philanthropic Organizations have taken place in various forms to assist people affected by floods, and disasters by gathering cash and in kind assistance such as food, clothes and medicines. And these organizations also work poverty alleviation, disaster relief, aid for children, assistances for the social and religious functions, disabled, the elderly, health care and education sectors. Mandalay is the Second Largest Business City in Myanmar. People in Mandalay City are religious persons. So many people perform philanthropic works or philanthropic organizations.

In Mandalay City, the philanthropic organizations are various forms, including individuals who participate in philanthropic organizations. At present there are 60 philanthropic organizations in Mandalay City. Promoting the sustainable development of philanthropic organizations in Mandalay City will require strengthening the diverse sources of development finance. Philanthropic organizations are non-profit and non-governmental entities that utilize donated assets and income to provide social useful services. So, this study will explore services of philanthropic organizations because the philanthropic organizations' activities in Mandalay City are very important for the people in community emergencies. This survey will also conduct in order to know how to perform the service of the philanthropic organizations in Mandalay City.

2. Objective of the Study

The objective of the study is to analyze the services of the (43) Philanthropic Organizations in Mandalay City.

3. Methods of Study

In this study, both primary and secondary data are used. The descriptive analysis,

multiple regression analysis are also used to examine the factors of services related to sources of funds. The primary data is collected by using key informant interview (KII) method and a structured questionnaire of a 5-point Likert Scale. The sample is determined by cluster sampling method for survey. Other needed information as the secondary data is obtained from reference books, internet websites and journals.

4. Scope and Limitation of the Study

This study focuses on the services of philanthropic organizations in Mandalay City. According to the cluster sampling method, the survey data are collected 43 philanthropic organizations among 60 organizations.

II. LITERATURE REVIEW

Philanthropy is traditional seen as giving money to the less fortunate, charities, or civil society organizations. Wealthy individuals and families tend to make charitable contributions to improve education and alleviate local social problems like poverty, hunger, and disease. In recent times, philanthropy is seen to entail the giving of time, expertise, or money. Philanthropy in the world organizations supports to vulnerable people, such as widows, orphans, poor families. Philanthropy is benevolent behavior, in the form of charitable acts. These acts typically are (1) giving or donating money or assets and (2) volunteering time and assistance for no payment. Many make a distinction between philanthropy and charity. Typically, philanthropy refers to wealthy residents making contributions to help the needy or disadvantaged. By contrast, charity is alleviating human suffering and reducing poverty, hunger, and disease. Philanthropic giving is associated with religion, personal preference, and social connections in Southeast Asia. Philanthropic giving is endogenous to national identity whereby the government, corporations, and community collaborate in dynamic ways to meet social welfare needs on the ground.

Social service is a service provided for the benefit of the society. Social service is done by the government, public or private institutions and NGOs. These services can be in the form of food subsidies, health care, education etc. These services are very important for the uplift or betterment of the country. There are various organizations working on the social service for the betterment of the society. NGO is working for the upliftment of the society which is made by a group of young individuals. Philanthropy can be regarded as a growing source of revenue for non-profit organizations, and given that philanthropic organizations wish to constitute a greater

part of the third sector in general.

A non-profit organization is a group organized for purpose other than generating profit and in which no part of the organization's income is distributed to its members, directors, or officers. Non-profit corporations are often termed "non-stock corporations." They can take the form of a corporation, an individual enterprise for example, individual charitable contributions, unincorporated association, partnership, foundation distinguished by its endowment by a founder, it takes the form of a trusteeship, or condominium joint ownership of common areas by owners of adjacent individual units incorporated under state condominium acts. Non-profit organizations must be designated as non-profit when created and may only pursue purposes permitted by statutes for non-profit organization. Non-profit organizations include churches, philanthropic organizations, public schools, public charities, public clinics and hospitals, political organizations, legal aid societies, volunteer services organizations, labor unions, professional associations, research institutes, museums, and some governmental agencies.

Civil society structures in Myanmar traditionally existed at the local level within religious groups, emerging from Buddhist and Christian-led social welfare activities and focusing on poverty, health, and the daily needs of communities. Particularly in areas of weak central government control and armed conflict, civil society often filled the state's service-delivery role. There are three types of civil society organizations in Myanmar- community-based organizations, and local and international nongovernment organizations (NGOs). Along with the concept of a philanthropic organization, there is also the non-profit organization (NPO). The term non-profit is attached to an activity or an organization to denote that its goal is not to seek material gains. With their intermediary role, most philanthropic organizations fund raise based on the non-profit principle with a strong donor and volunteer.

In 2001, Kyaw Thu began a process of reinvention which has seen him become one of Yangon's leading humanitarians. Kyaw Thu becomes a president of free funeral service society (FFSS), a charity so famous that simply say "Kyaw Thu's office". It is a large operation with over 500 staff – the majority of whom are dedicated volunteers. Kyaw Thu's office is the great and good of Myanmar society. FFSS also operates a mobile clinic service, named in honor of U Thu Kha, which provides vital, free medical assistance to over 200 people each day, a staff of over fifty volunteer doctors. Further operations have sprouted in Pyay, Pegu, and Kyobingauk. The clinic provides not only primary healthcare, but serves as a hospital for the treatment of many other major afflictions. And this FFSS provides classes for matriculating students, runs summer schools which teach children basic courtesy, grammar and ethics, and offers vocational training in areas such as hospitality, business, and teacher training. The organization also arranges disaster relief, filling gaps in official

provision to help victims of fire, flooding and Cyclone Nargis. The organization is also participated in agricultural efforts by providing wells, machinery, manpower and inputs, and also aided with the construction of new schools.

III. HISTORICAL BACKGROUND OF PHILANTHROPIC ORGANIZATIONS IN MANDALAY CITY

Mandalay City is located in the central dry zone of Myanmar by the Ayeyarwady River at 21.96 degree North, 96.08 East, 80 meters (260 feet) above sea level and 716 km (445 miles) north of Yangon, the new capital city site is 66 square kilometer (25.5 sq. mi) in area, surrounded by four main rivers, Ayeyarwady, Chinwin, Thanlwin and Sittaung. The city plan called for 144-square block grid patterned citadel, anchored by a 16 square block royal palace compound at the center by Mandalay Hill. The population has 1,225,553 (2014 Census). The Religions in Mandalay are Buddhism (Theracvada Buddhism), Christianity, Hinduism and Islam.

Mandalay was founded in 1857 by King Mindon, replacing Amarapura as the new royal capital of the Konbaung Dynasty. It was Myanmar's final royal capital before Kingdom's annexation by the British Empire in 1885. Under the British rule, Mandalay remained commercially and culturally important in Myanmar.

Philanthropic organizations in Mandalay City were religious-based and provided support for funerals and family or community emergencies. The first organization was the 'Byahmaso organization'. It was formed on May 7, 1998, under the guidance of Taung Salin monastery abbot U Teikkha. It was also the oldest organization in Myanmar. Firstly, it was launched for funeral services only. When Taung Salin Sayardaw formed the organization with local businessmen, doctors, the literary community, monks and government officials, the Mandalay municipal government was doing the job for funeral services with two or three old hearses and their service was very poor. The hearses broke down during funerals. The abbot donated some land to us, and he organized influential people in the community who saw a need for public service.

Chan Mya Thukha Social Welfare Association appeared in Mandalay History. It is situated at Shwesankine monastery in Shwesankine ward, Tampawaddy quarter, Chan Mya Tharzi Township, Mandalay City and has been doing social activities since May 21, 2006. Organization was based on the donation funds of respective quarters, villages, towns and cities, and voluntary contributions from social activities such as free transportation services on funerals, funeral services, free transportation cremation services on funeral, free ambulance transfer services to a long distance, free

ambulance transfer services to hospitals. And also come from donation. The donation funds collected from monthly donation of members, donation of sponsorships such as buildings, cars, and computers.

Most of the organizations in Mandalay had been arisen under the guidance of abbot U Teikkha. The abbot encouraged patrons and his friends to serve like this organization. Because of their superstition, the houses opposite of this association hurled stones at its office building and called in pallbearers to volunteers. The people did not want to mingle with them. And some devotees of the abbot stopped visiting his monastery when they saw the hearses. The significant of philanthropic organizations in Mandalay City provided the people assorted coffins free of charge. But they received only donation from them. They provided a free funeral service. If the family is really poor and cannot afford a funeral, they also give them the half of expenses on funeral services and religious ceremony. These organizations have been provided assistance to police in inquest cases such as a drowning, suicide, car accident and motorcycle accident. When police asked for their service, they go to the scene and provided their free services. And these organizations were carrying patients to their hometown from Mandalay hospital when their health condition deteriorates.

The philanthropic organizations also offered free medical care to needy patients. The philanthropic organizations started helping with free medical care in later 2000. Some patients could not afford to buy medicine prescribed by doctors, or could not pay for needed tests and medical procedures. In some cases, they would die if they cannot afford to buy these things. The philanthropic organizations started by spending with their limited financial resources per month. These organizations served free clinic and opened for general patients on weekends. Sometimes, these free clinics referred patients to government hospitals when needed.

The philanthropic organizations also provided natural disaster relief aid. In Cyclone Nargis, these organizations had been started the natural disaster relief aid. Organizations also donated relief supplies worth to the cyclone-hit areas, led by Abbot U Teikkha, two executive committee members and a medical doctor. These organizations in Mandalay joined together to provide relief supplies to the fire victims, the cyclone victims, the war victims, and the flood victims.

IV. ANALYSIS OF THE PHILANTHROPIC ORGANIZATIONS IN MANDALAY CITY

1. Study Area, Methods and Variables

The study area is Mandalay City located in the central area of Myanmar. Mandalay consists of 4 towns, Aungmyethazan, Chanayethazan, Chanmyathazi and Mahar Aungmye. There are total 60 philanthropic organizations in there.

In cluster sampling technique, analysis is carried out on a sample which consists of multiple sample parameters such as demographics, habits, background – or any other population attribute which may be the focus of conducted when groups that are similar yet internally diverse form a statistical population. Instead of selecting the entire population of data, cluster sampling allows to collect the data into small, more effective groups. Cluster sampling method represents the groups in the entire cluster.

According to cluster sampling method, this study wants to create a sample of philanthropic organizations across 4 towns in Mandalay. Using cluster sampling method, this study collects 43 organizations from 4 towns (clusters) to form a sample.

Dependent variable (Y) is the source of funds. Source of funds is the main important tool to serve more and more services. Even though non-profit organizations, they need funds to serve functions more and more. Source of funds means donated from members, volunteers, families, or activities.

Independent Variables(X) are oxygen services, funeral services, education services, emergency services and health care services. Oxygen service is a service that carried out by philanthropic organizations. This service serves for patients who are suffering the long problems or emergency cases. This service served by philanthropic organizations is in free of charge. Funeral service is a memorial service or celebration of life is a funerary ceremony that is performed without the remains of the deceased person. Most of the organizations have get source of funds from funeral services. Education service aims to target out of school children or children who cannot afford to attend the school by establishing formal and informal school services. Organizations earn by opening the courses and training courses that connects with experts and vocational institutes. Emergency services are ensured public safety and health by addressing different emergencies. These services exist for addressing certain types of emergencies as part of organizations' responsibilities. The health care services of philanthropic organizations provide basic medical services, preventive services and public health activities. Health care services are provided to the people who are in poor or unhealthy. Most of the organizations have got contributions from this service.

2. Data Analysis and Interpretation

This study used four sets of questionnaires to analyze the sources of funds, oxygen services, funeral services, emergency services, education services and health

care services in Mandalay City. The first questionnaire sets gender, age, levels of education, and marital status of respondents. The second section includes experiences, number of volunteers, and number of cars of organizations that are studied and analyzed under three categories, the third section sets services of philanthropic organizations influencing on sources of funds that are asked with Five Point Likert scale item (from 1= strongly disagree to 5= strongly agree) and the last section sets discussion with board members of the organizations. Eighty two (82) questionnaires are administered and returned. After collecting all the responses from those organizations, analyzing the demographic factors, and reliability of the study are conducted firstly. And then, analysis of influencing factors of services on sources of funds, correlation analysis and multiple regression analysis are conducted in order to prove the objective of this study.

3. Analyzing the Demographic Factors

According to Table (1), 100 respondents are male. In percentage, Male respondents are 100 percentage and female respondents are zero percentage of total respondents. Therefore, all of the respondents are male.

In Table (2), the majority of the participants, 2 respondents are between the ages of 26 and 36. 13 respondents are between the ages of 37 and 47. 14 respondents are found in between the ages of 48 and 58. 10 respondents are found in between the ages of 59 and 69 and 4 respondents are found in between the ages of 70 and 80. Therefore, the young respondent is 26 years old and the oldest respondent is 80 years old.

Education levels of respondent are studied by (7) groups: primary level, secondary level, high school, college and university level, post graduated, doctorate and others. The education levels of respondents are shown as Table (3). The academic qualifications of respondents are found in different levels: from primary level to doctorate level. According to the result, 5 respondents are in primary level, 16 respondents are in secondary level and high school level, 5 respondents are college and university level, there is no respondent in post graduated level and Master level, and 1 respondent is in doctorate level respectively. Therefore, most of the respondents are secondary and high school level and the least is doctorate level.

According to Table (4), 43 respondents have been studied it can be described as 11 respondents are single and 32 respondents are married. Therefore, most of the respondents are married.

Table (5) represents the business experiences of philanthropic organizations. The experiences of philanthropic organizations are studied. There are four categories: 3 to 6 years, 7 to 10 years, 11 to 14 years, 15 to 18 years and 19 to 22 years. The 20

philanthropic organizations have 3 to 6 years of experience, 12 philanthropic organizations have 7 to 10 years of experience, 3 philanthropic organizations have 11 to 14 years of experience, 4 philanthropic organizations have 15 to 18 years of experience and 4 philanthropic organizations have 19 to 22 years of experience in social field. The final category points out that majority of the philanthropic organizations have 19 to 22 years of experience. The number of volunteers in philanthropic organizations is different. According to survey data results, 24 organizations has under 70 volunteers, 4 organizations are between 71 and 129 volunteers, 6 organizations are between 130 and 188 volunteers, and 7 organizations are between 189 and 247 volunteers, 1 organization is between 248 and 306 volunteers and the most volunteers between 543 and 601 volunteers is found in only one organization.

In Table (6), 29 organizations own between 1 and 7 cars, 12 organizations own between 8 and 14 cars, and 2 organizations own between 15 and 21 cars. All of the respondents are male. The young respondent is 26 years old and the oldest respondent is 80 years old. Most of the respondents are secondary and high school level and the least is doctorate level. Most of the respondents are married. The majority of the philanthropic organizations have 19 to 22 years of experience. Six hundred volunteers are the most in philanthropic organizations and the least is twelve volunteers. The organization that own one car is one and it is the least. The organizations that owned more than one car has twenty one and it is the most.

4. Reliability of the Study

In this study, Cronbach's alpha is used to establish consistency reliability for sources of funds, oxygen services, funeral services, education services, emergency services, and health care services. In Table (7), the reliability statistic for sources of funds is 0.627, for oxygen services is 0.613, for funeral services is 0.684. for natural disaster is 0.662, for education services is 0.609, for emergency services is 0.684 and the reliability statistic for health care services is 0.600. Therefore, funeral services and emergency services are the most alpha value.

5. Analysis of Influencing Factors of Services on Sources of Funds

According to Table (8), services of philanthropic organizations in Mandalay City are sources of funds, oxygen services, funeral services, education services, emergency services, and health care services. The second is oxygen services with a mean of 4.38 with standard deviation of 0.83 which it is the nearest to the "strongly agree". The

third is funeral services with a mean of 4.60 with standard deviation of 0.75 which it is the nearest to the "strongly agree". The fourth is education services with a mean of 3.92 with standard deviation of 0.83 which it is the nearest to the "strongly agree". The fifth is emergency services with a mean of 4.51 with standard deviation of 0.76 which it is the "strongly agree". The sixth is health care services with a mean of 4.60 with standard deviation of 0.75 which it is the nearest to the "strongly agree".

In Table (9), the sources of funds can be seen as the highest level since the overall mean value is 4.05. According to the results, most of the organizations have received major sources of revenue from donors. All of the organizations have not received a strong stream of funds from their services. And organizations should generate many ways to get more funds. Organizations agree that their organizations cannot be sustainable with getting only a fund from collection. These organizations have not received any supporting from government.

As presented in Table (10), the oxygen services can be seen as the highest level since the overall mean value is 4.00. According to the results, most of the organizations' services should serve this service for people who are in need. Organizations are serving this service because of humanitarian. These organizations should not serve to get a fund.

As shown in Table (11), the funeral services can be seen as the highest level since the overall mean value is 4.26. According to the results, most of the organizations' services should be free for poor. The organizations accepted that their funeral service can reduce the grieving families that faced tremendous emotional and financial burdens on top of the loss of their beloved ones. Organizations have served this service for every religious group. Organizations have served this service because of being a good job. Organizations have served this service for all the work of life who asked for help from different fields. The organizations have not been doing this service to get public recognition.

As presented in Table (12), the education services can be seen as the highest level since the overall mean value is 4.22. According to the results, most of the organizations have served this service for poor people. And the organizations have served this service for poor people to be educated. Organizations have been serving this service for all the work of life. Organizations provide assistance to the State in some way by implementing social development tasks.

According to Table (13), the emergency services can be seen as the highest level since the overall mean value is 4.26. According to the results, most of the organizations have served this service because it made the social well-being for the society. Organization had been serving this service even though the organizations do not have funds. The organizations do not provide this service to get public

recognition.

As shown in Table (14), the health care services can be seen as the highest level since the overall mean value is 3.24. According to the results, most of the organizations served this service in free for helpless older persons and disabled persons. And these organizations also have catered for the varied types of needs of weaker and vulnerable sections of the society. Organizations have served this service not because of receiving funds, not because of being welfare for the society.

6. Pearson Correlation between Oxygen Services, Emergency Services, Health Care Services, Funeral Services, Education Services and Sources of Funds

According to Table (15), a statistical significant negative correlation is found between sources of funds and oxygen services ($r = 0.030$, $p = 0.847$ $p > 0.05$). This means that if the oxygen services increase, their sources of funds will increase. A statistical significant negative correlation is found between sources of funds and emergency services ($r = -0.163$, $p = 0.297$ $p > 0.05$). This means that the emergency services and sources of funds is negative relationship. A statistical significant positive correlation is found between sources of funds and health care services ($r = 0.363$, $p = 0.017$ $p < 0.05$). This means that the health care services and sources of funds is positive relationship. A statistical significant positive correlation is found between sources of funds and funeral services ($r = 0.888$, $p = 0.000$ $p < 0.01$). This means that if the funeral services increase, their sources of funds will increase. A statistical significant positive correlation is found between sources of funds and education services ($r = 0.727$, $p = 0.000$ $p < 0.01$). This means that as the education services and sources of funds is positive relationship.

If the oxygen services increase, their sources of funds will increase. The emergency services and sources of funds is negative relationship. Health care services and sources of funds is positive relationship. Funeral services and sources of funds is positive relationship. So, if the funeral services increase, their sources of funds will increase. Education services and sources of funds is positive relationship. So, if the education services increase, their sources of funds will increase.

7. Multiple Regression Analysis between Independent Variables Related to Source of Funds in Mandalay City

Multiple regression analysis is used to identify the linear combination between independent variables used collectively to predict the dependent variables (MILES and SHEVLIN, 2001). Regression analysis helps us understand how the typical value of the dependent variable changes when any one of the independent variables is varied,

while the other independent variables are held fixed. Ordinary Least Squares (OLS) is used most extensively for estimation of regression functions. In short, the method chooses a regression where the sum of residuals, $\sum U_i$ is as small as possible.

The multiple regression models with k independent variables i

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \dots + \beta_k X_{ki} + e_i \quad i=1, 2, \dots, n$$

Where, Y_i = value of the dependent variable in the i^{th} observation

β_0 = intercept

$\beta_1, \beta_2, \beta_3$ = regression coefficient associated with each of the X_k independent variables

X_k = value of the k^{th} independent variable in the i^{th} observation

e_i = random error terms

The estimated multiple regression model

$$\hat{Y}_i = b_0 + b_1 X_{1i} + b_2 X_{2i} + b_3 X_{3i} + b_4 X_{4i} + b_5 X_{5i}$$

In constructing the model, the variables are noted as:

\hat{Y}_i = Sources of Fund,

X_{1i} = Oxygen Services

X_{2i} = Funeral Services

X_{3i} = Education Services

X_{4i} = Emergency Services

X_{5i} = Health Care Services

According to Table (16), regression analysis is conducted with sources of funds and the independent variables. Adjusted R square value shows how much the total variation in dependent variable, organizations' sources of funds can be explained by independent variables, six services. Adjusted R square value is 0.847 which means that predictors (independent variables) represent 84.7% changes in sources of funds. Results show that F value is 47.402 that is significant at $p = 0.000$ (< 0.01). As the value of calculation (Durbin-Waston) was 1.162, the model is acceptable as its value is lower than 2.0.

The regression coefficient between mean oxygen services and sources of funds is -0.021 ($t = -0.316$, $p = 0.753$, $p > 0.1$). This shows that there is indirect relationship between oxygen services and sources of funds. The regression coefficient between mean emergency services and sources of funds is -0.438 ($t = -2.137$, $p = 0.039$, $p > 0.05$). This shows that there is indirect relationship between mean emergency services and sources of funds. The regression coefficient between mean health care services and sources of funds is -0.213 ($t = -2.668$, $p = 0.011$, $p < 0.05$). This shows that there is indirect relationship between mean health care services and sources of funds. The regression coefficient between mean education services and sources of funds is 0.413 ($t = 2.492$, $p = 0.017$, $p < 0.05$). This shows that there is direct relationship between mean education services and sources of funds. The regression coefficient between mean funeral services and sources of Funds is 1.206 ($t = 9.213$, $p = 0.000$,

$p < 0.01$). This shows that there is direct relationship between mean Funeral Services and sources of funds. If the organizations serve more funeral services and education services more, sources of funds will increase. If the organizations serve more health care services and emergency services serve, source of funds will decrease. Even though emergency services and health care services are received sources of funds, these sources of funds do not cover with expenses. Funeral service is direct relationship with source of funds and it is significant effect on source of funds. Education service is the direct relationship with source of funds and it is the significant effect on source of funds. Funeral service is the most influencing factor on source of funds while education service is the second influencing factor on source of funds.

V. CONCLUSION

The analysis of influencing factors of services on sources of funds in philanthropic organizations are oxygen services, funeral services, education service, emergency services and health care service. Most of the organizations have received major sources of revenue from donors. All of the organizations have not received a strong stream of funds from their services. These organizations have not received any supporting from government. Organizations have served their services for every religious group. The organizations have not doing these services to get public recognition.

According to the multiple regression analysis, emergency services and health care services are indirect significantly effect on sources of funds. Funeral services and education service is significantly effect on sources of funds. However, oxygen service is not significant effect on source of funds.

Most of the organizations have received sources of funds from emergency but it is not covered with their expenses on emergency services because of they did not get on every cases. The organizations are struggling to sustain the health care services because most of the patients are poor who do not pay for the service charges. Funeral service is the most influencing factor on sources of funds while education services is the second influencing factor on sources of funds. If the funeral services and education services increase, the amount of sources of funds also increases to provide sustainable services to the community at all time.

According to this survey, government did not give any assistance to these philanthropic organizations in Mandalay. It was also found that some of these organizations have strong funds and the others have weak in funds. The

philanthropic organizations with weak in funds have struggled for sustainable development of their services. All of the people working in these organizations are volunteers who invested time, money, and faith into the organization. The philanthropic organizations as non-profit organizations are accountable to the donors, founders, volunteers, program recipients, and the public communities. Only a few philanthropic organizations with a strong donor and volunteer base are able to diversify their social welfare service. Most of the volunteers in these organizations have different salaries from their occupations. Even though their salary is low, they invested their time and faith into the organizations. Emergency services played an even more critical role to ordinary people. The terrible traffic conditions made it more challenging for ambulance drivers, who sometimes need to take the risk of driving on the opposite side to rush patients to the hospital.

The key aspects of non-profits are accountability, trustworthiness, honesty, and openness to every person. Most of the volunteers are very difficult to work the full-time on the services of philanthropic organizations. So these organizations should have more staff who can work the full-time on the services of the organizations. These organizations require then a lot of funds because most of their services are depended on sources of funds. These organizations should open vocational training courses to make more funds for their services. With their intermediary role in many emergency cases, most philanthropic organizations' funds raise based on the non-profit principle with a strong donor and volunteer.

The term non-profit is attached to an activity or an organization to denote that its goal is not to seek material gains. The organizations should make the course fees for advanced courses. The philanthropic organizations should sell the stationery and knowledge books to support sources of funds. Offering free of charge for all services of these organizations is good, but they should make a price that will be affordable for everyone. The cases of emergency can emerge anytime. If the philanthropic organizations want to solve these emergency cases, they must have strong funds. The drivers should stand by at the office to maintain the 24 hours ambulance service running on every day.

The philanthropic organizations in Mandalay should be openness for their functions. Philanthropic organizations as social enterprises can sustain their enterprises by their revenues. By doing so, the philanthropic organizations cannot worry on financial statement, do not need to depend on donors and do more respective services for the community. The philanthropic organizations therefore should perform as a social enterprise. The philanthropic organizations like social enterprises are businesses which trade in order to address social problems. They generate income like other businesses, but reinvest all or most of their profits into their social mission. They create jobs, reduce inequalities and are accountable for their actions, bringing

together the entrepreneurial skills of the private sector and the values of public services.

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Appendix

Table 1. Gender of Respondents

Gender	No. of Respondents	Percentage (%)
Male	43	100
Female	0	0
Total	43	100

Source: Survey Data, 2019

Table 2. Age Group of Respondents

Age Group (Year)	No. of Respondents	Percentage (%)
26-36	2	4.7
37-47	13	30.2
48-58	14	32.6
59-69	10	23.3
70-80	4	9.3
Total	43	100

Source: Survey Data, 2019

Table 3. Education Levels of Respondents

Education level	No. of Respondents	Percentage (%)
Primary level	5	11.6
Secondary level	16	37.2
High School	16	37.2
College and University level	5	11.6
Doctorate	1	2.3
Total	43	100.0

Source: Survey Data, 2019

Table 4. Marital Status of Respondents

Marital Status	No. of Respondents	Percentage (%)
Single	11	25.6
Married	32	74.4
Total	43	100.0

Source: Survey Data, 2019

Table 5. Experience of Philanthropic Organizations

Organization Experience(Year)	No. of Organizations	Percentage (%)
3-6	20	46.5
7-10	12	27.9
11-14	3	7.0
15-18	4	9.3

19-22	4	9.3
Total	43	100.0

Source: Survey Data, 2019

Table 6. Number of Cars in Philanthropic Organizations

No. of Cars	No. of Organizations	Percentage (%)
1-7	29	67.4
8-14	12	27.9
15-21	2	4.7
Total	43	100.0

Source: Survey Data, 2019

Table 7. The Cronbach's Alpha for All Variables

Variables	Cronbach's Alpha	No. of items
Sources of Funds	0.627	5
Oxygen Services	0.613	7
Funeral Services	0.684	7
Education Services	0.609	7
Emergency Services	0.684	7
Health Care Services	0.600	7

Source: Survey Data, 2019

Table 8. Services of Philanthropic Organizations in Mandalay City

No.	Items of Services	Mean	Std.
1	Sources of Funds	3.69	0.88
2	Oxygen Services	4.38	0.83
3	Funeral Services	4.60	0.75
4	Education Services	3.92	0.83
5	Emergency Services	4.51	0.76
6	Health Care Services	4.60	0.75

Source: Survey Data, 2019

Table 9. Sources of Funds

No.	Items for Sources of Funds	Mean	Std.
1	Our organizations have not received a strong stream of funds from our services.	4.58	1.09
2	Our organizations have been received major sources of funds from donors.	4.91	0.42
3	Our organizations have been received supporting grants from the governments.	2.75	0.86
4	Our organizations can not sustainable only the funds getting from collection.	3.72	1.59
5	Our organizations should find many ways to generate more funds.	4.30	0.77
Overall Mean		4.05	

Source: Survey Data, 2019

Table 10. Oxygen Services

No.	Items of Oxygen	Mean	Std.
1	Our organization serves for the Oxygen Services by humanitarian.	4.65	0.54
2	Our organization this services to get the recognition from the society.	3.81	1.13
3	Our organization serves this service to get a fund.	2.86	0.56
4	Our organization serves for the needy people to donate them.	4.49	0.73
5	Our organization serves this service for the members and their families.	3.86	0.81
6	Our organization serves this service for people who are in difficulties.	4.21	1.18
7	Organization serves this service because it makes the social well-being for the society.	4.12	0.67
Overall Mean		4.00	

Source: Survey Data, 2019

Table 11. Funeral Services

No.	Items of Funeral Services	Mean	Std.
1	Our funeral service can reduce the grieving families that faced tremendous emotional and financial burdens on top of the loss of their beloved ones.	4.63	0.72
2	This service should be free for poor people.	4.72	0.45
3	Doing this service is to get public recognition.	3.21	0.94
4	Our organization serves this service for the members and their families.	4.09	1.10
5	Serving this service is a good job.	4.35	0.78
6	Organization serves this Service for all the work of life who asked for help from different fields.	4.28	0.98
7	Our organization serves this service for every religious group.	4.58	1.096
Overall Mean		4.26	

Source: Survey Data, 2019

Table 12. Education Services

No.	Items of Education Services	Mean	Std.
1	Serving of this service is for poor children to be educated person.	4.63	0.72
2	The new generations have to create the basic condition that will enable all the members of the community to realize their potential capacity, growth and self-fulfillment.	4.09	1.10
3	Doing this service is for the youth generation to become good sons who are willing to serve the public and the country.	3.21	0.94
4	Our organization serves this service for people who are in poor.	4.72	0.45
5	To give assistance to the State in some way by implementing social development tasks.	4.35	0.78
6	Organization serves this service because it makes the	4.14	1.08

	social well-being for the society.		
7	This service is for all the work of life.	4.40	1.17
	Overall Mean	4.22	

Source: Survey Data, 2019

Table 13. Emergency Services

No.	Items of Emergency Services	Mean	Std.
1	Our organization has to assistance the hospital, police station and fire station in inquest cases.	4.63	0.72
2	This service serves for emergency contacts.	4.09	1.10
3	Doing this service is to get public recognition.	3.21	0.94
4	Organization serves this service because it makes the social well-being for the society.	4.70	0.46
5	Organizations have been served this service even though the organizations without receiving funds.	4.35	0.78
6	Our organization serves this service for solving the problems in the current situation.	4.28	0.98
7	Emergency service is independent from the money the organization has fundraised.	4.58	1.09
	Overall Mean	4.26	

Source: Survey Data, 2019

Table 14. Health Care Services

No.	Items of Health Care Services	Mean	Std.
1	This service specifically caters for the varied types of needs of weaker and vulnerable sections of the society.	3.57	1.11
2	This service charge is fair prices for our customers.	3.34	1.43
3	Doing this service is to turn out voluntary social doctors.	3.26	1.42
4	Organization serves this service because it makes the social well-being for the society.	3.17	1.58
5	This service charge can be sustainable for the organization.	2.54	1.40
6	Doing this service is free for helpless older persons and disabled persons.	3.57	1.29
7	Our organization should collaborate with other organization to serve for it effectively.	3.26	1.42
	Overall Mean	3.24	

Source: Survey Data, 2019

Table 15. Correlation Coefficient between Sources of Funds and Services

No.	Services	Pearson Correlation Coefficient	Significance Level
1	Oxygen Services	0.030	0.847
2	Emergency Services	-0.163	0.297
3	Health Care Services	0.363*	0.017
4	Funeral Services	0.888**	0.000
5	Education Services	0.727**	0.000

Source: SPSS

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

Table 16. Results of Multiple Regression Model

Dependent Variable (Sources of Fund)	B	t test	Sig	VIF
Constant	2.514	4.358	0.000	1.051
Oxygen Services	-0.021	-0.316	0.753	1.051
Emergency Services	-.438**	-2.137	0.039	1.047
Health Care Services	-.213**	-2.668	0.011	1.553
Education Services	0.413**	2.492	0.017	5.610
Funeral Services	1.026***	9.213	0.000	5.663
F-value	47.402			
Adjusted R square	0.847			

Source: SPSS

*, **, *** Indicate statistical significance at the 1 % level, 5% level and 10% level.

Wheat Production in Monywa Township (2004-05 to 2017-18)

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Abstract : The objectives of this paper are to study in wheat production of Monywa Township and to analyze the relationship between sown acre and production of wheat in Monywa Township for the year (2004-2005 to 2017-2018). It is studied that, both the sown acre and wheat production of Monywa Township is greatest in year 2011-2012. Linear regression analysis is used to construct the sown acre and wheat production model of Monywa Township. It was found that regression coefficient is positive relationship between sown acre and wheat production in Monywa Township. According to the results, it was found that the estimated model could explain about 89% of the sown acre and wheat production. Therefore, it can be concluded that if the sown acre is increased, the wheat production will be increased in Monywa Township.

Key Works: *Sown Acre, Production of Wheat,*

I. Introduction

The Union of Myanmar is an agricultural country and the agricultural sector is one of the most important sectors for the country's economy. Agriculture goods are

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Myanmar's second largest export commodity. One of the four main economic objectives of the government is development of agriculture and development of the other sectors of economy. Agriculture development generally depends on the available resources for agriculture as well as water resources. The country's economic growth is depending on the agriculture sector, thus, the agriculture sector is a life-blood of our country.

An important source of carbohydrate is wheat in which contain a protein about 13% relatively high linked to other main cereals. The local production could only provide for 20% of the total requirement assuming that per capita consumption is 6 kg of wheat flour. There are production constraint on wheat production in Myanmar such as weather constraints, agronomist constraints, management constraints, etc..

The main crop of Myanmar is paddy. Though wheat is not our staple food and it is greatly used in making snacks, noodles, bread and other fast food, it becomes important next to rice. Wheat grows in the dry zones-Sagaing division, Mandalay division, Magway division and Bago division. Of them, the geographical features and climate of Sagaing division is the best for wheat cultivation. Sagaing division has occupied much proportion of wheat cultivation area and yield most in our country. Moreover, wheat cultivation continues to expand the area. The annual yield of wheat in our country not only meets the needs of the food staff factories but also gives foreign exchange by exporting. Therefore, the government is encouraging to increase sown acreage of wheat and its production. Wheat is grown in Shwebo, Yinmarbin, Monywa, Hkamti, Kalay and Tamu in Sagaing region and there are over 190,000 acres of wheat plantation. Local livestock breeders use wheat to make animal feed.

1. Objectives of the Study

This study is established for the following objectives:

- (i) To explore wheat production of Monywa Township,
- (ii) To analyze the relationship between sown acre and production of wheat in Monywa Township.

2. Method of Study

The data are secondary data. In the study, linear regression model is used to analyze the effect of production on sown acre. To conduct this analysis, the required data were collected from Myanmar Agriculture Department of Monywa Township.

3. Relationship between Sown Acre and Production of Wheat

Iqbal et al. (2005) used ARIMA (Auto Regressive Integrated Moving Average) model to investigate the area and production of wheat in Pakistan in the period of 2002 to 2022. The past thirty years data are used for this purpose.

II. Related Literature Reviews

The air temperature is vital for the wheat production in regions of Alaska . Production has a good condition in these regions where the mean maximum air temperature was at least 22°C and it is poor at the maximum air temperature less than 19°C (Knight et al.,1978).

According to Major et al. (1998), the main factors of wheat yields on the greatplains are soil moistureand nitrogen availability and location. Additionally, the soil and climatic variability can influence on the winter wheat yield. The study was based on a crop simulation model. Beziers, Pezenas and Aniane were selected as rainfall stations. The influence of climate change on yields was influenced slightly. The reduction in the rainfall had a minor effects on the wheat yield in the Aegean region of Turkey. When the temperature increase by 1-2°C, the yield of production reduce in yields by 7% per 1°C. So, the combination effect of reduction in rainfall and increase in temperature was more than each separate effect (Kayam et al. , 2000).

You et al. (2005) determined when 1% increased in wheat growing season temperature, wheat yields decreased by about 0.3%. The variation of growing season temperature from 5° to 18°C declined the wheat yield from 1.5 to 5.4% per 1°C in China.

III. Analysis

1. Sown Acre and Wheat Production

Sown acre and wheat production for 14 years are shown in Table (1)

Table 1. Data for Sown Acre and Wheat Production (2004-2005 to 2017-2018)

Year	Sown Acre	Production (basket)
2004-2005	4988	77962
2005-2006	4885	79137
2006-2007	4919	84850
2007-2008	5550	108225

2008-2009	5575	105925
2009-2010	5538	108655
2010-2011	5564	110612
2011-2012	5591	110981
2012-2013	5184	103006
2013-2014	4888	100937
2014-2015	4554	94496
2015-2016	4278	89239
2016-2017	2198	46201
2017-2018	1586	33385

Source: Myanmar Agriculture Department of Monywa Township (2019)

The study of relationship between two variables to make a scatter diagram, a graph of the observation pairs of observations. The values of the independent variable X is sown acre and the dependent variable Y is wheat production. Figure (1) shows the scatter plots of the data in Table (1).

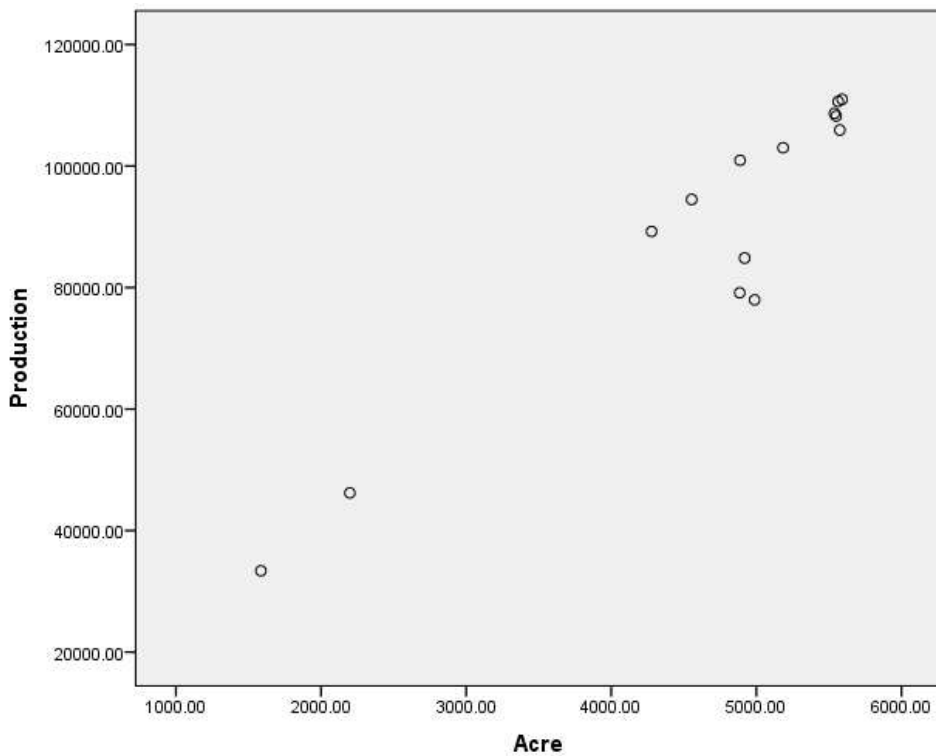


Figure 1. Scatter Diagram of Acre and Production

Table 2. The Correlation Coefficient

		Acre	Production
Acre	Pearson Correlation	1	.94
	Sig (2-tailed)		.000
	N	14	14
Production	Pearson Correlation	.94	1
	Sig (2-tailed)	.00	
	N	14	14

The correlation coefficient is 0.94. Thus, it can be said that, there is highly correlated between acre and production.

2. The Coefficient of Determination

A frequently used measure of how well the least-squares line fits the observed data is the coefficient of determination.

Model summary are shown in the following table.

Table 3. Model Summary for the Coefficient of Determination

Model	R	R Square	Adjusted R Square	Durbin-Watson
1	.943 ^a	.890	.881	.292

a. Predictors: (Constant), Acre

b. Dependent Variable: Production

To determine whether the model is suitable for production of wheat, R2 value is needed to be checked. Since R2 value is 0.89, it can be concluded that fitted model can explain about 89% of the production of wheat in Monywa Township.

Table 4. Regression Coefficients

Model	Unstandardized Coefficients		standardized Coefficients	t	Sig.
	B	Std Error			
Constant	4863.62	8868.84		0.55	0.593
Acre	18.16	1.84	0.94	9.86	0.000

According to the Table (4), the regression coefficient of acre are significant at 5% level. It means that sown acre serve as explanatory factors for sown acre and wheat production. Hence, the estimated linear regression model of sown acre and wheat production can be present as follow,

$$\hat{Y} = 4863.62 + 18.16 X_i$$

From the estimate regression model for the sown acre and wheat production, it is found that positive sign observed in the regression associated with sown acre should tend to increase sown acre and wheat production.

Table 5. Analysis of Variance for Acre and Production

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6692636545.48	1	6692636545.48	97.24	.000 ^a
	Residual	825888449.74	12	68824037.48		
	Total	7518524995.21	13			

According to the Table (5), the estimated model is significant at 5% level. It can be concluded with 95% percent confidence that a linear relationship exists between sown acre and wheat production.

3. Test of Normality Assumption

As a first step reaching a conclusion regarding the normality or lack of normality of the distribution of the depending variable, it can be plotted line residuals as a histogram, as illustrated in Figure (2).

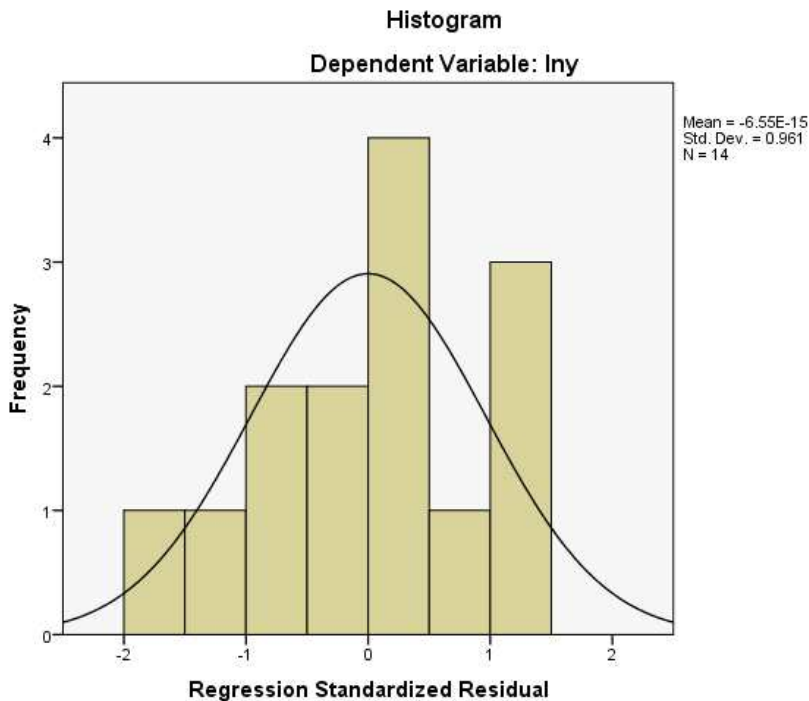


Figure 2. Histogram

Moreover, it can be determined whether the relationship between error terms are serially correlated or not by drawing the scatter residual plot. It can be assigned standardized predicted values to the horizontal axis and standardized residual values

to the vertical axis.

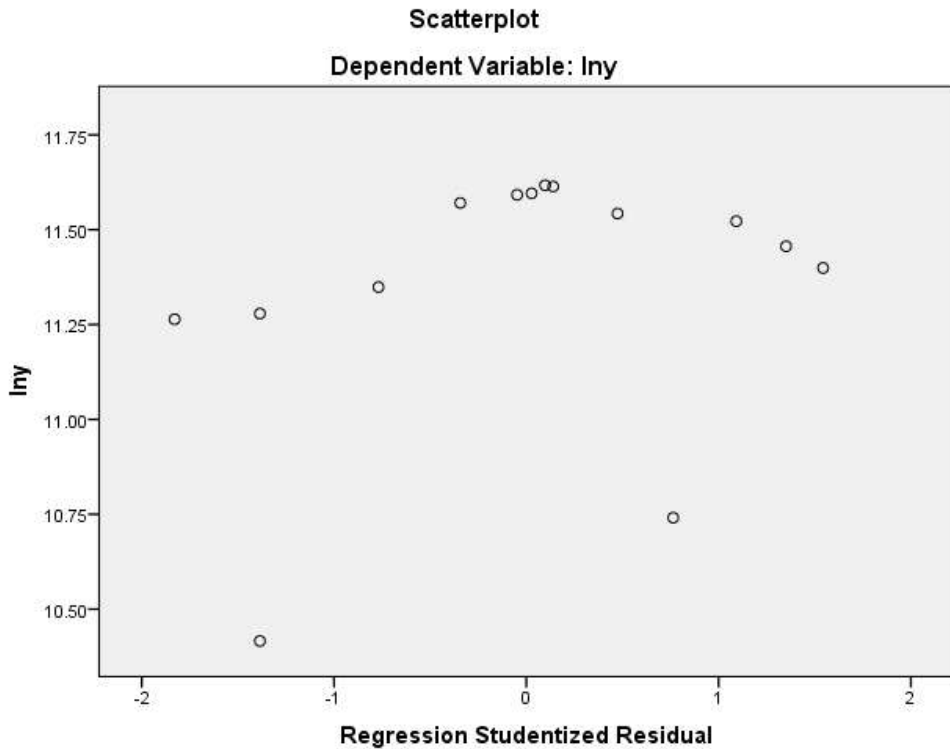


Figure 3. Residual Scatter Plot

According to the above figure, there is no pattern. Therefore, it can be concluded that it is homoscedasticity. Moreover, there is no relationship between the error terms. In addition to residuals plots, serial correlation can also be measured by using the Durbin-Watson Test.

IV. Conclusion

In this paper, the simple linear regression of production of wheat on sown acre (2004-2005 to 2017-2018) in Monywa Township was applied to investigate from the statistical point of view.

Firstly, we attempt to find the linear regression equation, it was found that

$$\hat{Y} = 4863.62 + 18.16 X.$$

According to this model the production of wheat would increase 18.16 baskets whenever the sown increase one acre. If the sown acre were to be zero, the production of wheat was expected to be 4863.62 baskets in Monywa Township.

Secondly, the "t" test for the significance of the regression coefficient was developed. It was found that there was positive linear relationship between sown acre and production of wheat in Monywa Township. Moreover, a 95% confidence interval for regression coefficient was constructed. It was found that the regression coefficient line between 14.144 and 22.168, it was found that there was linear relationship between sown acre and production of wheat in Monywa Township.

In addition, the coefficient of determination was studied. The R² value was 0.89, it was found that the estimated model could explain about 89% of the production of wheat in Monywa Township. To determine whether the error terms are serial correlation or not by using Durbin-Watson test. It was found that there is serial correlation between terms at 0.05 level of significance but we can reduce the residual value. Therefore, the study can say that the estimated model = 4863.62 + 18.16 X is the best fitted linear model. And then it is positively correlated.

Finally, the wheat production of Monywa Township was linearly related with sown acre. If the sown acre is known, the linear regression model should be used to project the future wheat production of Monywa Township.

V. Recommendations

Wheat is an important source of carbohydrates. Wheat is used in making snacks, noodles, breads and other foods. Thus, wheat is necessary in human life. According to my dissertation paper, the coefficient of determination, R² is 89% of the production of wheat in Monywa Township and wheat production of Monywa Township was linearly related with sown acre. Therefore, wheat should be cultivated in Monywa Township.

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The Relationship Between Leadership Style and Teacher Commitment at Monywa University

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Abstract : This study aims to explore the leadership style of rector at Monywa University and to analysis the relationship between leadership style and teacher commitment at Monywa University. The primary data are collected from 173 teachers in Monywa University by using sample random sampling method. In this study, the mean value of transformational leadership is 3.20 and the mean of transactional leadership is 3.78. Correlation results showed that transformational leadership style has positively significant relationship with teacher commitment and transformational leadership style has also positively significant with transactional leadership style. According to the research, leader of Monywa University is more using transaction leadership style. To get more commitment of the teacher, leader of Monywa. University needs to use transformational leadership style.

Key word: *Leadership Style, Organizational Commitment*

I. Introduction

Every human being needs not only oxygen but also education to survive in the world. Education in today's world is an indicator that shows how advanced a country is. To be good education, teachers are critical. Teachers plant the seeds of knowledge and sprinkle them with love and patiently nurture to produce student's dreams. Teachers across the globe prepare the future society. Therefore, teachers are the sculptors of the future society. Therefore, teacher is vital for promoting for all levels

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of education.

Commitment is the heart of a group or organization to success. Educational organizations that have a strong organizational mission are likely to have high level of teacher commitment. Committed and satisfied teachers can provide good service for students, therefore increasing their loyalty and reliability to the University.

Commitment is desired by corporate leaders and head of department because there is a linkage between commitment and leadership style. Organizational commitment depends on the leadership styles of the head of department or leader. An organization that no good leadership is likes a ship on the high sea without a captain. A leader must not only supervise but also play a guiding role for the subordinates. Leader abilities are having creativity and innovation, being good communicator and inspiring others to achieve goals. Leaders need to be clearly and succinctly explained to the subordinates everything from organizational goals to specific tools. Leaders should make themselves regularly available to discuss issues and concerns with employees.

Leadership styles refer to the process of influencing the behavior of people in a manner that leader strives willingly and enthusiastically towards the achievement of group objectives. The attainment of educational organization's objectives and development cannot be possible without good leadership styles and the efforts of teachers. Without employees (teachers), organizational will not be able to produce qualified students, achieve organizational goals and performance or meet its objectives and competitive advantage among the Universities. Therefore, teachers are becoming a source of competitive advantage for the University.

To achieve organizational performance and competitive advantage among Universities, the rector needs strong and effective leadership skills that can influence teacher commitment. Good leadership must maintain a balance between vision, mission, strategies, and result. The top of this study is concerned with two important aspects of organizational behavior which address leadership and teacher's commitment. Therefore, this study is to analyze how relationship between the leadership styles and teacher's commitment among Monywa University.

II. Rationale of the Study

Education is the life blood in improving the politic, economic, social, and cultural sectors of a country because education is a process of human enlightenment and empowerment. Without education, it is impossible to keep abreast with other nations in social and economic sectors. Therefore, the role of teacher is very important not

only in the classroom but also in social life. Commitment teachers can generate qualified students.

The development of commitment is dependent on several personal and organizational factors such as leadership, management policies, and practices. Likewise, the success of any university is dependent on its leadership styles and commitment of all its stakeholders. Rector is responsible for all happenings of the university. Leadership style affects the teacher commitment so the relationship between leader and employee (teacher) must be smooth running to achieve mission and value of the organization. Education is, indeed, a process of human enlightenment and empowerment. Education is one of the major sectors that play an important role for all nations around the world. A person's education is one of the most important factors in determining whether they will become a productive member of society (Jenking & Lanning, 2002). Education is the life blood in improving the politic, economic, social, and cultural sectors of a country. Without education, it is impossible to keep abreast with other nations in social and economic sectors. Educational activities are carried out by teachers in the class which requires them to spend maximum time with students. Teachers are responsible for students' achievement directly or indirectly. Therefore, teacher is the main person for the educational development of country.

Teachers commitment may be enhanced or diminished by factors such as student behavior, collegial and administrative support, parental demands, and national education polices (Day & Salas, 2004). The success of any university is dependent on its leadership styles and commitment of all its stakeholders. Teacher is one of the stakeholders of any University. Relationship between rector and teachers is of immense importance for smooth running of educational institutions. As rector is responsible for all happenings in the University and rector is also responsible for all happenings in the university. They are interacting and behaving as a way with staff members affects teacher's job satisfaction level and teacher's commitment to organization. In education sector, parents and teachers are important to improve the quality of students. Teacher's commitment and effectiveness sorely depends on morals. This implies that teacher job satisfactions are important phenomena for all organizations including university in any country. Additionally, teacher's satisfaction is not only important to managers and leaders and employees but also to students in all types of universities. Haddad (1990) suggested that expenditure on education on positively to labor productivity and economic payoff to spending on education from both the private and public standpoint is high.

Leaders should employ open communication to increase the trust between them and their employees. A frank communication promotes a trustworthy relationship between the leader and his employees, which helps to get issues solved quickly and

competently. Adequate motivation, suitable work environment, compensation, efficient communication between leaders and subordinates play an important role in promoting employee commitment and satisfaction. If employees are highly committed, they are expected to be highly productive and loyal to their employing organization. To achieve organizational performance and competitive advantage among Universities, the rector needs strong and effective leadership skills that can influence teacher commitment. Good leadership must maintain a balance between vision, mission, strategy, and results. Therefore, this study aims to analyze relationship between leadership styles and teacher's commitment at Monywa University.

III. Objectives of the Study

The objectives of the study are:

- (i) To identify the leadership style of rector at Monywa University.
- (ii) To analyze the correlation between leadership style and teacher commitment of Monywa University

IV. Method and Scope and Limitations of the Study

This study explores the relationship between leadership style and teacher commitment in Monywa University. This study uses descriptive and analytical method both quantitative and qualitative analysis is applied in this study. Primary and secondary data are used for this study. Questionnaires are designed with five-point Likert scale by using structured questionnaires; the required primary data for this study are collected from teachers in Monywa University. There are 510 teachers at Monywa University. Among them 173 teachers are selected by using the sample random sampling method. Secondary data are gathered from relevant books, journals, magazines, and internet website.

This study only focuses on the transformational leadership and transactional leadership. This study is the relationship between leadership styles and teacher commitment Monywa University. The independent variables are transformational leadership style and transactional leadership styles, while the dependent variable is teacher commitment.

V. Theoretical Background

Leadership styles have been studied extensively; perspectives on leadership have been written and revised. Every leader is different in his/her attitudes, behaviors, and management styles. In the current century, the requirement of a leader to practice well in the leadership is getting more difficult. For the situation nowadays, leaders must confront with more dynamic environment compared to the working environment that was less challenge for a few centuries ago. Leaders need to develop their own leadership approach by learning more about the following leadership theories such as great man theory, trait theory, contingency theory, behavior theory, situational leadership style theory, path-goal theory, and recent theories of leadership styles-transformational leadership style and transactional leadership style. This research is applied by transformational leadership style and transactional leadership style.

1. Transformational leadership Theories

Transformational leadership theory, also known as relationship theory, was initiated by Burns (1978) and Bass (1985) and has become quite popular in recent years. The theory focuses on the connections formed between the leaders and followers. Burns (1978), in the book leadership, set the stage for the evolution of transformational leadership theory. The focus was on followers and their sense of self-concept, encouraging followers to build self-concept based on the mission and vision of the leader, by motivating followers to do their best and want to meet the expectations of their leaders. In this process, followers can achieve self-esteem, be involved, and be satisfied.

According to Bass (1985), transformational leaders are those who motivate followers to do more than originally was expected. That could be achieved, Bass argued, through anyone of the following steps: (1) increasing followers' awareness and consciousness of the important of designated outcomes and the steps that lead to these outcomes, (2) encouraging followers to transcend their own self-interests, and (3) expanding or altering followers needs and wants according to Maslow's Hierarchy of Needs. In distinguishing between the Burns and Bass theories of transformational leadership, Carlson and Perrewe (1995) stated that: the main difference between these two theories was that Burns restricts this type of leadership only to leaders who appeal to positive moral values. On the other hand, Bass argues that a transformational leader is one who increases commitment regardless of the final effect on the follower. Regardless, when transformational leadership is enacted,

members of organizations no longer seek merely self-interest, but that which is beneficial to the organization. Bass (1985) described transformational leadership as leader behaviors that stimulate and inspire followers to achieve extraordinary outcomes by raising the level of motivation and morality in both themselves and their followers. Transformational leaders are effective in promoting organizational commitment by aligning goals and values of the follower, the group, the leader, and the organization.

Bass and his colleagues further conceptualized transformational leadership into four components. They are:

(i) Idealized Influence (Attributes and Behaviors)

The first dimension of transformational leadership style is Idealized Influence. Idealized Influence represents the strong vision and mission determination of transformational leaders. This component tells us the behavior of a leader who acts as a role model for their followers. Leaders are taken as people who have very high moral standards and ethical behaviors. The leader is trusted and respected by the followers. The followers are regarded as having exceptional capabilities, persistence, and determination. Such leaders provide vision and a sense of mission, instill pride, gain respect and trust in people.

Such leaders are willing to sacrifice their own gain for the good of their work group. They excite, arouse, and inspire their subordinates. Leaders of this kind emphasize trust, take stands on difficult issues, present their most important values and stress on the Importance of purpose (Bass & Riggio, 2006; Northouse, 2013; Bekele & Darshan, 2011). Bass & Avolio (2000) further state that through such Idealized Influence, leaders become role model for their followers and are admired, respected, trusted. According to Bass & Riggio (2006), there are two aspects of idealized influence. These are the leader's behavior (what one does) and the elements that are attributed (what traits are assigned to a leader) to the leader by their followers.

(ii) Inspirational Motivation

The second attribute of transformational leader is inspirational motivation. Inspirational motivation refers to the ability to communicate a compelling vision that spurs action toward individual and collective goals (Bass & Riggio, 2006). Transformational leaders identify high goals, create a team spirit, enthusiasm and constantly motivate followers. This factor is descriptive of leaders who communicate high expectations to the followers, inspiring them through motivation to become committed to and a part of shared vision in the organization. In practice, leaders use symbols and emotional appeal to focus group members' effort to achieve more than

they would in their own self-interest. Team spirit is enhanced by this type of leadership.

(iii) Intellectual Stimulation

Transformational leaders motivate their followers to be innovative, analytic, and creative. This attribute is Intellectual Stimulation. As stated by Bass (1990), leaders promote problem-solving practices and capacities. There is no area criticism of individual member's mistakes and creativity is inspired. New thoughts and creative solutions are followers' use of skills solicited from followers, who are encompassed in the procedure of addressing setbacks and discovering solutions. Followers are inspired to endeavors new ways and their thoughts are not disapproved because they differ from the leader's ideas (Bass & Avolio, 2000). This type of leadership support followers as they try new approaches and develop innovative ways of dealing with organizational issues. It encourages followers to think things out on their own and engage in careful problem solving.

(iv) Individualized Consideration

Leaders are act as coaches and advisors to not only identify and satisfy each individual follower current needs, but also to attempt to expand and evaluate the needs to assist follower become fully actualized. By emphasizing the followers' personal career needs and providing them with a sense of improved ability to bring out responsibilities, leader could further enhance followers' commitment.

2. Transactional Leadership Style

Transactional leadership involves leaders clarifying goals and objectives, communicating to organize tasks and activities with the co-operation of their employees to ensure that wider organizational goals are met (Bass 1974: 341). The success of this type of leader-follower relationship depends on the acceptance of hierarchical differences and their ability to work through this mode of exchange. Transactional leadership assumes that subordinates and systems work better under a clear chain of command.

Transactional leaders are concerned with process rather than forward-thinking ideas. These types of leaders focus on contingent reward or contingent penalization. Contingent rewards are given when the set goals are accomplished on- time, ahead of time or to keep subordinates working at a good pace at different time through-out competition. Contingent punishments are handed down on a management-by-exception basis. Within management-by-exception, there are active and passive routes.

(i) Contingent Reward

The major aim of transactional leader is to achieve organizational objectives. Contingent reward is the first identified attributes of transactional leadership dimension. In this context, the leader gives various awards to improve the performance and motivations of his followers. His followers can get the rewards when fulfilling the mandate. Contingent reward is an exchange process between leaders and followers in which effort by followers is exchanged for specified rewards. With this characteristic, followers receive for their effort and good performance as indicated by the agreed contract (Bass, 1990). The rewards are not always monetary (Kirkbride, 2006). Leaders must offer certain nonmonetary incentives for employees (Woofruffee, 2006). Rewards include time off work, praise, recognition, or work preferences. Leaders set clear goals, objectives, and target and ensure followers have appropriate resources to complete tasks.

The most effective form of transactional leadership is contingent rewards where the leadership sets goals, clarifies desired outcomes, provide both positive and negative feedback, and exchanges rewards and recognition for accomplishment when they are deserved. Followers receive a reward only when they had accomplished a task and this kin leadership importantly applicable teaching learning process in schools in which the teacher activities very routine demand strong commitment and personal engagement both in instruction and student management.

(ii) Management by exception (Active)

Management by exception (Active) is the second attribute of transactional leadership style. It is leader using the active form of management by exception watches followers closely for mistakes or rule violations and then takes corrective action (Bass, 1998). Management by exception (Active) leadership was less effective than contingent reward but might have been necessary in some instances. With the active characteristic, followers and leaders clarify expectations (Bass 1990). Leader monitors followers' performance and search for mistakes. (Rainey,2009). They also control work tasks and notify followers as problem s occur (Kirkbride, 2006). Leaders and followers also implement actions to avoid mistakes or correct mistakes (Rainey, 2009).

(iii) Management by Exception (Passive)

Management by Exception (Passive) is the third attribute of transactional leadership style. Management by exception (Passive) leader waits inactively for subordinates' mistakes and deviances from benchmarks until issues have arisen before

taking corrective measures (Bass & Riggio, 2006; Northouse, 2007). With the passive characteristics, leaders implement punishments or corrective actions for deviations (Rainey, 2009). These leaders follow performance as problem arises, they pass action to correct them. A leader using the passive form intervenes only after standards have not been met or problems have arisen.

3. Employee Commitment

No organizations in today's competitive world can perform at peak levels unless each employee is committed to the organization's objectives and work as an effective team member. In the past, organizations secured the loyalty of their employees by guaranteeing job security. However, many organizations have responded to competitive pressures by downsizing, restructuring and transformation and thus created a less secure organizational climate. A growing number of employees therefore feel that they are victims of broken promises. Therefore, modern organizations need to maintain the commitment of employees in several ways.

The employee will be as considered when he will remain with the organization for long time and desires to live in the same organization. Over the years, tremendous researchers have been conducted to support that statement. At the end it was concluded that committed employees stay in the organization for long time in contrast of those who are relatively less committed with the organization. Steers found that employee commitment is directly related with the company turnover. Organizational performance will be enhanced by higher level of employee commitment. Green, Mayhew, & Pack (2000) had found that employee commitment decreases the probability of employees' tendency of leaving the job. Meyer & Allen (1984, 1990 and 1991) described three-dimensional model of commitment: Affective, Continuance and Normative.

(i) Affective Commitment

Allen & Meyer (1990) argue that an individual will develop emotional attachment when he/she identifies with the goals of the organization and is willing to assist the organization in achieving these goals. Author explain that identification with an organization happens when the employees own values are congruent with the organizational values and the employee can internalize the values and goals of the organization. With this, there is a psychological identification with and a pride of association with the organization.

(b) Continuance Commitment

The next dimension of employee commitment is continuance commitment (Allen

and Meyer, 1990) which is based on Becker's (1960) side bet theory. It that as an individual remains in the employment of an organization for longer period. They build up an investment, which becomes costly to lose the longer that individual is attached to the organization.

(c) Normative Commitment

The third dimension of employee's commitment in an organization is normative commitment, which reflects a feeling of obligation to continue employment. Employees with a high level of Normative Commitment feel they ought to remain with the organization (Allen and Meyer, 1990).

4. Relationship between Leadership Styles and Employee Commitment

The success or failure of an organization is closely related to the efforts and commitments of employees. The employee commitment relies on the factors of transformational and transactional leadership, which are the independent variables. Nowadays, competitive world, it is difficult for organization to compete or even to survive without satisfying the most valued asset of the organization and deriving commitment of the employees towards their leader and organization. Workers who develop a high level of employee commitment tend to be highly satisfied and are fulfilled by their jobs.

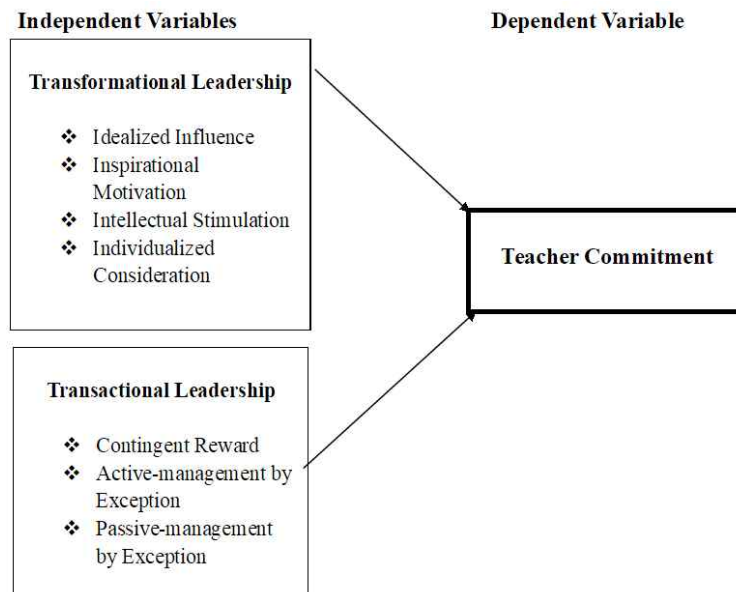


Figure:1 Conceptual Framework of the Study

Source: Own Compilation Based on Previous Research

VI. Results and Findings

The analysis presented reliability test and the correlation analysis between leadership styles and teachers' commitment in this university.

1. Reliability Test

The items that represent each individual factor were subjected to reliability analysis. The computation of the Cronbach's Alpha was determined the extent of agreement between respondents for each dimension. Table 1 summarized the detailed reliability value for each dimension.

Table 1 Reliability Analysis: Alpha Coefficients

Factors	Items	Cronbach's alpha
Idealized Influence	7	.904
Inspirational Motivation	7	.636
Intellectual Stimulation	5	.707
Individualized Consideration	6	.634
Contingent Reward	7	.716
Active Management by Exception	6	.941
Passive Management by Exception	5	.658
Teachers Commitment	15	.887

Source: Survey Data (July 2019)

According to Table 1, the collected data is verified for its reliability by calculating the Cronbach's Alpha. Cronbach's Alpha is a test reliability technique only a single set administration to provide a unique estimate of the reliability for a given Test. The normal range of Cronbach's coefficient alpha value is between 0 and 1, and the highest value indicates that higher degree of internal consistency. According to the results showed that Cronbach's alpha coefficients of the eight factors ranged from .634 to .941. These values are well above the generally agreed upon lower limit of 0.60 (Hair et al., 2006), including good internal consistency of the factors and high reliability of the scale. Therefore, based on the test, the results for the items are reliable and acceptable.

2. Overall Mean of Leadership Styles and Teachers Commitment

Leadership styles include transformational leadership and transactional leadership. The overall means of leadership styles are shown in Table 2.

Table 2 Mean and Standard Deviation of Transformational Leadership Styles

	Mean	Standard Deviation
Idealized Influence	3.94	.722
Inspirational Motivation	3.99	.742
Intellectual Stimulation	3.95	.790
Individualized Consideration	3.77	.759
Overall mean	3.91	.705

Source: Survey Data (July 2019)

According to Table 2, the mean value of idealized influence was 3.94, the mean value of inspirational motivation was 3.99, the mean value of intellectual stimulation was 3.95, the mean value of individualized consideration was 3.77. The overall mean value of transformational leadership was 3.91. The mean value of inspirational motivation was greater than the mean value of idealized influence, intellectual stimulation and individualized consideration. Therefore, inspirational motivation was most influenced in this University.

Table 3 Mean and Standard Deviation of Transactional Leadership Styles

Transactional Leadership Styles	Mean	Standard Deviation
Contingent Reward	3.94	.884
Active Management by Exception	3.88	.795
Passive Management by Exception	3.55	.676
Overall mean	3.79	.687

Source: Survey Data (July 2019)

According to Table 3, the mean value of contingent reward was 3.94, the mean value of active management by exception was 3.88, the mean value of passive management by exception was 3.55. The overall mean value of transactional leadership was 3.79. The mean value of contingent reward was greater than the mean value of active management by exception and passive management by exception. Therefore, contingent reward was most influenced in this University.

3. The Relationship between Leadership Style and Teacher Commitment At Monywa University

In this research, Pearson correlation analysis is used to examine relationship between leadership style and teacher commitment at Monywa University. In this study, the correlation coefficients (r) are interpreted as presented by Stockburger

(1996) as follows;

$r = 0.01$ to 0.20 indicates weak relationship.

$r = 0.21$ to 0.50 indicates moderate relationship.

$r = 0.51$ to 0.80 indicates strong relationship.

$r = 0.81$ to 1 indicates very strong relationship.

Table 4. The Relationship between Transformational Leadership Style and Teacher Commitment

Transformational leadership style and teacher commitment	Correlation coefficient	p- value
Idealized Influence	.740**	.000
Inspirational Motivation	.593**	.000
Intellectual Stimulation	.667**	.000
Individualized Consideration	.731**	.000

Source: Survey Data (July 2019)

*Correlation is significant at the 0.05 level (2- tailed).

**Correlation is significant at the 0.01 level (2- tailed).

According to this table, there is a significant relation between idealized influence and teacher commitment which is significant at the 0.01 level. The correlation value is .740 ($r = .740$) that show there is a strong positive correlation between idealized influence and teacher commitment. This means that when leaders seek new opportunities for the organization and understand the goals, teachers are more commitment to the organization.

According to the results, there is a significant relationship between inspirational motivation and teacher commitment which is significant at the 0.01 level. The correlation value is .593 ($r = .593$) that show there is a strong positive correlation between inspirational motivation and teacher commitment. This means that leaders' talking enthusiastically about what needs to be accomplished, being role model, leading by doing rather than just telling has the relation with teacher commitment.

The results indicate that there is a significant relationship between intellectual stimulation and teacher commitment which is significant at the 0.01 level. The correlation value is 0.667 ($r = .667$) that shows there is a strong positive correlation between intellectual stimulation. This indicate that leader's confidence that goals will be achieved, new ways of completing assignment, different perspectives of solving problem has an association with teacher commitment.

The results of the study show that there is a significant relationship between individualized consideration and teacher commitment. The result of correlation analysis between individualized consideration and teacher commitment is correlation coefficient of .731 ($r = .731$) that shows there is a strong positive correlation. This

means that leader's helping each faculty development, teaching and coaching to subordinates and pointing out the strength and weakness of collaboration are going to improve the teacher commitment.

herefore, it can be assumed that there is the relationship between these transformational leadership style component and teacher commitment. It is found that idealized influence and individualized consideration is higher relationship than the inspirational motivation and intellectual stimulation of transformational leadership to develop teacher commitment.

Table 5. The Relationship between Transactional Leadership Style and Teacher Commitment

Transactional leadership style and teacher commitment	Correlation coefficient	p- value
Active management by exception	0.806**	.000
Passive management by exception	0.696**	.000
Contingent Reward	0.929**	.000

Source: Survey Data (July 2019)

The results of the study show that there is a significant relationship between active management by exception and teacher commitment. The result of correlation analysis between active management by exception and teacher commitment is correlation coefficient of 0.806 ($r = .806$) that shows there is a very strong positive correlation. This means that leader is responding urgent questions without delay, new ways of problem solving, instruction and clear procedures has a higher relationship with teacher commitment.

According to the results, there is a significant relationship between passive management by exception and teacher commitment which is significant at the 0.01 level. The correlation value is .696 ($r = .696$) that show there is a strong positive correlation between passive management by exception and teacher commitment. This means that leader's effectiveness in meeting other job-related needs and involvement when important issues arise has an association with teacher commitment.

According to the results, there is a significant relationship between contingent reward and teacher commitment which is significant at the 0.01 level. The correlation value is .929 ($r = .929$) that show there is a strong positive correlation between contingent reward and teacher commitment. This means that leader's special recognition and positive feedback when teacher perform well has a higher relationship with teacher commitment.

Therefore, it can be assumed that there is the relationship between these transactional leadership style component and teacher commitment. It is found that active management by exception and contingent rewards are higher relation than

passive management by exception of transactional leadership to develop teacher commitment.

4. Discussion

From the study, there is link between leadership style and teacher commitment. Leadership style factors lead to teacher commitment in the workplace. It is found that teacher commitment provided by transformational leadership style and transactional leadership style.

The result of the study revealed that minimum level of idealized influence factors is that leader display confident. This finding means that leader needs to display confident. The maximum level of idealized influence is that leader seeks opportunities for the organization. This means that leader seeks more opportunities for the organization as compared to others. According to this factor, teacher more commit to the organization.

This result of the study stated that minimum level of inspirational motivation is that leader specifies the important of having a strong sense of purpose. This finding means that leader needs to specify the important of having a strong sense of purpose. This maximum level of inspirational motivation is that leader is a role model for teachers. This finding means that leader is more acting role model for teachers as compared to other factors. According to this factor, teacher more commit to the organization.

The result of the study revealed that minimum level of intellectual stimulation factors is that leader articulates compelling vision of the future. This finding means that leader needs to articulate compelling vision of the future. The maximum level of intellectual stimulation is that leader assigns the projects based on employee abilities to perform exceptionally high. This means that leader assigns the projects based on employee abilities to perform exceptionally high as compared to other factors. According to this factor, teacher more commit to the organization.

The result of the study revealed that minimum level of individualized consideration factors is that leader spends time teaching and coaching subordinates. This finding means that leader needs to spend time teaching and coaching subordinates. The maximum level of individualized consideration is that leader treats each faculty as an individual rather than just as an affiliate of a group. This means that leader is more treating each faculty as an individual rather than just as a member of a group as compared to other factors. According to this factor, teacher more commit to the organization.

The result of the study revealed that minimum level of contingent rewards factors is that leader makes clear what one can expect to receive when performance goals

are achieved. The maximum level of contingent rewards is that leader expresses possible opportunities that can be achieved to employees. This means that leader is more expressing possible opportunities that can be achieved to employees as compared to other factors. According to this factor, teacher more commit to the organization.

The result of the study revealed that minimum level of active management by exception factors is that leader monitors mistakes and deviations from the expected norms and then take corrective action. This finding means that leader needs to monitors mistakes and deviations from the expected norms and then take corrective action. The maximum level of active management by exception rewards is that leader responds urgent questions without delay. This means that leader responds urgent questions without delay as compared to other factors. According to this factor, teacher more commit to the organization.

The result of the study revealed that minimum level of passive management by exception factors is that leader fails to interfere until problems become serious and then take corrective action. This finding means that leader needs to interfere when the problem become serious. The maximum level of active management by exception rewards is that leader involve when important issues arise. This means that leader is more involving when important issues arise as compared to other factors. According to this factor, teacher more commit to the organization.

The correlation test result indicates that transformational leadership styles have correlation with teacher commitment. It is found that relationship between idealized influence and teacher commitment is the most significant relationship than inspirational motivation, intellectual stimulation, and individual consideration.

The correlation test result indicates that transactional leadership styles have correlation with teacher commitment. It is found that relationship between active management by exception and teacher commitment is the most significant relationship than contingent rewards, passive management by exception.

VII. Conclusion

According to the result of the study, two transformational leadership styles are significant effect on teacher commitment. Idealized influence is positively significant effect on teacher commitment. Therefore, leader should act in ways that build others respect for him/ her. Leader must be role model for teachers. And then teachers admire the leader and more committed to the works. It is important that leader has a clear understanding of where they are going consequently teachers can go to the

specified goal. Moreover, leader should seek new opportunities for the organization. If the organization has opportunity for teachers, teachers feel affection for the organization. Because of affection for the organization, teacher commitment will be improved.

Individual consideration is positively significant effect on teacher commitment. This indicates that leader should point out the strength and weakness of collaborative. Because of collaboration, coworkers can build friendship relations. And then, leader should treat each faculty as an individual and consider different needs, ability, aspirations of individual. Therefore, every teacher will be more committed to the organization.

According to the result of the study, transactional leadership styles are significant effect on teacher commitment. Contingent reward is positively significant effect on teacher commitment. Therefore, leader should express possible opportunities to employees. And if the teachers perform well, leader should give them positive feedback and special recognition. It is important that these factors can improve teacher commitment.

Active management by exception is positively significant effect on teacher commitment. Leader should provide instructions and clear procedures. If leader provide this fact, teachers can work their tasks and responsibilities without difficulty. Leader should solve the problem in creative ways if the complex problems arise. Moreover, leader should respond urgent question without delay. Leader's active participation in organization can enhance the commitment of all members. It is suggested that if the leader's transformational and transactional leadership style and teacher commitment can be effected in a better ways. Therefore, it can be concluded that teacher commitment can be improved if the leader in Monywa University apply these leadership styles. Thus, the leaders should maintain their practices of leadership styles to success for their organization.

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Municipal Solid Waste Management in Yangon City

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Abstract : Municipal solid waste management system has been integral part in improvement of human health and environmental quality. This research aims to describe current municipal solid waste management system and 3R's activities of YCDC and to analyze the YCDC performance using SWOT analysis. Currently, total amount of waste disposal which is collected by YCDC is about 1550 tons per day and 76% of it is organic wastes. YCDC has distributed its manpower and vehicles to conduct waste collection by districts and townships. Tax revenue collected by YCDC is about 420 million kyats per month. As 3R's activities, YCDC have implemented public awareness programmes for reduce and reuse waste disposals while YCDC is producing some recycle products such as recycled bins, plastic bags and other domestic appliances. Municipal solid waste system of YCDC has strength to keep the environmental clean and fresh with reducing environmental pollution. As waste collection and management is labor intensive activity, it creates employment opportunity. However, there has been some weaknesses such as limited resources, public cooperation, lack of accurate data and dangerous for workers. Conducting an effective and systematic management of municipal solid waste leads to have opportunities to reduce health risks and generate bio-waste energy in near future. Utilization of technology and know-how, public awareness, urbanization and sufficient funding can be found as threats of municipal solid waste management.

Key Words: *Municipal Solid Waste, 3R's, SWOT analysis*

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I. Introduction

According to the nature of human life, human produces wastes continually which result pollution. One of the major environmental problems is the collection, management and disposal of the municipal solid waste (MSW) in the urban areas. Lack of MSW management and disposal is leading to significant environmental problems. This includes soil, air water, and aesthetic pollution. Therefore the most important reason for waste collection is the protection of the environment and the health of the population. To keep the household and village environment clean and to reduce health risks, solid waste (refuse) should be disposed properly. Untreated refuse is unsightly and smelly and degrades both the quality of the environment and the quality of life in the community.

To be effectiveness, solid waste disposal programmes require action at both household and community levels—if only a few households dispose of waste properly, the village environment may remain dirty and contaminated. Community members should decide how important solid waste management is and determine the best ways to achieve waste-management goals. To minimize waste, it is important that both the households and the community at large make a conscious decision to reduce the amount of waste they produce and actively participate in recycling. Thus, the regular and systematic collection, transportation, disposing and recycling of waste materials with providing these services to community is important to urban development and sustainable development of the country.

In Yangon, there has been increasing MSW due to disposing different sources as an impact of urbanization, industrialization and migration activities. Especially, increase in consumption and change in consumption pattern (use of ready-made products) have led to increase in production of product and a resulting increase in waste. YCDC has made efforts to provide service of waste disposals with existing and limited resources. Therefore, it is needed to analyse the performance of YCDC, investigate whether efficiency allocation of resources and explore what potentials and limitations for MSWM exist, and how should conduct for more systematic and comprehensive MSWM system to support sustainable development.

The National Waste Management Strategy and Action Plan for 2017-2030 in 2109 approved by the government of Myanmar which sets out the strategy based on principles of inclusiveness, zero waste, zero emissions to achieve a greener, cleaner and healthier environment in the country and this research paper may be partially supported to this strategy and action plan.

II. Objectives of the Study

The key objectives of the study are to analyze the performance of solid waste management system in Yangon city and to find out appropriate measure for keeping the clean environment and secure the living beings safe and healthy using the 3 R's of waste management.

III. Method and Scope of the Study

The study used descriptive method with secondary data. SWOT and situational analysis are conducted to MSWM of Yangon City Development Committee (YCDC). Required data and information was collected from YCDC covering 33 townships. This analysis was mainly focused on formal sector and public municipal waste but informal waste handling processes were not included. This research analysed only to evaluate the performance and resource utilization of YCDC's MSWM activities.

IV. Concept of Solid Waste Treatment

Literally, the definition of solid waste is extremely important and relevant to the solid waste industry. According to the Resource Conservation and Recovery Act (RCRA), "solid waste" means any garbage or refuse, sludge from a waste water treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, resulting from industrial, commercial, mining, and agricultural operations, and from community activities. Municipal solid waste (MSW), commonly known as trash or garbage in the United States and rubbish in Britain, is a waste type consisting of everyday items that are discarded by the public such as product packaging, grass clippings, furniture, clothing, bottles, food scraps, newspapers, appliances, paint, and batteries. MSW is solid waste resulting from, or incidental to, municipal, community, commercial, institutional, and recreational activities, and it includes garbage, rubbish, ashes, street cleanings, dead animals, medical waste, and all other nonindustrial solid waste.

MSW is generated by households, offices, hotels, shops, schools, and other institutions. The major components of MSW are food waste, paper, plastic, rags, metal, and glass, although demolition and construction debris is often included in collected waste, as are small quantities of hazardous waste, such as electric light bulbs, batteries, automotive parts, and discarded medicines and chemicals.

Municipal solid wastes (MSW), defined as trash, are highly nonhomogeneous mixture of residential, commercial, and industrial sectors. Typical residential and commercial MSW include clothing, disposable tableware, yard trimmings, cans, office disposable tables, paper, and boxes, whereas institutional and industrial MSW contain restaurant trash, paper, classroom wastes, wood pallets, plastics, corrugated box, and office papers. MSW is usually left on the curbside weekly and picked up by a dump truck and taken to a landfill to be buried in a landfill or burned in an incinerator. In recent years, the amount of electronic waste, also known as e-waste, has increased drastically as people become more reliant on electronics, such as computers and cell phones that are replaced and disposed of frequently.

V. The 3R's of Waste Management

The 3 R's of the environment are: Reduce, Reuse, and Recycle. To recycle, reduce and reuse provides environmentally-friendly ways to reduce negative impacts of growing amounts of waste on the natural environment. "Reduce" refers to the reduction of waste during production processes such as manufacturing. "Reuse" also helps reduce waste by using items multiple times before discarding them, if at all. To "recycle" means to take a used material and remanufacture it to sell like as new product.

Reduce: Composting is identified as the best option for valuing green organic waste and, at the same time, reducing landfills overflowing. In the past, a number of large scale composting of market green waste initiatives were undertaken in Yangon City. However, these initiatives did not last long for many reasons such as the high production costs and the limited availability of QC tools. Consequently, alternative solutions to upkeep the market green waste are still to be investigated and experimented not only to reduce landfills overflowing but also to utilize the precious raw material source to produce organic compost.

Reuse: Conduct public awareness raising campaigns and environmental education programmes for local residents to mobilize support for waste reduction and reuse activities. For example, the YCDC has prohibited the production, trading and using the thin plastic bags in its administrative area and use of alternative bags such as string bags, leaves boxes and baskets have been introduced since 2009. Similarly, public awareness programmes have also been implemented by YCDC to promote sustainable lifestyles.

Recycle: Recycling activities are carried out in many cities in Myanmar mostly by the informal sector, including scavengers, waste collectors, and waste dealers. The

scavengers and waste collectors collect recyclable materials such as newspapers, metal, plastic bottles, tin and glass from households, communal depots, streets, commercial areas and final disposal sites and in turn sell these items to waste dealers who subsequently clean, sort, store and sell them in bulk to the recycling industry both locally and currently there is a lack of accurate and reliable data on recycling volumes, ratio and the number of recycling factories in the cities. A small amount of daily generated waste is recycled, which is amounted to 86 tons/day. According to the PCCD, there are a minimum of 306 recycling shops and more than 10,000 people working in the gathering and segregating the recycled materials creating a profit of 60 million MMK (US\$ 44,378) per day.

Among the recycled waste, glasses are mostly recycled and cardboard and paper are the second highest recycled items. Moreover, Pollution control and cleansing Department (PCCD), in charge of solid waste management (SWM) for Yangon City, cannot run by their revenue because the fees they charge for the services are quite low and are not enough to finance all the officers and labors, thus it has to depend on the regional government's subsidy. There are no big junk shops in the townships to collect the recyclables from small junkshops and transport to the appropriate recycling centers which have caused the inefficiencies of recycling system. YCDC is running a small-scale plastic recycling plant and green and blue plastics bag is produced using the waste plastic.

Waste-to-energy technologies have been selected as the most preferable options for the waste management in Yangon. Landfill gas to energy recovery (to replace the biggest open dumpsite) and incineration (one big incineration plant with electricity recovery and four small incineration plants without electricity recovery) are chosen as the treatment options for Yangon waste management. Japan has made a sizable contribution to this situation by promoting WtE in strategic studies but also by co-investing in Myanmar's first WtE pilot plant in Yangon. The investments amounted to US\$16 million. Half of this amount was financed by YCDC and the other half by Japan. Engineering, construction and commissioning are carried out by the Japanese firm JFE (<http://www.jfe-eng.co.jp/en/>). This pilot facility has a capacity of 60 tons of municipal waste per day, mainly from the townships of Insein, Shwe Pyi Thar, North Okkalar and Mingalardon.

Regarding the impact of Recycle, Reduce, and Reuse, the result of doing all three of these behaviors is a vast reduction in waste. Given the benefits of the recycle, reduce and reuse, the goal of more and more governments is to adopt an approach that integrates the 3 R's within it. The 3R's can contribute to reducing waste for collection and transport to final disposal site. Lifecycle environmental impacts from the 3Rs are much lower than landfill of unsorted waste.

VI. Municipal Solid Waste Treatment in Yangon City

Yangon city is situated in Yangon Region and it is the largest city of Myanmar. In Yangon region, there are 45 townships, while there are 34 townships in Yangon city. The population of Yangon city is 5.2 million (5,209,541) which represent 70.8 % of the entire population of Yangon Region according to the result of 2014 Myanmar Population and Housing census¹⁾. There are 34 townships in Yangon city and the average population density is 5363.6 per square kilometer.

The total area of the entire Yangon city is 961.28 square kilometers which is 9.9% of Yangon Region²⁾. According to official statistics for FY 2010–2011, the size of the economy of Yangon Region was 8.93 trillion kyats, or 23% of the national GDP. There are around 14 light industrial zones in Yangon with over 4000 factories employing 150,000 workers.

The public agency responsible for SWM in Yangon is the Disposal and Cemeteries Department of the Pollution Control and Cleansing Department, which is under the Yangon City Development Committee (YCDC). SWM in Yangon City is financed by the service charges which are collected by the YCDC.

Regarding the capacity at the workers level, their responsibilities are normally sweeping the street; collecting the waste from households, commercial establishments, institutions, industries, and gardens; and transporting them to the Final Damping Site.

Table (1) shows Final Dumping Sites of YCDC. There are two main Major landfills around Yangon FDS — Htawe Chaung and Htainbin and two temporary sites — Dala and Seikkyi Khanaungto which are being operated by the PCCD. All FDSs are open dumping sites. There is no soil covering on the dumped waste, nor collection and treatment of leachate, nor control of landfill gas emission. Even at the FDS, there is no proper and systematic facility and infrastructure for disposing, as waste is disposed where ever there is space.

Table 1. Final Damping Sites of YCDC

Location of Final Dumping Sites (FDS)	Constructed Year	Total Area/ Used in Acre	Disposal Capacity (Ton of Waste/ Day)	Remark
1. Htein Bin	2002	150/70	847 tons per day	Now burning
2. Htawe Chaung	2001	55.77/47.4	612 tons per day	Open dumping
3. Shwe Pyi Thar	2005	1	50 tons per day	Low landfill Temporary site
4. Mingalardon	2003	0.91	25 tons per day	Low landfill

1) Population and housing census of Myanmar, 2014

2) Local Governance Mapping the state of local governance: trends in Yangon (UNDP Myanmar, February-2015)

				Temporary site
5. Dala	2003	1.3	10 tons per day	Low landfill
6. Seikkyi Khanaungto	2003	0.25	5 tons per day	Temporary site Low landfill
Total amount of disposal waste			1550	Temporary site

Source: YCDC, 2020

However, a PCCD is planning to run waste-energy projects at the two biggest dumping sites: Htein Bin and Htawe Chaung, the skill and capacity of the staff and labor workers are needed to be built up accordingly YCDC is running a small-scale plastic plant which produces green and blue plastic bags from the plastic waste. The positive aspect is that the highest composition is organic which is biodegradable, however, the negative aspect is that there is no composting system yet.

According to report of Institute for Global Environmental Strategies(IGES, 2014), the waste are generally classified into four groups: organic, paper and textile, plastic and other including woods, rubber and leathers, metals, glasses, crockery and stones. Figure (1) shows waste composition of Yangon.

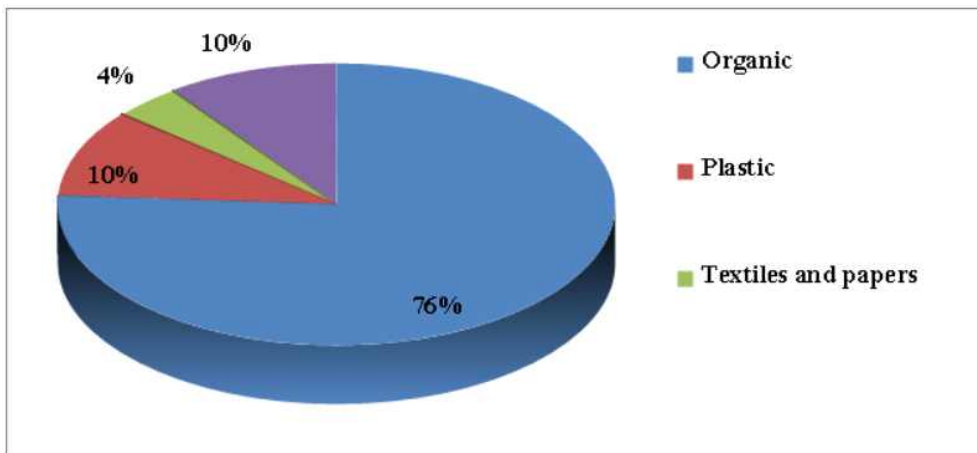


Figure 1. Waste Composition of Yangon

Source: YCDC, 2020.

Organic waste, mainly from vegetable solid waste includes 76% of the waste. That kind of waste can produce compost as natural fertilizer. Paper and Textile that include 4% of total waste can also produce compost as carbon source. Other woods, rubber and leathers, metals, glasses, crockery and stones can reuse in some construction or other purpose. The main problem is plastic waste that includes 10%. This plastic waste will take many years for decomposition.

VII. Analysis on Situation of Solid Waste Management in Yangon City

In Yangon, 97% of the waste is formally collected. Generally, solid wastes are segregated publically into two: wet and dry. Wet waste such as kitchen waste, left-over, flowers can be discarded safely tight with blue bags daily. Dry waste such as paper, cork, plastic, broken toys, pieces of metal, pieces of wire can be discarded safely tight with green bags weekly (Wednesday and Sunday). But they are loaded on the same vehicle for transportation to the sanitary landfills.

There are various waste collection approaches such as bell ringing, collection at street dump yards, hand carts etc. Municipal solid waste collection system in Yangon can largely be characterized as labor intensive, relying on the use of both manual workers and non-specialized vehicles. Waste collection capacity, as measured by the ratio of solid waste collected to total waste generated, has been increasing for many major cities. In general, the current waste collection system includes primary and secondary collection. Primary collection takes place in different forms such as door-to-door (bell collection), block, and container collection methods. The primary waste collection system is carried out either or in combination of push carts and tri-bicycles while secondary collection system is performed mainly with tipper trucks (dumpers). Roadside space and street reservation are often used for secondary waste collection stations where large containers are placed to store the waste from the primary collection.

Total number of staff in YCDC is 6942 which includes 950 in Eastern District, 2077 in Western District, 1935 in Southern District, and 1980 in Northern District respectively. Among total of 34 townships in Yangon Region, there are 8 townships in Eastern District, 11 townships in Western District, 10 townships in Southern District and 9 townships in Northern District.

There are various types of vehicles used in PCCD, YCDC. They are 10 ton truck, 10 wheel truck, 12 wheel truck, Dump truck (5.5 Ton), HYD Compactor 9m, HYD Compactor 7m, Japan car (2.5) ton, Tata compactor, Chenge Long, ECC Compactor, Mitsubishi Compactor, Hijet, Suzuki, Ta Ta Hopper, CNJ/ GBS/AMT Truck(2.5 Ton), Power Pac Compactor (3 Ton), Hospital/clinic (2 Ton), City Master and Mini Excavator. Waste collection vehicle can be classified three main types, trucks of garbage bin, trucks for dumping (small, big), and compactors truck. Truck capacity can be varied between 2-8 tons/trip. As vehicle utilization, total number of vehicles of YCDC is 740: 306 in Eastern District, 153 in Western District, 151 in Southern District and 130 in Northern District.

Waste collection fee is charged to households and commercial centers, etc. and the service fees vary depending upon the distance from the city center. For instance, monthly fee for waste collection from old suburbs, sub-urban and central business district are 300 kyat, 450 kyat and 600 kyat per household respectively. The rate for one vehicle (3 tons capacity) is about 35,000 kyat per trip. Commercial enterprises are required to pay a special collection fee from 20,000 to 150,000 kyats, depending on the volume of waste produced. Regarding income tax revenue collected by YCDC, total amount of tax revenue is about 405.645 million kyat per month in 2020. Among four districts, Southern District collected 46.7% of total tax revenue, 35.4% by Northern District, 15.2% by Western District and 2.8% by Eastern District respectively.

VIII. SWOT Analysis on Solid Waste Management in Yangon City

After investigating the existing MSWM practices in Yangon city, a strategic MSWM was identified from the SWOT analysis for the MSW in Yangon city. It can be found by four strengths and four weaknesses, three opportunities, and three threats.

(i) Strength 1: Keeps the environment clean and fresh

Perhaps, the greatest advantage of waste management is keeping the environment fresh and neat. These waste disposal units also make the people go disease-free as all the resultant wastes are properly disposed and taken care of.

(ii) Strength 2: Reduces environmental pollution

Waste management if done in a proper manner not only eliminates the surrounding waste but also will reduce the intensity of the greenhouse gases like methane, carbon monoxide which is emitted from the wastes accumulated. The depth of the existing landfills and incineration will be curbed, thereby cutting down the harmful factors that affect the environment.

(iii) Strength 3: Creates employment

But in all the facets of waste management, a huge amount of labor is needed. Right from the collection to the final step of segregation, every phase needs manpower and ultimately a large number of employment opportunities get opened up. New jobs are produced due to the waste management factor.

(iv) Strength 4: Waste management will help you earn money

Waste management earns a person a few extra bucks every month. Actually, there

are many companies which will pay you for your waste. Right from old and used bottles to tin cans and e-wastes, all kinds of wastes are collected and paid. These wastes are then segregated according to the extent of pollution they cause to the environment and these wastes are recycled accordingly for various purposes. There are also crash courses available which will aid you to reuse your trash. Above all, by following this method, you can create awareness to your fellow people by earning money, which is a win-win concept.

(i) Weakness 1: Public cooperation

Each City Development Committee introduces a number of programs in cooperation with Local Non-governmental Organizations (NGOs) and other volunteer groups to raise the awareness of reducing waste and promoting 3Rs (Reduce, Reuse, Recycle) . However, due to the lack of a road map and infrastructure for proper waste separation management, public participation and 3Rs activities are still limited and ad-hoc.

(ii) Weakness 2: Available data and Law Enforcement

Another challenge is the lack of accurate and reliable data on recycling volume, ratios and the number of recycling factories in Myanmar. The government of Myanmar has enacted environmental laws, rules and regulations, but the enforcement of these existing legal frameworks is still weakness in participation.

(iii) Weakness 3: The resultant product has a short life

This is also true since the resulting recycled product cannot be expected to have a durable quality. As the product itself has its origin from the remains of the other trashed waste products and heaps of partially used ones. The recycled product, though, is eco-friendly is expected to have a shorter life span than the intended original one.

(iv) Weakness 4: The sites are often dangerous

As the waste management sites include the landfills to recycling units under its aegis, these sites are highly susceptible to fungal and bacterial growth thereby leading to various diseases. Even the debris formation will be accelerated by such bacterial growth, which makes it totally unsafe for the workers who work there. It also causes widespread pollution and releases harmful chemicals. These chemicals, when mixed with drinking water or any other consumable item pose a high amount of danger to human health.

(i) Opportunity 1: Reduction of health risks

Poor solid waste management (SWM) has negative health impacts, including the proliferation of infectious and non-communicable diseases. Poor solid waste management is linked to a wide range of risks including slowing down of economic growth, higher incidence of diseases, environmental degradation and deterioration in quality of life. Health impacts from improper waste management are categorized as: (i) infection transmission (ii) physical bodily injury (iii) non-communicable diseases and (iv) emotional and psychological effects. Moreover, the release of emissions from decomposition and burning of solid waste also contributes to accumulation of atmospheric greenhouse gases and exacerbation of climate change.

(ii) Opportunity 2: Bio-waste energy generation

Treatment facilities to turn waste into energy are improving in Myanmar. Japan has helped to not only promote waste to energy in strategic studies, but also to co-invest in Myanmar's first pilot plant project in Yangon. The pilot plant project exceeded USD16 million and half of the amount was provided by the Yangon City Development Committee, and the rest by Japan. This project can produce 700 kilowatts of electricity. Of that, 400 kW is used for feeding into the grid, and the remaining is used for the internal consumption of the plant.

(iii) Opportunity 3: Funding scheme & international support

Myanmar has international support for waste management issues. The Japanese government provided USD5.5 million for waste management project to implement a semi-aerobic landfill in 2019. Further, the Asia Development Bank (ADB) has cooperated on waste management activities in Myanmar under the Mandalay urban services improvement project.

(i) Threats 1: Appropriate technological solution

Lack of competency and insufficient financial support are major threats to YCDC for development of MSW infrastructure. There is need for PPP to implement management and handling with the latest technology/know-how with the subject experts firms and companies. The solid waste management sector in Myanmar needs to upgrade technologies for waste collection, transport, recycling and waste to energy technology. Barriers to progress include limited know-how and capacity to adapt suitable technologies to local conditions, limited resources, which include underdeveloped financial and technical capabilities to identify and invest in new technologies.

(ii) Threats 2: Awareness to enhance segregation

Ecological awareness and citizen participation to segregate waste at source,

door-to-door collection, and disposal in appropriate collecting bin is imperative. The awareness plays an important role in MSWM and augments the efficiency of waste management stream. It is the most critical phase in the whole process of MSWM, which helps in handling solid waste leading to ultimate success.

(iii) Threats 3: Urbanization and lack of appropriate level funding

With the population growth, challenge to provide adequate infrastructure in urban area and new landfill site selection is important. Most of the landfill sites are running beyond their capacity in metropolitan cities. Inadequate financial support to cater to waste management problem aggravates it.

IX. Conclusion

In Myanmar, solid waste management system is progressing, but still faces challenges in achieving sustainable waste management in the face of industrialization and urbanization in the country. While there was some awareness among community members about waste reduction, reuse and recycling, this did not translate into practice. This highlights the need for awareness campaigns on integrated waste management which incorporate measures such as waste reduction, recycling and composting to maximize efficiencies and societal benefits. For this to work well, households should be encouraged to embrace waste separation at source which reduces the costs of segregating waste materials later. To achieve this, awareness campaigns can be carried out in partnership with community and non-governmental organizations to effectively reach households and individuals. These campaigns should also communicate the economic benefits that can be realized through reduction, reuse, and recycling practices.

The government could also focus on having adequate staffing for solid waste management and implement fees or other penalties with legislative goals and effective coordination among different stakeholders to promote a positive change in waste management. Furthermore, adequate training and capacity-building programs are necessary for the officials on data recording and maintaining the records. Such information is very useful to measure the overall progress of waste management towards sustainability. For long term sustainability, development of appropriate integrated systems, designed for maximum resource recovery would be the key driving force towards greenhouse gas mitigation as well as for getting maximum economic and social benefits from waste management in Yangon.

Solid waste management system development should be carried out in a way that

there is little or no environmental and social impact from generation to final disposal. Waste segregation at the source, which is a waste reduction measure, should be promoted as YCDC envisages. Recent concepts such as Sound Material Cycle Society and Extended Producer Responsibility at the long term of the urban planning should be adopted and introduced. SME sector including production of recycle product should be promoted and subsidized by the government.

The Master Plan needs to introduce the sustainable Solid Waste Management (SWM) in Yangon. The Master Plan consists of two major components which are technical component including waste transfer system, waste to energy, waste reduction and recycling and integrated collection system and soft component including human resources development, citizen's awareness and education, legislation establishment, budget allocation for integrated solid waste management (ISWM). Finally the waste hierarchy, 3R awareness for solid waste management in Yangon City should include in school curriculum from primary school level to middle school student for awareness and behavior change of the students.

Waste management in Yangon has been improving gradually. With recent involvements with different stakeholders, YCDC officials have a much better understanding of the real issues with respect to the current waste management. However, still much focus has been given to implementation of final treatment facilities and less attention given to initiation of effective waste collection and transportation system, implementation of a formal recycling scheme, etc. In order to develop a sustainable waste management, equal attention should be given to all the phases of waste management.

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The Analysis and Implications of Germany's Smart Factory Policy: Case Studies of Bosch and Adidas

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ABSTRACT: Germany is leading the smart factory industry. German companies already have the technology and know-how accumulated in the field of embedded systems and automation technologies combined with product production in factories, so the digitalization of factories, that is, smart factories, became the core of Germany's Industry 4.0 strategy. In Germany, many German companies such as Siemens, Bosch, and Adidas are showing great outcomes by actively applying smart factories. The smart factory of Siemens and Bosch is the most successful case. The smart factory system also affects reshoring to the home country through changes in the global value chain. The case of Adidas' smart factory is the case of reshoring its production base to Germany in 2017 by digitalizing the existing labor-intensive shoe manufacturing line. However, Adidas stopped operating smart factories in Germany and the United States in April of 2020. This paper analyzes the success and failure cases of the smart factory system, the heart of the recent 4th industrial revolution.

Key words: *4th Industrial Revolution, Smart Factory, Bosch, Adidas, Reshoring*

I. Introduction

As the core basis of the 4th industrial revolution, not only advanced countries such as the US, Germany, S. Korea, and Japan, but also emerging countries such as China are closely observing the importance of the manufacturing of the smart factory

industry. In particular, competing countries such as China are establishing and promoting policies to strengthen the competitiveness using ICT in the manufacturing industry to enhance growth vitality, create jobs, and improve trade balance.

A smart factory, as an intelligent, consumer-oriented factory that combines next-generation digital technology and manufacturing technology, can dramatically improve manufacturing productivity based on various technologies such as cyber-physical system (CPS), robotics, 3D printing, and IoT. (Byun, 2020; Xu et al, 2018; Schwab, 2016; UBS, 2016; Wang et al, 2016; Hermann et al, 2015; Fredette, 2012)

According to Markets & Markets(2020), the global smart factory market is projected to grow annually by 9.3% until 2022, increasing rapidly from about \$170 billion in 2016 to \$254.2 billion in 2022 and about \$383.8 billion in 2025. Active dissemination will occur in the automobile semiconductor/electronics, energy, mining/metals, chemicals, and food and beverage industries. The size of the Korean market is expected to be \$78.3 billion in 2020 and \$12.76 billion by 2022, so a high growth rate of 12.2% is expected per year.¹⁾

Germany is leading the smart factory industry. German companies already have the technology and know-how accumulated in the field of embedded systems and automation technologies combined with product production in factories, so the digitalization of factories, that is, smart factories, became the core of Germany's Industry 4.0 strategy. This smart factory system also affects reshoring to the home country through changes in the global value chain (GVC). In Germany, many German companies such as Siemens, Bosch, and Adidas are showing great outcomes by actively applying smart factories. The smart factory of Siemens and Bosch is the most successful case.²⁾ The case of Adidas' smart factory is the case of reshoring its production base to Germany in 2017 by digitalizing the existing labor-intensive shoe manufacturing line. However, Adidas stopped operating smart factories in Germany and the United States in April of 2020.

This paper analyzes the success and failure cases of the smart factory system, the heart of the recent 4th industrial revolution. First, the German smart factory policy is analyzed in Chapter 2, the success cases of Bosch and the failure cases of Adidas are analyzed in Chapter 3, and then the implications and conclusions are drawn in Chapter 4, respectively.

1) <<https://www.marketsandmarkets.com/PressReleases/smart-manufacturing.asp>>

2) *"Siemens Amberg factory is assessed as the best smart factory in Europe due to its high level of automation and intelligence. Amberg factory has been manufacturing equipment to design and control production lines for industrial automation. The level of automation reaches 75 percent and the factory produces over 12 million products per year".* Byun(2020), p. 190.

II. German Smart Factory Strategies

1. Industry 4.0

In response to the 4th Industrial Revolution, Germany announced 'Hightech-Strategie 2020' in 2011, promoted ten future projects, and promoted 'Industry 4.0' as one of those projects. With strategies, the concept of the smart factory became an issue and the establishment of international standardization of smart factory was constructed. Therefore, Germany's smart factory policies are related to 'Industry 4.0'.³⁾

'Industry 4.0' is a phenomenon in which an intelligent production system is established by connecting industrial processes and machines through a network through information and communication technology. The 'Industry 4.0' is a manufacturing innovation project that builds a fully automatic production system in the manufacturing industry that enables information exchange between production equipment and products through IoT (Internet of Things). As an industrial production system that optimizes the entire production process, it signifies the evolution of the paradigm as a smart factory by combining IT systems with traditional businesses such as manufacturing.

At that time, Germany had an industrial structure based on traditional manufacturing industries such as machinery, equipment, and automobiles. However, in the field of software and telecommunications industries, the development was slow compared to other competing countries. In particular, domestic manufacturing facilities faced the risk of losing the market competitiveness was maintained through high technology due to the high cost and high wage structure. Therefore, the 'Industry 4.0' strategy is a strategy that aims to maintain a leading position in the information and communication field by grafting domestic manufacturing industries, which have the world's best competitiveness in line with the trend of digitalization and networking, with digital and information and communication technologies to maximize its competitiveness.

The automation technology required for this would become more intelligent with the various processes such as self-optimization, configuration, and diagnosis and support people in their increasingly complex work. A further feature is the networking of spatially distributed production capacities and the associated planning and control systems. Scientific research at the time discovered that the benefits of 'Industry 4.0' could shorten production times, increase automation, and produce more customized

3) The German Ministry for Labour and Social Affairs(2016)

products. In Germany, the high proportion of industrial value-added meant that the initiative was needed.⁴⁾ The company, Bosch, has enshrined this in its corporate strategy.

'Industry 4.0' is expected to have ripple effects such as strengthening the status of the manufacturing industry, attracting high-ranking talent, providing quality jobs, and leading an affluent life. 'Industry 4.0' seeks a new manufacturing industry by connecting industry-academia relations and it will lead the 4th industrial revolution by building a smart factory that enables standards, mass production, and customized multi-variety production based on the cyber-physical system (CPS) and strengthening networking with external manufacturing ecosystems.⁵⁾ The core elements of 'Industry 4.0' are the establishment and development of a technology roadmap, the role of a focal point for technology exchange and industry-academic cooperation, the establishment of a win-win model between large and small companies, and the introduction of smart factories.

Table 1. 'Industry 4.0' and 'Platform Industry 4.0' Strategies

	'Industry 4.0'	'Platform Industry 4.0'
Principal Agents	<ul style="list-style-type: none"> •Industry Association (BITKOM, VMDA, ZVEI) 	<ul style="list-style-type: none"> •Department of Economy and Energy, •Department of Education Research
Forms	<ul style="list-style-type: none"> •Centered on "Research Agenda". Included in 10 more topics of the German national future high-tech strategy 	<ul style="list-style-type: none"> •Core tasks of the current government in which industries, unions, and research institutes participate under the responsibility of government agencies.
Core Tasks	<ul style="list-style-type: none"> •Industry 4.0 development/growth and application strategy deduction 	<ul style="list-style-type: none"> •Goal of finding practically applicable outcomes for each of the five core areas; 1) Platform and /standards, 2) Research and innovation, 3) Cyber security, 4) Legal/ institutional conditions, 5) Manpower training and education
Target Outcome	<ul style="list-style-type: none"> •Industry 4.0 implementation plan •The application strategy proposal document announcement in April 2015 	<ul style="list-style-type: none"> •Derivation of specific results in each key field •Presentation of the first results at the government sponsored IT Gipfel in 2015

Source: Steemit.com

Germany promoted 'Industry 4.0' as a public-private-academic cooperation project. In 2015, Germany expanded and switched to 'Platform Industry 4.0', which reset

4) <https://de.wikipedia.org/wiki/Industrie_4.0>

5) Mussomeli, A., Parrott, A., Cotteleer, M.(2017)

manufacturing process digitization strategy improvement, standardization, data security, institutional maintenance, and manpower development as new tasks to analyze the performance and supplement the initial approach.⁶⁾ The difference between 'Industry 4.0' and 'Platform Industry 4.0' is that 'Industry 4.0' is a research center led by government agencies or industry associations (BITKOM, VDMA, ZVEI), whereas 'Platform Industry 4.0' is based on the results of existing research, subdividing into five key areas and drawing specialized results. 'Platform Industry 4.0' aims to digitize manufacturing processes, standardize, secure data, establish standards for institutional maintenance, and cultivate key talents.⁷⁾

Germany's smart factory promotion is characterized by its emphasis on human-machine collaboration, and the active participation of small and medium-sized companies led by the government, industry, and academia. Germany's 'Platform Industry 4.0' is the same as the US corporate consortium (IIC, SMLC, AllSeen Alliance, OCF) and the 4th industrial revolution promotion organization and companies, universities, and research institutes are operating the 'Test Bed,' which creates innovation by jointly introducing cutting-edge technologies.⁸⁾ The characteristics of the Fourth Industrial Revolution in Germany are policy promotion, cooperation system promotion, and the establishment of a leading manufacturing innovation system from a mid to long term perspective.

Table 2. Germany and the United States' Innovation Platform

	Innovation Platform	Characteristic	Driving Entity	Establishment Period
USA	Industrial Internet Consortium(IIC)	•Creation of industry wide/international standardization and new business models. •22 Test Beds were used	Private enterprise (250 companies)	2014 (AT&T, Cisco, GE- 8 companies)
	Smart Manufacturing Leadership Coalition(SMLC)	•Conducting joint research in non-competitive fields: using a test bed	Private enterprise (56 companies)	2012 (NPO)
	All Seen Alliance	•Developing industry standards for consumer electronics/brands: using test beds	Private enterprise (200 companies)	2013 (Linux)
	Open Connectivity Foundation(OCF)	•Electronic devices (smartphone, computer, sensor) connection/use of test bed	Private enterprise (150 companies)	2014 (Intel, Samsung)

6) Plattform Industrie 4.0.(2016)

7) <<https://steemit.com/kr/@clutho/smart-factory-4>>

8) Kim *et al*(2017), pp. 105-106.

Germany	Platform Industrie 4.0	<ul style="list-style-type: none"> •524 Test Beds (Small and Medium Enterprises, University Research Centers, Other Research Centers, Large Enterprises, etc.)→ Simulation of complex manufacturing and logistics systems according to actual conditions. 	<ul style="list-style-type: none"> •Government in 2013 (BMBF, BMWi), associations (BITKOM, VDMA, ZVEI), academics and research institutes (Fraunhofer-Gesellschaft), labor unions (IG Metall)
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Source: Kim et al(2017)

2. Characteristics of German Smart Factory Policy

German smart factory policy is related to 'Industry 4.0'. The characteristics of the Fourth Industrial Revolution in Germany are policy promotion, cooperation system promotion, and the establishment of a leading manufacturing innovation system from a mid to long term perspective. First, Germany is focusing on realizing a next-generation production system that concentrates on production plants and even the entire Germany from a mid to long term perspective. Germany adopted 'Industry 4.0', which is a long-term innovation strategy to secure competitiveness in the era of the Fourth Industrial Revolution through a national strategy by incorporating information and communication technology (ICT) into the manufacturing sector with the methods of multi-kind small quantity production and even multi-kind mass production. The German manufacturing industry seeks to secure German competitiveness in the long term through the innovation of competitiveness in the manufacturing industry since it accounted for 22% of gross domestic product (GDP) in 2019, which is higher than 12% in the United States and 16.5% in Italy, accounting for 25% of employment.

Second, it is the establishment of a leading manufacturing innovation system. 'Industry 4.0' aims to maintain and strengthen the competitiveness of the German manufacturing industry and achieve this through the expansion of smart factories with high production efficiency.

Third, it is the promotion of the collaboration system. As shown from the case of 'Industry 4.0' in Germany, the paradigm shift in which individual companies change the production method itself through collaboration is rapidly progressing in almost all industry sectors and business types. As shown from 'Platform 4.0', the main body leading the 'Industry 4.0' strategy is a system formed jointly by the government, private organizations, various associations, and associations. Commonly, the testbed is in operation. The German government supports 'Industry 4.0' so that SMEs can grow together through the SME support policy through 'Mittlestand 4.0'.⁹⁾ It is difficult to

respond quickly to consumer demands with the capabilities of individual companies alone. Therefore, the decentralization of production and distribution has established the foundation for collaboration between large companies and SMEs. Through 'Industry 4.0', the fact that the platform is not a production, technology, or service as a key item for German exports shows a high correlation between the Fourth Industrial Revolution and the platform.

III. Case Studies: Bosch and Adidas

1. Bosch's Successful Case

Bosch, founded in 1886, is a manufacturer of automotive electric products. In order to overcome the poor manufacturing environment such as deterioration of operating profit and high wages, and a to prepare for competition, the Feuerbach plant in Stuttgart, where a large number of automotive factories, such as Mercedes-Benz and Porche gathered, was improved to a smart factory. Bosch applied various technologies to implement a smart factory. Bosch developed an Active Cockpit solution for factory production control, a collaborative robot (Apas) and sensors, CPS implementation, and maintenance functions using a smartphone.¹⁰⁾

Bosch has been pursuing a two-pronged strategy when it comes to industry 4.0: On the one hand, the group, which manufactures not only industrial technology but also automotive parts, tools, and building technology, wants to gradually equip all of its 280 plants with networked automation technology. Bosch is developing this in-house and aims to generate a billion Euros in efficiency gains for the group by 2020.¹¹⁾ On the other hand, Bosch also wants to sell the technology to other companies. Bosch's portfolio for industry 4.0 consists of 4 components: software, logistics & production, service & consulting, and field-level equipment.

Bosch's success factors and achievement are as follows. First, Bosch success is the result of continuous innovation efforts such as the BPS (Bosch Production System) production and method that simplifies complex processes with IT technology and enables timely production. For example, when constructing a smart factory, investment in education was supported for the use of a new system in order to reduce the backlash from the labor forces as a result of the perception of job decline. In addition, though technology development, it performed the roles of

9) Kim *et al*(2017), pp. 105-106.

10) Etnew(09.24.2017)

11) <https://www.handelsblatt.com/technik/hannovermesse/vernetzung-industrie-4-0-soll-bei-bosch-zum-milliardengeschaeft-werden/24145258.html?ticket=ST-25329129-nUNI99fnWRbO5M25qujA-ap4>>

consumers and suppliers as a duals strategy. As a result, Bosch has improved productivity and increased sales by owing a smart factory.¹²⁾

The BPS is at the heart of Bosch's manufacturing strategy. It aims to avoid waste in production and all associated business processes. The BPS serves to continuously improve quality, costs, and delivery performance. Bosch also involves its suppliers intensively in this process and offers them appropriate training if required. They also work together with their suppliers on the implementation of BPS principles as part of supplier development projects. Bosch aims to continuously increase the productivity of its production chain.¹³⁾ With the implementation of BPS, standardized, lean processes are implemented that require a trouble-free process. Therefore, our suppliers must meet the requirements regarding flexibility, delivery frequency and replacement time-in short: they must be BPS-capable.¹⁴⁾

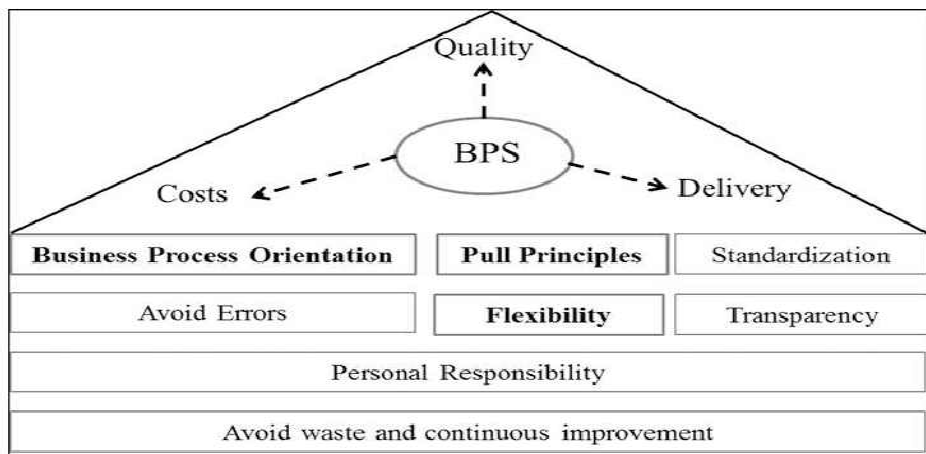


Figure 1. BPS- Bosch Production System

Source: <https://www.researchgate.net/figure/Main-pillars-of-the-Bosch-Production-System-BPS_fig2_271582392>

Second, Bosch shares its smart factory know-how and production information with partners. Based on the know-how of converting the Bosch manufacturing site into a smart factory, it is actively targeting the global market by acting as a technology seller. In addition, it was possible to expand the business sector by securing high base technology capabilities. Bosch applies the strength of sensor functions to research related to autonomous vehicles (in corporation with NVIDIA). In the

12) Min(2018)

13) <http://purchasing.bosch.com/de/de/quality_innovation/production/production_competence.html>

14) <http://purchasing.bosch.com/de/de/quality_innovation/production/production_competence.html>

production of fuel injectors, which are the core parts of diesel engines, Bosch meets hundreds and thousands of product specifications by applying RFID values by sharing real-time production information with customers.¹⁵⁾

For example, Bosch shows how networking and data collection can be used to optimize worldwide production networks by using Global ABS (Antilock Braking System) and ESP (Electronic Stability Program). 11 plants worldwide produce 26 million systems a year. 5000 machines are connected via a common production control software. Due to the worldwide data presence, excellent benchmarking can be carried out. If, for example, the employees in Japan have carried out optimization on the welding machine that leads to an improvement in productivity, this can then be adapted in the other plants.¹⁶⁾

Third, Bosch promotes a dual strategy of the smart factory from the perspective of consumers and suppliers. this company will first switch to a smart factory in its existing factory from the viewpoint of the leading user and promote the connection of all its factories targeting the year 2020. From the perspective of the leading provider, the technology of Bosch software innovation (industrial IoT), such as solution, is developed through its subsidiary to smart factory technology. In addition, the number of IoT-enabled mechanical devices was expanded to 250,000 by 2019. It is planning to have, and supply factories and application technologies (Rexroth) related to heavy equipment and industrial machinery.¹⁷⁾ Bosch introduced an innovative BPS system through a smart factory, shared smart factory know-how and production information with partners, and promoted a dual strategy of the smart factory from the perspective of consumers and suppliers to improve productivity and increase sales.

2. Adidas Smart Factory Failure Case

Adidas moved its sneaker production line with subcontractors to China and Southeast Asia in 1993 due to high labor costs in the country. However, a smart factory was established in Ansbach, Germany in 2017, as cost competitiveness weakened due to the recent rise in labor costs in China and Southeast Asia. With the successful digitalization of the existing labor-intensive manufacturing line, which required large manpower, it was judged that its competitiveness had improved sufficiently. Therefore, the reshoring of the production base occurred in Germany. This smart factory was introduced as a representative example of reshoring in which advanced countries outsourced manufacturing facilities to developing countries back

15) Kim(2017)

16) <<https://automationspraxis.industrie.de/industrie-4-0/bosch-erstaunliche-erfolge-mit-industrie-4-0/>>

17) Kim(2017)

to their home country.¹⁸⁾

Since 2016, because Adidas has participated in more than 20 companies related to software and sensors, it has built a mass production system after pilot testing a smart factory that combines advanced technologies such as the IoT, big data, machine learning, 3D printing, and robotics. Adidas also promoted a Speedfactory plant in Atlanta, USA in order to meet North American demand in 2017. Adidas' smart factory is fully operational twenty-four hours a day to automate the entire process from customer order to production so that shoes can be quickly made and assured not only of mass production based on 3D technology but also of multi-variety and small-batch production tailored to specific consumer preferences.

The labor-intensive production process has been transformed to allow production with only a small, reduced number of workers from the work previously performed by 600 people through digital work such as big data, IoT, cloud computing, robots, mechanization, and 3D printing. Customized production is available when a customer orders through the website and delivery is available within two days. The production time has been reduced from the previous several weeks to five hours, making it possible to produce 500,000 pairs per year, and introduced multi-variety and small-batch production, which produce small quantities of products that meet various individual needs. This regression of labor-intensive products can be applied to other countries as the fourth industrial revolution of smart factories. Adidas Speedfactory is characterized by the reshoring effect, the ability to produce customized products, and reduced lead time.

However, Adidas stopped operating smart factories in Germany and the United States in April 2020. The four-year test case of Adidas' German smart factory gives a lesson that reshoring through a smart factory cannot always be successful. Adidas succeeded in reducing the production speed three times compared to before, but it did not reach mass production through smart processes. To change the way of producing labor-intensive shoes, the company built a Speedfactory covering the 4th industrial revolution technology, but it decided to suspend the factory after four years. The reason for the suspension is that there are still technical limitations to realizing the trade-off goal of 'precision process' and 'mass-production' as a cause of difficulty in the 3D printing-based production method.¹⁹⁾ However, Adidas' challenges and open collaboration efforts for productivity innovation must be evaluated. It was an opportunity to secure the foundation for innovation and accumulate AI, IoT, big data, and future manufacturing technologies.

18) Cruickshank(2016)

19) Bain(2019), Thomasson(2019)

IV. Implications and Conclusion

Germany's smart factory policy is related to 'Industry 4.0'. 'Industry 4.0' is the new industrial revolution of the 21st century, enabling companies to develop more 'intelligent' products and services by reducing costs and increasing efficiency, where the human factor is crucial for application and work is based on existing literature in the field. Smart Factory offers a solution that can help manufacturing companies to further optimize their processes and significantly increase their internal performance due to the system's automated operations, straightforward setup with simple, on-demand installation, and high scalability.

'Industry 4.0' represents a new level of control of the entire value chain over the life cycle of products. In addition to the technological aspects, the business aspects of 'Industry 4.0' and the educational aspects will also be important, and qualification is becoming increasingly important. Intelligent production and industrial artificial intelligence can have a positive net job effect. New competence-based job profiles are emerging and the need for other jobs can be reduced. In economic policy, more attention should be paid to 'Industry 4.0', as it will increase productivity and also enable new, better adapted products and new disruptive business models. Another disadvantage is, of course, that many jobs are lost due to digitization in the major industrial nations. In addition, market demand for products manufactured with outdated technologies will quickly stop due to poor quality, and such production will have to be discontinued due to high costs and impatience.

The key factors of the Fourth Industrial Revolution in Germany are policy promotion, cooperation system promotion, and the establishment of a leading manufacturing innovation system from a mid to long-term perspective. The smart factory system also affects reshoring to the home country through changes in the global value chain. This paper examines the success of Bosch and the failure of Adidas. The success factors of Bosch are that it simplifies complex processes with IT technology, promotes continuous innovation, shares smart factory know-how and production information with partners, and promotes a dual strategy of the smart factory from the perspective of consumers and suppliers.

In the case of Adidas, the characteristics of Adidas Speedfactory are the reshoring effect, the ability to produce customized products, and reduced lead time. However, Adidas succeeded in reducing the production speed three times compared to the previous one but did not reach mass production through smart processes. Adidas' failure is giving a lesson that reshoring through a smart factory cannot always be successful. In order to enable corporate U-turns (reshoring) using the Adidas case as a teacher, on the other hand, it is necessary to review whether the company can

return to the country from the global value chain level, rather than simply relocating the factory.²⁰⁾ Adidas has most of its footwear manufacturing (OEM) factories and raw material suppliers in Asia. If the company produces alone or out of this supply chain, its productivity may decrease. If reshoring is possible at the supply chain level, the key now is whether the smart factory can significantly reduce labor costs or produce high value-added products at all.

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A Study on the Seasonal Festivals in Myanmar

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ABSTRACT: Myanmar's annual festivals were affected by seasonal characteristics. Myanmar is a tropical monsoon climate and has a mild climate throughout the year. There is a difference because the country is long to the north and south. There are four criteria according to the timing of sowing, before the monsoon rice, monsoon rice, late monsoon rice, and winter rice. The well-being rice farming in the wet season determines the economic richness of the year. New Year in Myanmar is April, the beginning of farming. The New Year is considered the nation's biggest holiday. In ancient times, 60 hours were divided into morning and afternoon. Before the New Year's festival is held, the street sells Thingyansa with a description of the new year's gypsum. Letung mingla Festival is an agricultural festival. It is a ceremony containing a desire to plant rice well and prepare for farming well and a wish for good harvest. In Mithun and Nirvanaje festival a lot of weddings are held. Thamane Festival is a harvest festival. It is a purpose to warm the body. These festivals are linked to the means of securing economic goods and building merit for conducting important events such as marriage.

Key words : *Seasonal Festival, Myanmar, Tropical culture*

I. Introduction

The wave of socialization is rapidly penetrating Myanmar. In the meantime, economic and political development is taking place rapidly. Myanmar remains a traditional culture. The festival in Myanmar reflects the characteristics of religion and

climate. Interest in traditional culture establishes the identity of national culture. Myanmar was used as part of the national integration policy. Myanmar's festivals have historically been influenced by their natural environment, religion, and social culture. There is no research that has been analyzed in terms of concrete and multifaceted aspects.

Festivals are associated with the natural environment, such as the seasonal cycle. So it has a close relationship with the social life of Myanmar. The annual festival in Myanmar is a ritual related to the natural environment such as seasonal circulation. It is a social activity that mediates traditional customs of Myanmar people with religious and cultural backgrounds.

Festivals have been discussed by several studies. Ryu Jung-ah (2013) referred to the limitations of the research in festival theory as a lack of theoretical discussion. Festivals are words that refer to celebration and sacrifice in a comprehensive way. Representative scholars in festival research are Arnold van Gennep (1873-1957), a structural researcher who established the concept of passage ceremony, Victor Turner (1920-1983), who applied dialectic to the process of rituals and analyzed the theatrical elements from a ritual perspective. Kim-Shinae (2016) divides Myanmar's New Year festival into modern and traditional perspectives, discussing customs and functions.

Most of the previous studies of Southeast Asian rituals including Myanmar showed a tendency to explain from the perspective of Buddhist tradition. Hayashi (2001) describes the annual festivals of Thailand and Laos as an example of Buddhism. Myanmar's annual festivals, which are intangible heritage of traditional culture, need to look at elements of natural environment such as farming season together with religious viewpoint.

The aspects of festivals and social and cultural functions are diverse. Therefore, the interpretation may vary depending on the researcher's point of view. The festival is a practical act that is carried out by direct participation of Myanmar people.

II. Main subject

1. Farming season in Myanmar

Myanmar's annual festivals are associated with seasonal climatic factors as well as religion. Each country created food, clothing, and residential culture based on local natural conditions. The countries that flourished the brilliant culture became the starting point to adapt to the natural environment. Myanmar's annual festivals were

also affected by seasonal characteristics.

What are the seasonal characteristics of Myanmar? How did the seasonal characteristics affect the annual festival in Myanmar? Myanmar has three climates: rainy, winter and summer. In the rainy season, it is affected by the southwest monsoon wind. It starts in mid-May and ends in mid-October. Rainfall varies according to the area. After the rainy season, about three months of winter comes. Followed by more than three months of dry summer (Khin Win 1991).

Myanmar is a tropical monsoon climate and has a mild climate throughout the year. There is a difference because the country is long to the north and south. The distinction between wet and dry seasons is evident by the warm and humid monsoon phenomenon. Farmers have distinguished rice in a variety of ways. The timing of sowing, the condition of water, and the period of growth are the criteria.

There are four criteria according to the timing of sowing. Before the monsoon rice, monsoon rice, late monsoon rice, and winter rice. The pre-monsoon rice (sowing in March) is harvested in June. It is 2% of total rice area. This is planted in the central region. The area occupied by rice before monsoon is small. However, it is important in the middle part where rice is scarce. It is the time when most of the rice in the storage pool is consumed at harvest time. Followed by monsoon rice. Monsoon rice accounts for the largest portion at 81 percent. It is planted in mid-June, transplanted in mid-July, and harvested in October-November. This applies to all areas of Myanmar.

Late monsoon rice are planted in August, replanted in September, and harvested in January. In the second half of the rainy season, it descends to the normal water level and is planted in the Delta region of the lowlands. Accounting for 2 percent of the total area. Winter rice is planted in November and replanted in December. And it is harvested in March. It accounts for 15 percent of the total area. It is planted around the river or in the Delta region (Kin Win 1991).

The timing of sowing and harvest is closely related to seasonal changes. In particular, harvesting rice seeds in the monsoon season accounted for 81 percent of the total rice yield. Therefore, the well-being rice farming in the wet season determines the economic richness of the year. The New Year in Myanmar is April. There is a festival to pick the ground just before the rainy season. It is also the time of the first sowing of new year. It means the beginning of farming. Monsoon rice accounts for 81% of the harvest area, so it is the most important time. The light festival held in November is intertwined with the harvest season of monsoon rice. The Turmene Festival is the second harvest season. It is in time for the final harvest before the New Year.

2. New year festival(Thimjang, April)

In most countries, the New Year is considered the nation's biggest holiday. Due to differences in culture by country, different types and dates are held. Myanmar is the second half of the dry season. It is held in the Dagu month corresponding to nweyadhi (summer). There are two more dictionary meanings in Dagu month. One thing is 'breaking the palm tree. It is a good month to harvest the fruit of palm trees. It is presumed to have been derived because farmers can harvest a lot.

The other is a change of time. It is called Thimjang Festival. People go out into the streets, watering people on their way and cool the heat. Set up a stage for festivals all over the street. The streets of the city are controlled from the night before the festival. On stage, young people dance to music and sprinkle water. Taxis put vinyl on seats in preparation for those who get wet. They also use trucks. Sprinkling water on each other is meant to wash away the evil actions that have accumulated in the past. It also means to start the new year.

In Myanmar's climate conditions, the use of water is an important factor in the festival. In March - April when the dry season begins in Myanmar, the average temperature is more than 40 degrees. There is a purpose of spraying water and forgetting the heat. In Myanmar, there is no seasonal recognition of spring, but a New Year festival is held. Dagu month is the time when the length of day and night is the same after the sowongyardi (winter). The festival is from April 13 to 16, and the 17th is the beginning of the new year. In the case of the intercalation, the day is shortened. It is 12th - 16th, and it becomes the new year on the 17th.

The New Year festival is different from the annual festival held every month on the full moon. Based on solar calendar, starting from the April of the equinox. This is the second half of the dry season. The length of night and day is the same. "Myanmar's 12 Months and Traditional Culture Festival" describes the time of the night and day of the month. Currently, Myanmar is 24 hours long.

In ancient times, however, 60 hours were divided into morning and afternoon. Also used traditional water clocks. One day starts at 0:00 and ends at 0:00 the next day. From sunrise to sunset is daytime, from sunset to sunrise is night. Therefore, a day is 30 hours a day and 30 hours a night.

But night and day time are not always the same, and there are some differences. The Dagu month (April) and the Dadinjut month (Oct.) are the same day and night. Waju month (June) have the longest length of daytime, and Pyado month(January) have the longest length of night. A period of one year is determined by the periodic phenomena of these space. The New Year also celebrates the festival according to the climatic conditions.

Myanmar has no winter. So there is no winter, summer and autumn festival. The

New Year's Festival is a spring equinox(Folk Elements in Burmese Buddhism). New Year festivals also announce the upcoming rainy season. In primitive times, it had a magical purpose of raining rain (Maung Htin Aung 1958). Festivals based on the vernal equinox are related to spring. This also applies to Easter.

It is Easter Day to commemorate Jesus' resurrection. It is the Sunday after the first full moon behind the vernal equinox. There is a difference in the dates each year. In the early church, the equinox with the same length of night and day was Easter. This, however, reflected the pagan tradition. The Germanic people perform the Ostar(Land and spring god) festival on the vernal equinox. In Rome, gave sacrifices to Attis. Atis, a plant that dies in winter and is resurrected in the spring. It was held on March 25. Other Christian festivals are associated with pagan festivals in each province. However, Easter is linked to the vernal equinox to announce the beginning of spring (Lee - Jeong Mo 2001).

Before the New Year's festival is held, the street sells thingyansa with a description of the new year's gypsum. 12 months of gypsum, gypsum for day of birth, new year's gypsum, climatic information necessary for farmers, and so on. Thingyansa is produced by astrologers and is distributed throughout Myanmar. Before 1886, it was made under the authority of the king (Maung Thin Aung 1958). There is a depiction of Dezaming in Thingyansa. It is a god coming down and going up to the Thingyan festival. It was certified as the god of planets on Sunday. It is the king of the 37 Nat spirits who are mythical believers in Myanmar. This picture shows the luck of the New Year at a glance.

There is Indra in Hinduism. Indra is a god of Indian mythology. They live in heaven or meru mountain. As king of the gods, he controls the weather and war. His clothing colors, agricultural tools or war weapons he brought, and the animals that ride them suggest the fortunes of that year (Maung Thin Aung 1958). Wore gold clothes, holding a bunch of flowers in one hand, the other hand holds a water bottle, riding a male calf or water buffalo. This is peace and prosperity (Maung Thin Aung 1958). The thagyamin descends to the earth with two lists from heaven. In the list decorated with gold, write the people who have built up their virtues. In the list of dog leathers records the men who sinned. It was the object of worship with the purification ceremony of the New Year The ancient Equinox was later grafted with a sunday planet god. The worship ritual of the Sunday planet god has the consciousness of washing the hair. It also carries a ritual to the king's coronation (Maung Thin Aung 1987). Sprinkle water on each other at this time. There is a Buddhist sense of values to wash away the vices and build merit.

3. Letung mingla Festival (June-July)

It was held on the full moon of Nayong month (June). In Myanmar, 'Le' (rice field) and Mingla (prosperity) were combined. It is an agricultural festival that was held traditionally in the royal family from ancient times. It was one of the important ceremonies of the royal family of Myanmar in the traditional era. The traces can be found in historical documents of Myanmar. The patriarch of Bagan, Htuntaik (reign 569 - 582), was killed accidentally during the ceremony (Hmannan 1992). The king, Mindon (1853 - 1878) has never left a ritual even when he is old (Shway Yoe 1963). Despite the danger, this festival had an important meaning. This festival can also be seen in the pictures(parabaik). The king and the bureaucrats are picking the ground using sacred white water buffalo. This festival began in ancient times and remained until the last dynasty. Myanmar's natural environment has a direct impact on rice farming. In particular, 81 percent of the total harvested rice was sown at the beginning of the monsoon season. Good rice farming in the wet season is an important factor in determining the economic richness of the year. These natural conditions are associated with this festival, which was organized by the ancient royal family. Before the rainy season, the moist soil is depicted as a ceremony to select using a pair of white cows(Pekhu 2011). June is the last month of summer before the full-scale rainy season begins.

In early June, the southwest monsoon rains bring rain and make it easy to cultivate the land (Shway Yoe 1963). This festival is a ceremony for praying for the good harvest of rice farming in the royal family of Myanmar. Rice farming is an economic basis in agricultural society. It is also the first rice farming period since the new year. It is a ceremony containing a desire to plant rice well and prepare for farming well and a wish for good harvest.

4. Dezaungmong Mithun festival (November-December)

It is a festival to be held on the full moon of the Dezaungmong which corresponds to November. Mi means light, thun means light. Myanmar people wear electric lamps on street electric poles and trees. At home, it beautifully decorates indoor and outdoor with light bulb. Previously, oil lamps were used. It is held in the village of the whole country. Myanmar people enjoy it most with the New Year festival. The Nirvanaje Festival is organically related to each village community. Neighbors exchange food and necessities with each other. It is a combination of nirvana and ze (market). Each household chooses goods to provide during the festival. The selected items are displayed on the newsstand in front of the house. Neighbors exchange numbered paper for each other. On this day of the festival, receive the product with this coupon. In the case of expensive items, winners are covered by lottery. In the home providing food, set up stalls and chairs for meals. In

addition, visit relatives at this time and do gado (bow in the sign of respect). A lot of weddings are held. There are the following customs that set a wedding date. When married in mid-April to May, it becomes rich. When marry in June, love each other very much. When get married in July - August, get sick or die. So parents are reluctant to marry at this time. If be married in February - March, can not have children, or have only a daughter, or children are unhappy. (Shway Yoe 1963).

5. Thamane Festival (February-March)

It is a harvest festival held on the full moon of February (thabodwe). Thamane is a combination of Thaman (rice) and Hurne (sticky). Use the glutinous rice called kauknyin when cook rice. They eat thamane, a traditional dish of Myanmar. They drink green tea or palm sap drinks. It is the first half of the dry season in Myanmar, and it corresponds to winter (Sarong Yardi). They make turmene with mix greasy sesame seeds. It is a purpose to warm the body. They offer tribute to their neighbors and monks. At the Shedagon pagoda, turmene management competition is held. People who work at pagoda make a team. The judges will examine the taste, shape, and touch. Winners will receive prizes and trophies. Yangon Foreign Language University do Thamane festival for foreign students. Put glutinous rice in oil and stir until sticky. Move it to the floor and rub it with a stick. Use a cooker called 'de'. Fried coconut and onion pieces are also included. Three to five men roll with long sticks. It builds merit by purchasing Thamane made by the temple. Reservations are made one week before the festival. Give 25,000 pounds to the employee and get a confirmation. There are many crowds in the Shedagon festival. Broadcast coverage also comes. The traditional cheering tool is exciting. It is done in other temples and homes. It is characteristic of agricultural ceremony. In Myanmar, monsoon rice accounts for 81 percent of the total. After Monsoon Rice, a more majestic Thezaungmong festival is held. It is the farming ceremony which is the last harvest before the New Year. These festivals are linked to the means of securing economic goods and building merit for conducting important events such as marriage.

III. Conclusion

Myanmar's annual festivals were affected by seasonal characteristics. Myanmar has three climates: rainy, winter and summer. Rainy season starts in mid-May and ends in mid-October. Rainfall varies according to the area. After the rainy season, about three months of winter comes. Followed by more than three months of dry summer.

Myanmar is a tropical monsoon climate and has a mild climate throughout the year. There is a difference because the country is long to the north and south.

There are four criteria according to the timing of sowing, before the monsoon rice, monsoon rice, late monsoon rice, and winter rice. The pre-monsoon rice is harvested in June. The area occupied by rice before monsoon is small. Monsoon rice accounts for the largest portion at 81 percent. It is harvested in October-November. Late monsoon rice are harvested in January. Accounting for 2 percent. Winter rice is harvested in March. It accounts for 15 percent. The well-being rice farming in the wet season determines the economic richness of the year. New Year in Myanmar is April, the beginning of farming.

The New Year is considered the nation's biggest holiday. The festival is from April 13 to 16, and the 17th is the beginning of the new year. It is a good month to harvest. Watering to people on street and cool the heat. It is meant to wash away the evil actions. The average temperature is more than 40 degrees. There is a purpose of forgetting the heat.

In ancient times, 60 hours were divided into morning and afternoon. April and Oct. are the same day and night. June have the longest daytime, and January have the longest night. Myanmar has no winter. New Year festivals announce the upcoming rainy season.

Before the New Year's festival is held, the street sells Thingyansa with a description of the new year's gypsum. It is produced by astrologers. Before 1886, it was made under the authority of the king. Sprinkle water on each other at this time, there is a Buddhist sense of values to wash away the vices and build merit.

Letung mingla Festival was held on the full moon of June. It is an agricultural festival that was held traditionally, the important ceremonies of the royal family. This festival began in ancient times and remained until the last dynasty. Good rice farming in the wet season is an important factor in determining the economic richness of the year. This festival is a ceremony for praying for the good harvest of rice farming in the royal family of Myanmar. It is a ceremony containing a desire to plant rice well and prepare for farming well and a wish for good harvest.

Mithun and Nirvanaje festival is held on the full moon of November. They wear electric lamps on street and home. Previously, oil lamps were used. Neighbors exchange food and necessities in Nirvanaje Festival. And visit relatives for gado. A lot of weddings are held. There are customs that when married in mid-April to May, becomes rich. In June, love each other very much. In July - August, get sick or die. In February - March, can not have children.

Thamane Festival is a harvest festival held on the full moon of February (thabodwe). They eat thamane, a traditional dish of Myanmar. It is a purpose to warm the body. They offer tribute to their neighbors and monks. At the Shedagon

pagoda, turmene management competition is held. Put glutinous rice in oil and stir until sticky. After Monsoon Rice, a more majestic Thezaungmong festival is held. It is the farming ceremony which is the last harvest before the New Year. These festivals are linked to the means of securing economic goods and building merit for conducting important events such as marriage.

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The Expected Effects of Make-up on the Psychological Well-being of Middle and Old Women

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Abstract : Today, as the standard of living improves and the advancement of women into society is expanding, socially, middle-aged and elderly women are also increasingly interested in beauty issues. In addition, today's standard of living has been raised, women's participation in society has been expanded, their appearance has been further expanded in line with the societal fever, and women's age has increased interest in beauty issues. In addition, the need for coping with physical and mental aging is expected to increase as the self-esteem increases and the desire for self-actualization increases due to changes in values of middle-aged and elderly women. Therefore, in this study, the following research problems were set up and analyzed. (I) How is the make-up effect and psychological well-being of middle-aged women? (II) What is the difference between the makeup effect and demographic characteristics of middle-aged women? (III) What is the relationship between the expected effect on the composition of middle-aged and elderly women and their psychological well-being? (IV) What is the relative influence of the variables (social and demographic characteristics (expected effect on makeup)) on the psychological well-being of middle-aged women?

Key Words : *Make-up, Psychological Well-being, Middle and Old Women,*

1. Introduction

1. Necessity and purpose of research

For women, middle and old age is the golden age of the most productive life in which they can perform their role in a stable atmosphere with economically stable

and social status established. This period is regarded as a transitional period and a developmental stage in life (Myungso Kim; Youngseok Han, 2006; Youngsuk Kim, 2006; Eun Jieun, 2013; Kyungeun Lee, 2012; Mikyung Jung, 2009; Yujin Choi, 2010).

Today, with the improvement of living standards and the expansion of women's advancement to society, and socially, middle-aged and elderly women are also increasingly interested in their beauty problems (Kim, 2006). And enhance today's standard of living and social participation of women and the further expansion of the extravaganza also looks depending on the craze in social and women age has been increased interest in their beauty problems (Kim Myoung Hee, 2006).

In addition, the need to cope with physical and mental aging will increase even more for middle-aged and elderly women as their self-esteem expands due to changes in their values and the desire for self-realization increases (Eun-mi No, 2010).

The key statistics table of the Women's Family Panel at the Korea Women's Policy Institute shows that the overall economically active population of women in 2008 increased by about 12% to 57.1% in 2018. The main statistical tables of the Korea Women's Development Institute of Women and Family Panel shows have risen about 12% in the economically active population 46% of the overall 2008 women in 2018 the economically active population 57.1%. Along with economic growth, the improvement of women's education and awareness level leads to the sharing of housework and care work, and the desire for self-realization of women through self-development (Korea Women's Policy Institute, Women's Family Panel, Economically Active Population Key Statistical Table, 2020).

Improving women's education and awareness in addition to economic growth, domestic work and to have a share of care work, self-actualization through self-development of women needs (Korea Women's Development Institute of Women and Family Panel economically active population Main Chart, 2020). Unlike in the past, modern middle and old women have a strong desire for external health and beauty as their participation in social activities expands.

The productivity of middle and old women is associated with many aspects such as social roles and social activities, and these social relationships and social activities can be said to have an effect on the psychological well-being and depression of middle and old women (Ae-soon Kim, 1993; Hyunhwa Kim, 1992; Kyungsook Park, 1991; Hyunjoo Yang, 2005). Because physical appearance is very visible, it is not only an object of social comparison, but it is also directly related to self-evaluation, and positive changes in appearance can reduce the cause of stress and increase self-satisfaction, thereby giving a feeling of happiness (Lee Soo-kyung and Ko Ae-ran, 2006).

In modern society, self-management is becoming more competitive, and appearance plays an important role in psychological well-being and social

interpersonal relationships. Most of the studies on women's makeup that women have self-regulation and courtesy toward others by wearing makeup, and that they can express social expectations and femininity toward women.

There are many research papers related to the self-esteem, self-identity, life satisfaction, and life satisfaction of middle-aged and elderly women, but studies that analyzed the effect of participation in social activities of middle and old women's social activities on psychological well-being are still insufficient to be.

In addition, the expected effects of makeup and social activities according to the social and demographic characteristics of middle and old women (age, spouse presence, education level, health status, living standard, child residence, religion, housing type, pocket money, occupation) I would like to see what differences exist in the degree of participation.

2. Research Problem

The research questions set in this study are as follows.

Research Problem 1. What is the expected effect of the makeup of middle-aged and elderly women, and the degree of psychological well-being ?

Research Problem 2. What are the differences in the expected effect of makeup and demographic characteristics of middle-aged and elderly women?

Research question 3. What is the relationship between the expected effect on the makeup of middle-aged and elderly women, and a sense of psychological well-being?

Research Question 4. What is the relative influence of the variables (social and demographic characteristics (expected effect on makeup)) on the psychological well-being of middle-aged and elderly women?

II. Theoretical background

1. Middle and old women

1) The concept of middle and old women

With the development of science and technology and economic growth, the life expectancy of humans has been prolonged and the standard of living has been improved, so life after middle age has become an important period that accounts for more than one-third of life (Namjin Kim and Youngil Cheon, 2003). The female population after middle age increased further, and the proportion of middle age in the entire life cycle increased (Kim Young-beom, 2006; Jang Hye-ryeong, 1997).

Today's research on the time period for classifying middle-aged women differs according to the researcher's point of view, and about 40 to 59 years old is classified as middle-aged women. Today's research on the time period for classifying middle-aged women differs according to the researcher's point of view, and about 40 to 59 years old is classified as middle-aged women. As the level of culture improves and life expectancy grows, it is sometimes viewed as 65 years old. The characteristic of this period is the most stable and satisfactory time due to the social status and economic margins achieved by oneself. It's time to adjust to your physical strength. Physical changes include changes in vision and hearing, various chronic diseases, and menopause and sexual changes (Kim, 2012). It is also known as a period of sociocultural changes along with physiological changes in the body (Kim Ki-beom et al., 2006).

This period is the golden age of the most productive life, with an interest in children's education and career as well as playing their role in a stable atmosphere with a stable economic and social position.

This period is the golden age of the most productive life, with an interest in children's education and career as well as playing their role in a stable atmosphere with a stable economic and social position. This generation is an age group that actually leads society in terms of power and responsibility (Ga-Hyun Yoon et al., 2006).

In the Korean Welfare Act for the Elderly, those who are 65 years of age or older are defined as the elderly, and in developmental psychology, it is a general view to see old age as 60 to 65 years of age or older. Therefore, in this paper, as the level of culture improves and lifespan increases, the senile age is defined as approximately 65 years of age or older. At this time, physical strength begins to gradually decline and diseases that promote senility begin to appear. Looking back, I questioned whether it was worth it (Ga-Hyun Yoon et al., 2006).

As women meet middle and old age, they enter a period of menopause. As women meet middle and old age, they enter a period of menopause. In the mid to late 40s, the secretion of sex hormones begins to decrease as the activity of reproductive organs such as the ovaries that make and secrete sex hormones decreases. In addition, osteopenia and osteoporosis caused by a decrease in bone density increase the likelihood of fractures, and mental illnesses such as depression accompanied by insomnia, concentration disorder, and memory impairment (Hwang, 2011).

Prior studies related to employment of middle-aged and elderly women, such as a study on the relationship between family life and marital satisfaction according to employment status (Soosun Park, 1996; Mikyung Lee, 2002), etc., employment of married women is affected by family members, marriage relations, and society in

general. While attention has been paid to the impact, marital satisfaction, and job satisfaction, little attention has been paid to the effect of employment on the subjective quality of life of middle-aged women, and factors related to the employment of married women, namely, employment of married women. It has been studied only in a wide range of conditions, such as employment and child rearing, attitudes toward employment, and employment and time management.

2) Changes in middle and old women

(1) physical changes

Middle-aged women are in the middle of maturity and old age among the developmental stages of life. In addition to physical changes such as aging and the onset of physical diseases, changes in the role of the family, changes in the social support system, and relationships between individual societies, such as middle-aged women as a group which during the developmental stage of life in the middle of maturity and old age, changes in the aging and changes in the role of the family in addition to physical changes, such as the beginning of physical illness and social support system, the relationship between individual social facts. It is the time to adapt to various changes such as social and psychological factors (Lee So-young, 1996).

Middle-aged women's reaction to menopause appears differently. Some people shrink for no reason (Young-ryun Lee, 1981) and lose interest in their appearance, while others focus on managing their appearance by using clothes as a means to escape from psychological atrophy. have.

Adulthood is generally divided into three stages: adulthood (20-40 years old), middle age (40-60 years old), and old age (60 years old or older), of which middle-aged development begins to decline in terms of physical ability and health, but accidents are actually It develops into a more mature pattern based on professional experiences. During this period, children marry or leave their homes, and their personality may change as they think about death to come (requoted in Okbun Jung, 2000).

Table 1. Changes in each part of the face according to aging

change part	Change in skin color	Change in skin shape
Mouth	<ul style="list-style-type: none"> • The color becomes darker and dull 	<ul style="list-style-type: none"> • The volume of the lips disappears and the outline becomes unclear.
Eyebrow	<ul style="list-style-type: none"> • he color looks pale. 	<ul style="list-style-type: none"> • The eyebrows are thin and look less. • Partially missing.
Eye area	<ul style="list-style-type: none"> • The area around the eyes looks dull. • It looks shady. 	<ul style="list-style-type: none"> • The upper eyelid becomes thicker. • Wrinkles are visible. • There are fewer eyelashes
chin		<ul style="list-style-type: none"> • Because of the sagging of the skin, the double chin stands out.
fore-head	<ul style="list-style-type: none"> • The forehead and glabellar facial expressions around wrinkles look dull. 	<ul style="list-style-type: none"> • The wrinkles on the forehead and brow facial expressions stand out.
cheek	<ul style="list-style-type: none"> • Spots and freckles are darkened and look dull. 	<ul style="list-style-type: none"> • The cheekbones protrude. • The skin is sagging • Wrinkles stand out

Source: Jinsoo Jun (2003). A Study on the make-up attitude and make-up of elderly women.

Table 2. General characteristics of the elderly

Classification criteria	Characteristics of the elderly
According to the maturity of the body and health	<ul style="list-style-type: none"> • Active restrictions • Changes in the appearance of whitening hair and wrinkles • Decreased functioning of internal organs • Decreased energy motility and physical cooperation • Weakened immunity to disease
Psychological maturity, adaptation, and change	<ul style="list-style-type: none"> • Pursuit of independence and economic independence • They want to be recognized for their value of existence • Sensitive reaction to one's own body • Increased tendency of realistic thinking • Depression, increased introversion and passivity • Increasing tendency to reminisce about the past • Increased caution • Wanting to be healthy and live longer
Adaptation of social norms	<ul style="list-style-type: none"> • Loss of role (reduction of life scope) • Confirming one's existence through participation in various meetings • wanting to learn to show that you can do something Increased leisure time

Source: Jinsoo Jun (2003). A Study on the make-up attitude and make-up of elderly women.

(2) social change

Looking at middle-aged women and vocational activities, women who engage in vocational activities have higher self-esteem and confidence in their abilities than non-employed women. In the case of women who engage in vocational activities, since they have developed a sense of independence, they have a great ability to adapt to changes in the middle age, while housewives who have prioritized the needs of their families tend to have low self-esteem (Jungwoo Choi, 2006).

The productivity of middle-aged women is associated with many aspects such as social roles and social activities, and these social relationships and social activities can be said to have an effect on the psychological well-being and depression of middle-aged women

(3) psychological change

An important psychological characteristic of middle-aged women is that they undergo changes in their self-concept. Several studies argue that self-concept is

lowered and that self-concept is elevated during this period. Scholars who claim that middle-aged women's self-concept is lowered are those who have not been able to self-develop themselves in middle-aged women, have been hurt by their self-concept due to physical decline, or are housewives who have been carried only for husbands or children in an obedient manner. It is said that he may have fallen into a sense of loss more than a employed woman. On the other hand, scholars who claim that middle-aged women's self-concept is elevated, see this as a period when confidence in herself increases more and she is full of confidence to develop her own abilities. If you have the most unrealistic concept of self in adolescents trying to establish a sense of identity or in old age when you lose your sense of identity, it is argued that this problem is the least in middle age (Kim, 1989). As a wife, she is not satisfied with staying as a mother, and in order to pursue a more socially meaningful life, she has jobs and hobbies (Kim Myung-ja, 1989).

As the role of child rearing is over, some people become interested in themselves anew. They realize that they are in vain and experience a weakening mental state (Park, 1997).

2. Expected effect on makeup

1) Definition of makeup

To categorize cosmetics according to the purpose of use, there are basic cosmetics, makeup cosmetics, functional cosmetics, and body cosmetics for skin, and hair cosmetics and scalp cosmetics for hair and scalp (Appendix 2 of the Enforcement Rule of the Cosmetics Act). Products for basic care include face wash cosmetics, lotions, lotions, and creams, and if these are not enough, there are essences and packs for special care. Cleansing cosmetics are intended to cleanse the skin by removing dirt, makeup debris, and waste products, and has the effect of preventing blood circulation by constricting capillaries by sebum and sweat secreted from the skin (Korean Dermatological Association, 2012). It works to restore the pH balance of the skin, which was raised by cleansing, to a normal state, and to prepare the skin texture by supplying oil and moisture (Oh Eun-jeong et al., 2013).

The definition of cosmetics stipulated in the Cosmetics Act (Article 2) is an article used for the human body to add attractiveness by cleansing and beautifying the human body, to change appearance, or to maintain or promote the health of skin and hair.

The definition of cosmetics stipulated in the Cosmetics Act (Article 2) is an article used for the human body to add attractiveness by cleansing and beautifying the human body, to change appearance, or to maintain or promote the health of skin and hair. Say something minor. In addition, cosmetics are classified into various types

according to purpose, and are largely classified into general cosmetics and functional cosmetics (Mina Park, 2014).

As for the functional chemicals listed in the Ministry of Food and Drug Safety, cosmetics in the past were limited to basic cosmetics for cleanliness and skin protection. As functional cosmetics emphasizing the same function are in the limelight, the demand for functional cosmetics with excellent effects and efficacy is increasing significantly (Journal of the Korean Cosmetics Association, 2012).

The Ministry of Food and Drug Safety refers to cosmetics as "cosmetics are products used in a similar way, such as applying, rubbing and spraying on the human body to add attractiveness and brighten appearance by cleansing and beautifying the human body, or to maintain or promote the health of skin and hair. It has been defined as "a mild action on the human body" (Cosmetics Act, 2016).

2) Expected effect on makeup

Women's make-up behavior is based on personal needs, that is, the concept of equipment, the desire for beauty, or motivation, but through social communication, they wear makeup according to social expectations and influence the conception and development of self-concept. It is a social action that tries to improve, express a social role, and evaluate and recognize oneself through comparison with others (Ahn-Jin Jo, 2014).

These skin changes in old age do not have much effect physically, but in terms of changes in appearance, they can have a big impact on the psychological side, and in the case of elderly women, a sense of self-loss and lack of confidence due to attachment and longing for their youth. (Mi-Ryung Kim, 2007). Women's interest in appearance is that the elderly, without exception, keep their body tidy and beautiful, and interest in beauty continues, and in reality, self-esteem and women's appearance management behavior are very closely related (Kim Gyeong-min, 2008), especially in the elderly. Appearance management plays an important role in overcoming various obstacles and restoring confidence in the population (Ryu Hye-hyun, 2007).

It can be said that women are socially recognized by putting on make-up, become more cautious of their mindset, and have a self-regulation function and courtesy toward the other person. It is a level of self-concept related to identity or femininity. They internalize socialized self-concepts due to self-stationaryization and social expectations for women (Kyung-jin Baek and Mi-young Kim, 2004).

The preceding studies on the consumption characteristics of cosmetics use according to age group are as follows. Housewives in their 40s use different types of consumption depending on the income gap.

For the wealthy, they prefer not to stand out rather than fashionable, and they value the traditional quality and value of luxury goods. In addition, we want to

purchase products in places where individual privacy is respected.

In addition, we want to purchase products in places where individual privacy is respected. Also I want to buy products where privacy is respected. In the case of ordinary income, if they only like the design, they buy low-priced and high-quality products in the market, and they are not sensitive to luxury goods.

In their 50s, they are not sensitive to price and tend to choose cosmetics that are safe for the skin and prefer expensive brands with excellent functions, and as in their 40s, they are highly interested in eye creams, elasticity, and wrinkle-related products (Lee, 2015).

Table 3. Definition of cosmetics

Country	Definition
U.S.A.	Articles used in the human body to change appearance by making it clean and beautiful without changing the structure and function of the human body and promoting attractiveness.
Europe	Items used to clean and scent all skin parts of the human body or mouth and teeth, or to change appearance or prevent body odor by protecting and maintaining the skin, mouth, and teeth in a healthy state.
Japan	Items that are minor to the human body by using a similar method, such as spraying or applying to the body to add attractiveness by cleansing and beautifying the human body, to change appearance, or to keep the skin or hair healthy.

Source: Minyoung Kim, (2016). 「A Study on the Path Analysis and Lifestyle Comparison of the Purchase Decision Process of Road Shop Cosmetics and Department Store Cosmetics Buyers.

3. Psychological well-being

1) Definition of psychological well-being

There are various definitions of psychological well-being according to the opinion of scholars. Psychological well-being is a concept that is used interchangeably with psychological well-being, subject well-being, subjective well-being, and subject happiness, and is not clearly defined theoretically, but is positive. It is being studied as a concept to measure the psychological health of the side

The concept of quality of life was regarded as the same concept as subjective sense of well-being, happiness, and satisfaction, and it was defined as the subjective well-being perceived by individuals with respect to the ultimate emotional dominance, physical, mental, social, and economic aspects experienced in life

Psychological well-being is defined as overall life satisfaction, whether an individual's overall life is enjoyable and joyful, and whether one is satisfied and feels

happy with his or her life (Diener, 1984).

In addition, it refers to the quality of an individual's psychological life. It is a concept that is understood from the psychological and social level rather than simply happiness-based life satisfaction (Kim Hee-jin, 2013). It is defined as the degree to which they function and feel well as a mature individual (Kim Hyun-ju, 2010), and Myung-so Kim et al. (2001) have the ability to accept themselves as they are, maintain positive interpersonal relationships, and independently control their behavior. It is defined as the state of having control over the surrounding environment, the purpose of life, and the motivation to realize one's own potential.

A life with a high psychological well-being means accepting oneself as it is, maintaining positive interpersonal relationships, having the ability to independently or self-regulate one's behavior, and being able to choose and change the environment well. It is a life that has control, has a purpose in life, and has a motive to realize one's potential (Cha Kyung-ho, 2004).

In recent years, beyond the level of understanding the quality of life as an individual's sense of happiness or satisfaction with life, it has been applied to social policies and various administrative processes, and quality of life research has been conducted in various directions. In fact, today, quality of life is treated not only in social welfare, but also in various fields such as psychology, sociology, nursing, economics, and philosophy. This is because it is difficult to identify or measure its properties in complex terms such as subjective and abstract (Holmes & Dickerson, 1987; Lim Seong-wook, 2006. re-cited). Therefore, the definition of the concept is not accurately defined, so it can be said that there is no concept definition consensus among scholars as it is interpreted in different meanings, and the terms of quality of life are well-being or welfare, subjective well-being, It is used synonymously with satisfaction (lifesatisfaction) and happiness (happiness) (Lim Hee-seop, 1996).

III. Research method

1. Survey subject and data collection method

In order to find out the effect of the expected effect of make-up on middle-aged and elderly women on psychological well-being, the subject of this study was to survey 300 Korean women in their 40s to 70s or older who have used cosmetics. The investigation period was conducted for one month from April 1, 2020 to April 30, 2020.

As a survey method, a questionnaire survey was used. Among them, 50

respondents with a large number of single respondents and non-responders were excluded. In this analysis, the analysis was conducted with 250 people.

2. Research tools

1) Expected effect on makeup

As for the expected effect on makeup, Jae-seon Yoo (2017) used the scale of the expected effect on makeup used in this study, this scale was composed of 27 questions, 'I often follow celebrity's makeup techniques', 'When I put on makeup, my facial expressions. It is composed of questions such as 'It becomes brighter' and 'I gain confidence when I put on makeup.' Each question is 5 points for 'very much', 4 points for 'just so', 3 points for 'normal', and 3 points for 'not so'. It was measured on a 5-point Likert scale, which gives 2 points to 'not very much' and 1 point to 'very unlikely', and it was interpreted that the higher the total score, the higher the expectation for makeup. The reliability of the expectation scale for makeup used in this study was Cronbach's $\alpha=.96$ was very high.

2) Psychological well-being

To find out the psychological well-being of middle-aged and elderly women, a scale consisting of 12 questions was used by revising and supplementing the scale used in the study by Kim and Lee (2009).

Each question is 5 points for 'very much', 4 points for 'just so', 3 points for 'normal', and 3 points for 'not so'. It was measured on a 5-point Likert scale, which gives 2 points to 'not very much' and 1 point to 'very unlikely', and it was interpreted that the higher the total score. The reliability of the psychological well-being scale used in this study was Cronbach's $\alpha=.77$.

IV. Results

1. General characteristics of survey subjects

The general characteristics of the survey subjects are shown in Table 4 below

Table 4. Socio-Demographic Characteristics of the sample

Category		N	(%)
Age(yr)	40-49	34	(10.7)

	50-59	176	(55.2)
	60-69	97	(30.4)
	≥70	12	(3.8)
Spouse	No	39	(12.2)
	Yes	280	(87.8)
Education	≤middle school	65	(20.4)
	high school	171	(53.6)
	≥college	83	(26.0)
Health	very poor	0	(.0)
	poor	29	(9.1)
	moderate	163	(51.1)
	good	111	(34.8)
	very good	16	(5.0)
living state	very low	5	(1.6)
	low	62	(19.4)
	moderate	183	(57.4)
	high	64	(20.1)
	very high	5	(1.6)
Living state with children	seperate	150	(47.0)
	Living together	169	(53.0)
Religion	no	170	(53.3)
	yes	149	(46.7)
Housing type	House	70	(21.9)
	Apartment	229	(71.8)
	Row houses	12	(3.8)
	Commercial housing	4	(1.3)
	Multi-family housing	3	(.9)
	Etc.	1	(.3)
Pin money (Won)	< 100,000	19	(6.0)
	100,000 – 290,000	111	(34.8)
	300,000 - 490,000	103	(32.3)
	500,000 – 690,000	49	(15.4)
	≥700,000	37	(11.6)

2. Use of cosmetics

Results for Cosmetic Usage of the study subjects are shown in <Table 5>. Looking at the general information of the survey subjects, in the case of the makeup stage, 130 people (40.8%) in the '2nd stage (skin, lotion, foundation or BB cream)', and '3rd stage (skin, lotion, foundation or BB cream, eyeliner, lips, etc.) Ball touch, etc.)' 109 people (34.2%), 'Step 1 (skin, lotion)' 45 (14.1%), 'Others (ignore all steps and apply only what is necessary, e.g., apply only lips and sunscreen)' 33. The survey was

followed by 10.3% (10.3%) and 2 (0.6%) who do not do it at all.

The survey was followed by 10.3% (10.3%) and 2 (0.6%) who do not do it at all. In terms of appearance age, the average was 53 years old, 167 people in their 50s (52.4%), 83 people in their 60s (26.0%), 63 people under 40s (19.7%), and over 70s. Six patients (1.9%) were surveyed in order. In the case of the appearance age that others think of, the average was 53 years old, and 179 people in their 50s (56.1%), 68 people in their 60s (21.3%), 67 people under 40s (21%), and Five people (1.6%) were surveyed in the order of '70s or older'. In the case of their desired appearance, the average was 51 years old, with 165 people in their 50s (50.7%), 95 people in their 40s and under (29.8%), 54 people in their 60s (16.9%), and 70 Five people (1.6%) were surveyed in that order. The appearance age he wants is 51, indicating that he is relatively young.

Table 5. The actual condition of use of cosmetics by survey subjects

Category		N	(%)
Makeup step	Do not do it at all	2	(0.6)
	Step 1 (skin, lotion)	45	(14.1)
	Step 2 (Skin, lotion, foundation or BB cream)	130	(40.8)
	Step 3 (Skin, lotion, foundation or BB cream, eyeliner, lips, cheek touch, etc.)	109	(34.2)
	Others (ignore all steps and apply only what is necessary, e.g. lips, sunscreen only)		
	Etc.(Others ignore all steps and apply only what is necessary, e.g. lips, sunscreen only)	33	(10.3)
Appearance age (yr)	≤39	63	(19.7)
	40-59	167	(52.4)
	60-69	83	(26.0)
	≥70	6	(1.9)
Appearance age		53.95	(7.53)
The age that others think (yr)	≤39	67	(21.0)
	40-59	179	(56.1)
	60-69	68	(21.3)
	≥70	5	(1.6)
The age that others think		53.32	(7.43)
The look	≤39	95	(29.8)

you want age	40-59	165	(51.7)
	60-69	54	(16.9)
	≥70	5	(1.6)
The look you want age		51.16	(7.76)

3. The level of psychological well-being and the expected effect on makeup of middle and old women

Looking at the expected effect on makeup of the survey subjects, the average score was 3.22 points, and in the case of 'the face looks more bright when you put on makeup', it was 3.85 points, showing the highest average value, followed by 3.77 points for 'You look more serious when you put on makeup' and 'You look more beautiful when you put on makeup' respectively, 3.72 points for 'I look brighter when I put on makeup', and 3.71 points for 'I look younger than my age when wearing makeup'. It was higher in order of point. In the case of 'I often follow the makeup techniques of celebrities', the score was 2.13, showing a relatively low number.

And the psychological well-being of middle-aged and elderly women was 3.27 points, which was higher than the median value of 3, and the expectation and psychological well-being of the subjects of this study were relatively high.

Table 6. The degree of psychological well-being and the expected effect of make-up of middle and old women

Category	M	SD
Expected effect on makeup	3.22	0.61
Psychological well-being	3.27	0.39

4. Relative influence of factors (social and demographic characteristics, expected effect on makeup) on the psychological well-being of middle-aged and elderly women

In order to examine the effect of the expectation effect on makeup on the psychological well-being of middle-aged and elderly women, a hierarchical regression analysis was conducted, and in Model 1, a significant variable in the dependent variable was input as a control variable. To diagnose hepatic multicollinearity, the variable inflation factor (VIF) and tolerance were examined. In general, if the dispersion expansion coefficient is more than 10 or the allowable value is less than 0.1, it is judged that there is a problem of multicollinearity. In this analysis, the VIF values of all variables were less than 10, and the tolerance was greater than 0.1,

indicating that the problem of multicollinearity did not occur.

In Model 1, which examined the influence of the independent variable on the psychological well-being of middle-aged and elderly women, among the independent variables, health status and occupation showed significant influence, and the explanatory power of all variables was low at 7%.

In Model 2, which added the expected effect of make-up to the independent variable, the expected effect of make-up was $\beta = .035$, indicating that it had a significant static effect ($p < .001$). In addition, the explanatory power of all variables increased to 22%, resulting in an increase of 15%, and the expected effect of make-up on the psychological well-being seems to be very large.

These results show that if the expected effect on makeup is high, it has a positive effect on the psychological well-being of middle-aged and elderly women.

Table 7. Expected effect of makeup on psychological well-being

Model	Non-standardizati on factor		Standa rdizati on factor	t	p	VIF	R 2 (.043)	F(p)
	B	Stand-ard error	β					
1	(Cons.)	3.082	.126		24.526	.000		.072 (.042) 2.397** (.009)
	age	-.039	.073	-.031	-.530	.596	1.137	
	spouse	-.050	.051	-.056	-.975	.330	1.086	
	educatio n	.088	.069	.074	1.274	.204	1.130	
	health state	.184	.077	.137	2.386*	.018	1.090	
	living state	-.073	.049	-.085	-1.503	.134	1.060	
	Living state with children	.066	.055	.069	1.188	.236	1.129	
	Religion	-.057	.046	-.073	-1.239	.216	1.167	
	housing type	-.003	.044	-.004	-.066	.948	1.072	
	p i n money	.069	.051	.079	1.338	.182	1.152	
	occupati on	.119	.054	.128	2.219*	.027	1.103	

(Cons.)	2.206	.164		13.417	.000		.217 (.186)	7.059*** (.000)
age	-.083	.068	-.066	-1.219	.224	1.148		
spouse	-.096	.047	-.107	-2.016*	.045	1.108		
education	.045	.064	.038	.705	.481	1.145		
health state	.159	.071	.118	2.233*	.026	1.093		
living state	-.081	.045	-.095	-1.818	.070	1.063		
Living state with children	.019	.051	.020	.365	.715	1.146		
2 Religion	-.029	.043	-.037	-.669	.504	1.184		
housing type	-.046	.043	-.060	-1.083	.280	1.194		
pin money	.036	.048	.041	.750	.454	1.168		
occupation	.064	.050	.069	1.288	.199	1.127		
Expected effect of using cosmetics	.150	.035	.237	4.286** *	.000	1.195		

* p<.05,** p<.01, *** p<.001

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Employee Satisfaction on Compensation of Hotels in Nay Pyi Taw

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Abstract: This study focuses on the effects of employee satisfaction on compensation of Hotel. The objectives of the study are to identify the compensation of MGallery Hotel and to analyze the effects of employee satisfaction on compensation of MGallery Hotel. There are 133 employees in MGallery Hotel. Among them, 120 employees are selected as sample respondents by using simple random sampling method. Primary data are collected from 150 sample respondents by using structured questionnaires measured with five point likert scale. Secondary data are collected from libraries, relevant text-books, previous research papers and journals, records of Hotel and websites of Ministry of Hotel and Tourism in Myanmar and other relevant websites. The survey data was collected during, January 2020. Descriptive statistics, correlation coefficient and multiple regression methods will use to analyze the relationship between compensation and employee satisfaction. Salary and health care are strongly positive correlation with employee satisfaction. Bonus and workers' compensation are moderately correlation with employee satisfaction. According to multiple regression analysis, the results show that salary and health care have significant and positively effect to influence employee satisfaction. This Hotel should maintain current basic salary and health care for increasing employee satisfaction.

Key words: *Salary, Bonus, Workers' Compensation, Health Care and Employee Satisfaction.*

I. Introduction

Human resource is the most important resource in any organization because the effective utilization of other resources depends upon the management of the

employees of the organization. HRM practices are required to be implemented in today's knowledge organizations to attract, retain and add value (Dessler, 2008). Human resources management refers to the policies and practices involved in carrying out the human resource aspects of a management position including human resource planning, job analysis, recruitment, selection, compensation, performance appraisal, training and development, and labor relations and others. The most commonly goal for human resources management is employee's satisfaction.

Employees are the organization's key resource and the success or failure of organizations depends on the ability of the employers. Employee satisfaction is important for any successful business, the success of the hospitality industry relies on whether the employee is happy or not. Without proper compensation management and organization can't be managed and retained. Compensation is the heart beat of human resource management. Compensation is one of the physical needs that motivates which in turn will affect the employee performance in organization. Compensation is output and the benefit that employee receive in the form of pay, wages and rewards like monetary exchange for the employee's to increases the satisfaction (Johnson et al.,2008).It has financial compensation and nonfinancial compensation. Financial compensation includes direct financial compensation and indirect financial compensation.

According to Dessler (2008) refers to direct financial compensation is most widely known and recognized form of compensation. Direct compensation is payment such as wages, salaries, bonuses, incentives, social security and commissions for regular intervals. Indirect financial Compensation as legally required benefits and voluntary benefits. It includes the understanding of social contract between the employers and employees as benefits, education, health care and retirement program. Moreover, the growth, development and expansion of the organization are highly dependent employees' satisfaction. The most vital aspect of the hotel industry revolves around employee satisfaction. To prevent bad reviews which are the death of every business, the hotel industry must do everything to ensure satisfaction.

According to the Hotel and Tourism Ministry in Myanmar, there are 1,590 hotels and guesthouses with a total of 69,370 rooms operating in the country. Nay Pyi Taw has 64 hotels and guesthouses including 4 five stars hotels. Among of them, MGallery Hotel is one of the five stars rank in the hotel industry in Nay Pyi Taw. It is established in since 2014. It has133 employees including managerial level 10 employees and non-managerial level 123 employees. It has popular facilities among domestic and foreign visitors in Nay Pyi Taw and features 165 rooms and private suites. It is situated in national guest house, Dekkhinathiri road, Nay PyiTaw, Myanmar. Compensation is important for Hotel because of every employee's satisfied to achieve hotel's desired goal..

1. Objectives of the Study

The objectives of the study are;

- (i) To identify the compensation of MGallery Hotel in Nay Pyi Taw.
- (ii) To analyze the effects of employee satisfaction on compensation of MGallery Hotel in Nay Pyi Taw.

2. Scope and Methods of the Study

There are five stars hotels in Nay Pyi Taw. Among them, MGallery Hotel is selected for this study. There are 133 employees in this hotel. Among them, 120 employees are selected as sample respondents by using simple random sampling method. Data was gathered through both primary data and second data source. Primary data are collected from 120 sample respondents by using structured questionnaires measured with five point likert scales. In this questionnaire, Five-point Likert scale was applied. The data collection period was during January, 2020. Secondary data are collected from relevant text-books, previous research papers and journals, records of Hotel and websites of Ministry of Hotel and Tourism in Myanmar and other relevant websites. This study use descriptive statistics, correlation coefficient and multiple regression methods. Correlation coefficient use to analyze the relationship between financial compensation and employee satisfaction. Multiple regression analysis use to analyze the effects of employee satisfaction on financial compensation of MGallery Hotel in Nay Pyi Taw.

II. Theoretical Background

Compensation is important for employees regarding attracting, retaining and motivating employees because it is one of the main reasons people work.

1. Direct Financial Compensation

The direct financial compensation refers to payment to employees which enhances employee's financial position directly. Direct financial compensation comes in form of wages, salaries, incentives, commissions and bonuses (Dessler, 2013).

1) Salary

The basic compensation that an employee receives, usually as a wage or a salary, is called base pay. Salary is one of the strategies in motivating the workers, in order to enhance performance, commitment and satisfaction. It may influence the workers' behavior as well as attract, and increase the intention to stay and lead to the higher performance in the organization. Pay satisfaction had a significant positive relationship with the organizational commitment. Salary was one of the factors that can influence the probability of decision making for the workers to join, leave or stay in the organization (Michiels, 2017).

Salary is a fixed amount paid in exchange for an employee's services. Employment Standards legislation entitles most employees to receive a "minimum wage" in exchange for the work they complete for an organization. Many organizations use two base pay categories, hourly and salaried, which are identified according to the way pay is distributed, the nature of the job title, skills and experience.

2) Bonus

Individual employees may receive additional compensation in the form of a bonus, which is a one-time payment that does not become part of the employee's base pay. A bonus can recognize performance by an employee, a team or the organization as a whole. Most employers base part of an employee's bonus on individual performance and part on organization results as appropriate.

Bonuses can also be used to reward employees for contributing new ideas, developing skills, or obtaining professional certifications. Organizations are offering bonus pay as a one-time cash reward to enhance and motivate the employees' working performance. Bonus pay might increase retention to stay or leave. Bonuses can also be used to reward employees for contributing new ideas; developing skills are acquired by an employee (Jackson, 2006).

2. Indirect Financial Compensation

Dessler (2013), described indirect financial compensation employees receive for continuing employment with the organization which is an important part of every employee's compensation.

1) Workers' Compensation

Workers' compensation benefits provide a degree of financial protection for employees who incur expenses resulting from job-related accidents or illnesses. As with unemployment compensation, the various states administer individual programs, which are subject to federal regulations. These circumstances should provide further

encouragement to employers to be proactive with health and safety programs (Mondy, 2006).

Workers' compensation is insurance paid by companies to provide benefits to employees who become ill or injured on the job. Through this program, workers are provided with benefits and medical care and employers have the assurance. Workers' compensation is required for all employers. Workers' compensation covers long-term illness and injuries as well as incidents. Employees may be able to sue an employer for workplace injuries. Workers' compensation laws aim to provide sure prompt income and medical benefits to work related accident victims or their dependents, regardless of fault. Every state has its own workers' compensation law and commission and some run their own insurance programs (Dessler, 2008).

2) Health Care

Health Care benefits are an important part of an employee's indirect financial compensation. Private-sector employers now spend money annually to provide health insurance coverage for employees. Specific areas include various forms of health, dental and vision care. Benefits for health care represent the most expensive item in the area of indirect financial compensation. A number of factors have combined to create this situation: a growing population, a growing demand for medical care, good working environment, increasingly experience medical technology and inefficient administrative processes. It is important for firms to hold the line on their health care costs. Employees receive incentives to use the facilities within the network (Mondy, 2006).

III. Research Design

Demographic characteristics of the respondents are analyzed by gender, age, marital status, education, working experience and salary.

Table 1. Profile of Respondents

Sr.No	Statement	Category	Frequency	Percentage
1	Gender	Male	64	53.30
		Female	56	46.70
2	Age(years)	20 and under	5	4.20
		21-30	76	63.30
		31-40	32	26.70
		41-50	6	5.00
		above 50	1	.80
3	Marital Status	single	72	60.00

		married	48	40.00
4	Education	undergraduate level	23	19.20
		graduate level	83	69.20
		master level	7	5.80
		others	7	5.80
5	Working Experience (Years)	less than 1 year	13	10.80
		1 year and 2 years	56	46.70
		2 years and 3 years	38	31.70
		3 years and above	13	10.80
6	Salary (Kyats)	lower than 150000	6	5.00
		150001-200000	31	25.80
		200001-300000	48	40.00
		300001-400000	30	25.00
		400001 and above	5	4.20
	Total		120	100.00

Source: Survey Data (January, 2020)

As shown in Table (1), gender can be classified into two groups, male and female.

The out of 120 respondents, 64 respondents (53.50%) are male and 56 respondents (46.70%) are female. This shows that there are more male than female in Hotel.

The ages of the respondents are grouped into five groups. the ages of 5 respondents (4.20%) are below 20 and 20 years, 76 respondents (63.30%) are 21 year to 30 years, 32 respondents (26.70%) are 31 year to 40 years, 6 respondents (5.00%) are 41 year to 50 years and 1 respondents (0.80%) are above 51 years.

Marital status of respondents is grouped into two groups. The marital status, 72 respondents (60.00%) are single and 48 respondents (40.00%) are married. It shows that there are a large number of single employees.

Education levels of respondents are grouped into four groups. The 23 respondents (19.20%) is undergraduate level, 83 respondents (69.20%) are graduate level, 7 respondents (5.80%) are master level and 7 respondents (5.80%) are others (diploma, certificate).

Working Experience levels of respondents are grouped into four groups. According to the survey data, 13 respondents (10.80%) are less than 1 year, 56 respondents (46.70%) are 1 year and less than 2 years, 38 respondents (31.70%) are 2 years and less than 3 years and 13 respondents (10.80%) are 3 years and over .

Salaries (Kyats) of respondents are grouped into five groups. According to the survey data, 6 respondents (5.00%), 31 respondents (25.80%), 48 respondents (40.00%), 30 respondents (25.00%) and 5 respondents (4.20%) are respectively. It is show that most of respondents between 200001 kyats and kyats 300000 kyats.

IV. Analysis and Results

To determine the respondents' satisfaction on the compensation provided by the hotel and employee satisfaction on these compensation factors, structured questionnaire were used to collect the primary data.

Table 2. Employee satisfaction on Compensation

Sr.No	Variables	Items	Mean	SD
1	Salary	7	3.82	.524
2	Bonus	7	3.70	.538
3	Workers Compensation	7	3.80	.504
4	Health Care	7	3.69	.674
5	Employee Satisfaction	9	3.79	.779

Source: Survey Data (January, 2020)

According to the results in Table, financial compensation showed agrees level of employee satisfaction. Therefore, it can be concluded that MGallery Hotel in Nay Pyi Taw provides appropriate suitable salary to all employees. Bonus, it can be concluded that the bonuses could set up to directly drive and support to MGallery Hotel. The workers compensation result indicates that hotel expenses when employee occur work-related accidents, illness, insurance programs and injuries. Therefore, health care result indicates that provides good health care plans and spends money annually to provide health insurance.

Table 3. Correlation Analysis of Financial Compensation

Sr.No.	Variables	Pearson Correlation Coefficient	P-value
1	Salary	0.691**	0.000
2	Bonus	0.449**	0.000
3	Workers Compensation	0.536**	0.000
4	Health Care	0.738**	0.000

Source: Survey Data (January, 2020)

Dependent Variable: Employee Satisfaction

** Correlation is significant at the 0.01 level (2Tailed)

According to the above Table, employee satisfaction appears to be significantly and positively correlated with salary, bonus, workers' compensation and health care at 0.01 significant levels. The correlation coefficient of salary ($r = 0.691$, $P < 0.01$), and health care ($r = 0.738$, $P < 0.01$) are strongly correlated with employee satisfaction. And bonus ($r = 0.449$, $P < 0.01$), workers' compensation ($r = 0.536$, $P < 0.01$) are

moderately correlated with employee satisfaction. The correlations results show that employees more satisfied on salary and health care provided by Hotel. MGallery Hotel should facilitate bonus and workers' compensation to get employee satisfaction.

The multiple regression analysis was conducted to test the proposed objectives of the relationship between financial compensation (salary, bonus, workers' compensation and health care) and employee satisfaction on Hotel. The results of multiple regression analysis are shown in Table.

Table 3. Multiple Regression Analysis

Variables	Standardized Coefficient		Unstandardized Coefficient Beta	t	Sig.
	B	Std. Error			
Constant	0.889	0.409			
Salary	0.455	0.120	0.306	3.802	0.000
Bonus	0.155	0.096	0.107	1.615	0.109
W o r k e r s ' compensation	0.139	0.097	0.090	1.225	0.223
Health care	0.499	0.113	0.432	5.132	0.000
R				0.792	
R2				0.627	
Adjusted R2				0.614	

Source: Source: Survey Data (January, 2020)

Dependent Variable: Employee Satisfaction

Significant at 1 % level.

The result of multiple regression analysis provided that salary ($\beta = 0.455$, $t = 3.802$, $p < 0.000$) and health care ($\beta = 0.499$, $t = 5.132$, $p < 0.000$) were significant and positive impact on employee satisfaction. But the result shows that there is no significant relationship between bonus ($\beta = 0.155$, $t = 1.615$, $p > 0.10$) and workers' compensation ($\beta = 0.139$, $t = 1.225$, $p > 0.10$) and employee satisfaction.

$$\text{Employee Satisfaction} = 0.889 + 0.455 \text{ salary} + 0.499 \text{ health care}$$

According to regression results, if Hotel has not provided compensation, the amount of employee satisfaction is 0.889. Salary and health care are significant at 1% significant level. One additional unit of salary increased 0.455 in the employee satisfaction. And one additional unit of health care increased 0.499 in the employee satisfaction.

On the other hand bonus and workers' compensation do not support the significant on employee satisfaction. Therefore, Hotel should more provide and care of employee satisfaction level. Salary and health care are considered as the most important and essential factors for all employees in Hotel.

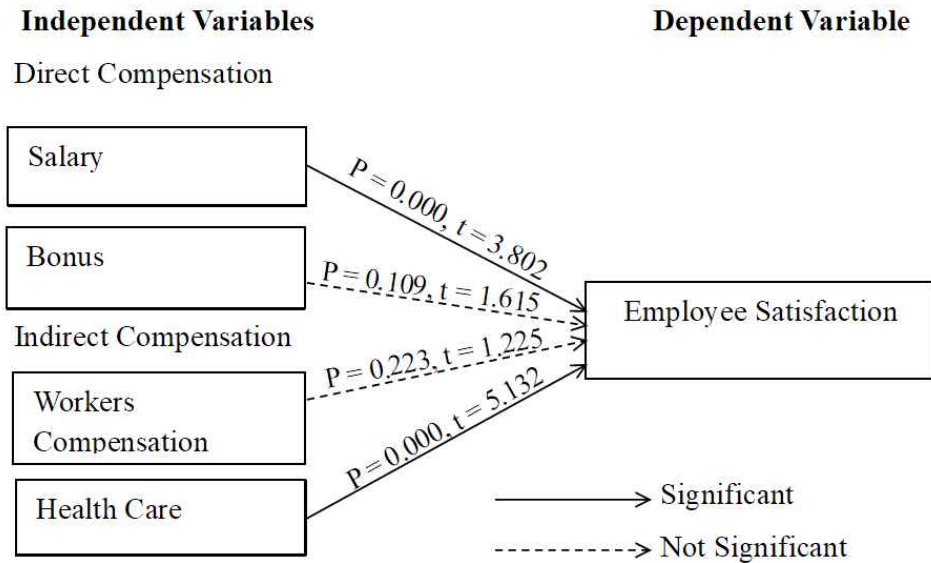


Figure 1. Conceptual Framework with Results

Source: Survey Data (January, 2020)

According to the result of figure (1), multiple regression analysis, salary and health care have significant relationship with employee satisfaction. Among of these significant factors, employees are satisfied salary by providing hotel because employees get salaries equally like other employees who take the same responsibilities and workload.

On the other hand, bonus and workers' compensation has no significant on employee satisfaction. This result indicates that hotel weak provides not fair responsibilities and workload. Because hotel's bonus policy is when employees performance results are not met, hotel don't provide bonus. Therefore, some of employees feel this bonus policy is not fair.

V. Findings and Discussions

Compensation is important for every organization. This study only analyzes financial compensation which mainly provided Hotel. They want to get financial compensation than non-financial compensation for their survival.

Bonus and workers' compensation do not have significant effect on employee

satisfaction. When employees performance results are not met, hotel don't provides bonus. Therefore, hotel should encourage to more effective employee performance. In addition, hotel's bonus payment may reduce employee turnover issue. Therefore, hotel should more provide effective bonus payment system which is to attract perform better.

Workers' compensation also doesn't have significant effect on employee satisfaction. Hotel should more expenses with work-related accident and illness. In addition, hotel should pay the entire cost of workers' compensation insurance and their past experience. In addition hotel should provide further encouragement to be proactive with health and safety programs.

For every hotel industry, compensation and benefits are vital role to create employee satisfaction. In order to get high level of employee satisfaction, hotel must need to provide effective and efficiency compensation practices for employees. And hotel must consider employee satisfaction because employees are the most important assets in this type of business, it is crucial for hotel to motivate and satisfy the employees. Therefore, compensation of Hotel should be carefully developed and practice.

This study found that financial compensation practices such as salary and health care have most significant effect on employee satisfaction. It is found that almost all of employees are fully satisfied with their positions' salary and health care.

And also further studies can be analysis other variables of financial compensation and nonfinancial compensation such as wages, commissions, family and medical leave, feedback, competent employees and working conditions and whether it has an effects on employee satisfaction. The scope of the study is the hotels located in Nay Pyi Taw which is one of the limitations of the study. Thus, further research should focus on hotels located in the other areas of Myanmar which will provide different knowledge to the managers and practitioners of human resource management of the hotels.

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Analysis of the Nexus between Military Expenditure and Economic Growth in Myanmar: Evidence from Toda-Yamamoto Causality Approach

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ABSTRACT: This paper assesses the nexus between military expenditure and economic growth in Myanmar using annual time series data for a period of 49 years spanning from 1970 to 2018. The main econometric tool of the augmented Granger causality test approach developed by Toda and Yamamoto (1995) is employed to fulfill the objective of this study. It is interestingly found that there is a unidirectional causality running from military expenditure to economic growth, however, it is surprisingly found that no causality running from economic growth to military expenditure. Specifically, the result indicates that the past value of military expenditure affects the present value of economic growth but the past value of economic growth does not affect the present value of military expenditure for the period from 1970 to 2018. Based on this finding, this study would like to suggest that the empirical result might not be intended to mention that government should ever increase military expenditure to capture economic growth of Myanmar. As peace, stability and tranquility is a fundamental requirement for economic development of Myanmar, the government should effectively and efficiently take both action on attaining the peace process as well as obtaining economic development in order to grip a modern developed nation at a faster rate rather than employing increasing use of military expenditure to capture economic growth. On one hand, as a country's resources are limited, increase use of military expenditure can crowd out nation's productive resources and investment which will lead to a slower economic growth like Myanmar. Therefore, it is recommended that the government, political leaders and the ethnic armed associations all together should contribute more effort on the work of peace process by guiding, negotiation, and collaboration on reducing impasse factors that are confronting in current peace process so as to moving forward as a peaceful and a modern developed nation.

Key Words: *Economic Growth, Military Expenditure, Toda and Yamamoto (1995), Granger Causality Test, Peace Process,*

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I. Introduction

There are numerous studies which have been analyzing the effect of military expenditure and economic growth. The evidences of these studies have depicted that military expenditure effects on economic growth in different channels based on the sample and methodology they have chosen. Some literatures show the evidence that military expenditure could contribute to economic growth through employment creation, infrastructure development, new invention and innovation and even R & D as it was hypothesized by Keynesian Approach.

On the other hand, other literatures found a diverse effect of military expenditure on economic growth as hypothesized by neoclassical Approach. Their arguments are that increase in military expenditure causes government expenditure to increase. This increase causes a lower private saving and less available to loanable fund in the financial market which in turns leads to a higher interest rate for private investors to borrow money for their investment. Thus crowd out of private investment will occur, as a consequence, this effect will interrupt production activities in an economy and finally, causing aggregate supply, employment and output to decline. On one hand, the other scholars such as Lai et al (2005); Kollias et al. (2004) and Dunne and Vougas (1999) analyzed the causal association between military expenditure and economic growth and in their studies they observed that one way causality exists from defense spending to economic growth while in the study of Dakurah et al. (2001); Chowdhury (1991); Karagianni and Pempetzoglu (2009) revealed that causality runs from economic growth to defense spending. On one extreme case, some researchers such as Mintz and Stevenson (1995); and Batchelor, Dunne and Saal (2000) reveal the evidence of no significant effect of defense expenditures on economic growth.

II. Rationale of the Study

1. Current Situation of Conflict and the Peace Process in Myanmar

A country Myanmar is formed with a diversity of 135 ethnic groups and it has a long history of armed conflict. Until recently Myanmar is still confronting the arm conflicting in some ethic organizations, and even some violence and turmoil has continued at high levels in other states like Rakhine state and Kachin. Since 2011, there was a formally offered the peace talks to Ethnic Armed Organizations (EAOs) in a nationwide peace dialogue by the president of the quasi democratic government

U Thein Sein and there has been found some progress in reaching ceasefire agreements with ethnic armed organizations. Then, a series of bilateral ceasefire agreements was followed by the signing of the Nationwide Ceasefire Agreement (NCA) in late 2015 however numerous views that the peace process is moving forward very slowly with little progression (Myanmar Economic Monitor, 2019).

In the study of the Deadlocking Factors in Myanmar's Peace Process (2019), it is mentioned that the current Myanmar peace process are encountering dilemma under NCA's political dialogue framework. According to this study, the factors that caused the dilemma in the peace process are found. Amongst, the proposed formation of a single army and commitment to non-secession, different interpretations of the text of the Nationwide Ceasefire Agreement, non-inclusion of some ethnic armed organizations, the role of the Joint Ceasefire Monitoring Committee, the absence of national-level political dialogue in Shan and Rakhine States, and the lack of unity among ethnic armed organizations (Gum San Awng et al, 2019) were identified as determinants of the gridlock of the current peace process in this research. Therefore, it is noticeable that these factors need to be addressed to be able to move forward the peace process.

2. Military Expenditure and Economic Growth in Myanmar

Based on the fact above, when an investigation military expenditure of Myanmar over the past 49 years from 1970 to 2018, it is noticeable that despite Myanmar has been encountering economic hardships; military affairs and its role has been still remaining large in Myanmar. From Figure (1), it can be observed the complete time series of annual military expenditure and this expenditure series are presented in terms of both current and constant value during the period from 1970 to 2018. The trend of military expenditure in Myanmar has been increasing gradually from 1970 to 1986 but it dropped down in 1987 and in 1988 within two years. This two years period reflected the years when political up rising broke out in the country. After that military expenditure has been increasing again from 1989 to 2002 and it has substantially jumped up from 2003 to 2006. Further, military expenditure has been sharply increasing from 2007 to 2010 as an upward trend and it reached a peak in 2010. But this increasing trend immediately displayed a down turn position in 2011 and military expenditure in term of current value of kyat has sharply fell from 29, 78,969 million kyat in 2010 to 14, 00,381 million kyat in 2011.

It was remarkable that the year 2011 reflected the year of peace talks to EAOs in a nationwide peace dialogue which was formally offered by the president of the quasi democratic government U Thein Sein. It was coincident that military expenditure substantially dropped down in that year. Between the year 2011 and

2013, bilateral agreements between the government and 15 different EAOs were signed (Min Zaw Oo, 2014). Currently, it is observed that military expenditure portrays an increasing trend and it reached the peak level once again and the amount of military expenditure was the nearly the same as in the year 2010.

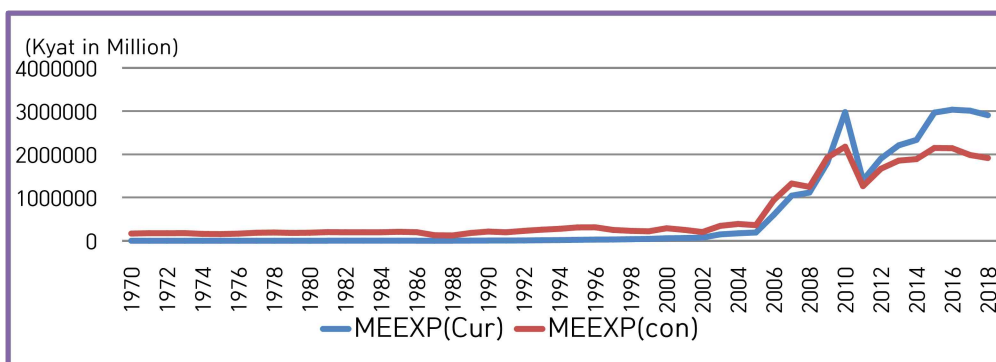


Figure 1. Military Expenditure in terms of Current and Constant Kyat Million in Myanmar (1970- 2018)

Source: Author's calculation based on secondary data

From Figure (2), it can be examined the military expenditure in term of the ratio of military expenditure to real Gross Domestic Product as a percentage from 1970 to 2018.

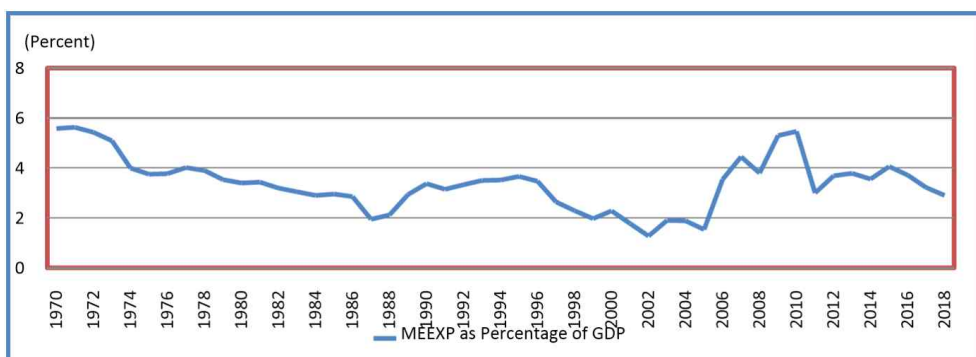


Figure 2. Military Expenditure as Percentage of Real GDP (1970-2018)

Source: Author's calculation based on secondary data

From the period of 1970 to 1983, the ratio of military expenditure as a percentage of real GDP has been ranging from 5% to 3% even it has decreasing trend. This ration has been continuously decreasing from 2.92% in 1984 to 1.97% in 1987. This ration further has been gradually turning up at 2.14% in 1988 and it

fluctuates with increasing rate between 3% and 4% from 1989 to 1995. Then, this ration fell to 2.67% in 1996 and it remains at around 1 % and 2% level nearly one decade from 1996 to 2005. After that the ration of military expenditure to real GDP has been significantly increasing and it reached 5% level in 2010. Then, it fell from 5% level in 2010 to 3% in 2011. Furthermore, the ratio of military expenditure as percentage of real GDP continuously has been slightly up turning again which was ranging from over 3% to 4% from 2012 to 2017 and then it decreased to 2.92% in 2018. Thus, it can be observed that overall military spending as the ration of military expenditure to Real GDP has been taking place from 3% to 5% over the years in Myanmar economy.

By observing the trend of military expenditure from Figure (1), it can be realized that the trend of military expenditure in Myanmar shows an increasing trend over the years from 1970 to 2018 both current and constant value in term of kyat in million. It can also be observed that the change in military expenditure from time to time has been depending on how many military affairs and roles remained large and important in Myanmar. Base on the fact, it can be clearly understood that as the more military affairs and roles take as an essential place, the larger of military expenditure is needed to spend more and more and vice versa in the case of Myanmar. In addition, in term of ration from Figure (2), it is highlighted the ration of military expenditure to Real GDP has been amounted from 3% to 5% over the years in Myanmar economy.

This fact therefore stimulates the interest of this study to analyze whether military expenditure that has been utilized over the years for the purpose of national interest of peace, safety and stability contributes to economic growth and whether the growth of economic performance, on the other hand, reinforces the causes of military expenditure to grow for the case of Myanmar. More than that there is no local literature which has been examined the military expenditure and economic growth of Myanmar. Therefore, based on this interest, this study set out the objective as to explore the empirically evidence of any nexus relationship existence between military expenditure and economic growth in Myanmar and to provide policy implication for the case of Myanmar.

III. Data sources and Methodology

1. Data

To prove the empirical evidence on the causal relationship between military

expenditure and economic growth, this study employs annual time series data which covers 49 years from 1970 to 2018. The two main variables which are real gross domestic product (RGDP) and military expenditure (MEXP) are utilized in this study. The value of RGDP is used as a proxy for economic growth and it is an inflation adjusted by using in base year prices of (2000=100). Similarly, there is inflation adjusted to military expenditure (MEXP) and it is expressed as a real term by using deflator. GDP data is collected from a series of annual report which are annually released from Ministry of Planning and Finance (MOPF) and the military expenditure (MEXP) are obtained from World Development Indicator (WDI, 2020). To apprehend growth effects, the series of two variables are taken as the natural logarithmic form.

2. Methodology

As the characteristic of data is time series, firstly, the Augmented Dickey–Fuller (ADF) is performed to determine the order of integration of the variables and the Toda-Yamamoto (1995) Causality Approach is applied as main analytical tool to analyze the way of the causal relationship between the two variables.

1) The Augmented Dickey–Fuller (ADF) Unit Root Test

The main purpose of using unit root tests is to check whether time series variables are stationary or non-stationary and to determine the order of integration of the variables. Unit root test is the first step it is necessary to assess a spurious regression which can come out from a non-stationary series. Thus in order to avoid of this problem, the unit root test was conducted on each of the variables that are specified in the study. Thus, the Augmented Dickey Fuller (ADF) test suggested by Dickey and Fuller (1979) is employed to check the variables whether they are stationary or nonstationary series under this study. The three regression models utilized for investigation of ADF unit roots are presented as follow¹⁾-

$$(1) \quad \Delta Y_t = \beta_1 + \rho y_{t-1} + \beta \sum_{i=1}^m \Delta y_{t-i} + \varepsilon_t \quad (\text{Intercept})$$

$$(2) \quad \Delta Y_t = \beta_1 + \beta_2 t + \rho y_{t-1} + \beta \sum_{i=1}^m \Delta y_{t-i} + \varepsilon_t \quad (\text{Intercept and Trend})$$

$$(3) \quad \Delta Y_t = \rho y_{t-1} + \beta \sum_{i=1}^m \Delta y_{t-i} + \varepsilon_t \quad (\text{No Intercept and No Trend})$$

In this case, when $p=1$; the null hypothesis of ADF is the variable has a unit root.

1) R.Carter Hill et al; Principles of Econometrics, 3rd ed; p.325-338

Thus, a series is the non-stationary time series. If the null hypothesis is rejected, it means that the series is a stationary time series. According to t statistics, if t critical value is less than ADF, it cannot be rejected the null hypothesis and it implies that there is a unit root in a series. If t critical value is greater than ADF, it can be rejected the null hypothesis and it is concluded that there is no unit root in a series.

2) The Toda-Yamamoto Causality Approach

The Toda-Yamamoto Causality Approach is developed by Toda and Yamamoto (1995). The merit of this approach is that it makes Granger (1995) causality much easier since this approach is valid for irrespective of whether a time series I (0), I (1) or I (2), and whether it is non-cointegrated or cointegrated. Thus, researchers either can relax keeping stresses on testing cointegration among variables or converting VAR into ECM. As a result of having this advantage, this study, therefore, follows Toda and Yamamoto (1995) approach which is a modified Wald test for restrictions on the parameters of a VAR (k) model. The Toda and Yamamoto (1995) prove the evidence that this test has an asymptotic chi-square distribution when a VAR with a new lag order of (k+dmax) model is estimated. In this case, (k) indicates the length lag and (dmax) represents the maximum order of integration. The null hypothesis of this model is that there is a Granger Non Causality. The alternative hypothesis is there is Granger Causality. Rejecting the null hypothesis is therefore implies a rejection of Granger Non Causality meaning that a rejection supports the presence of Granger Causality. The Toda-Yamamoto (1995) test for the Non- Causality approach used in this study is expressed as follows.

$$\Delta \text{LOGRGDP}_t = \beta_0 + \sum_{i=1}^k \delta_{1i} \Delta \text{LOGRGDP}_{t-i} + \sum_{i=k+1}^{k+dmax} \delta_{2i} \Delta \text{LOGRGDP}_{t-i} + \sum_{i=1}^k \delta_{3i} \Delta \text{LOGMEXP}_{t-i} + \sum_{i=k+1}^{k+dmax} \delta_{4i} \Delta \text{LOGMEXP}_{t-i} + \varepsilon_{1t} \dots \dots \dots (1)$$

$$\Delta \text{LOGMEXP}_t = \beta_1 + \sum_{i=1}^k \alpha_{1i} \Delta \text{LOGMEXP}_{t-i} + \sum_{i=k+1}^{k+dmax} \alpha_{2i} \Delta \text{LOGMEXP}_{t-i} + \sum_{i=1}^k \alpha_{3i} \Delta \text{LOGRGDP}_{t-i} + \sum_{i=k+1}^{k+dmax} \alpha_{4i} \Delta \text{LOGRGDP}_{t-i} + \varepsilon_{2t} \dots \dots \dots (2)$$

Where: LOGRGDP is natural logarithm of real gross domestic product; LOGMEXP is the natural logarithm of military expenditure; re constant terms; are parameters of the model; are the residuals of the model; k is the optimum lag length; LOG indicates the natural logarithm; k+dmax is the maximum order of integration. From equation (1), the null hypothesis, means that do not granger cause. Likewise, from equation (2), the null hypothesis, that do not granger cause

IV. Empirical Results and Discussions

1. Unit Root Test Results

As can be seen in Table (1), the Augmented Dickey–Fuller (ADF) test results show that LOGRGDP is stationary at the first difference and it is integrated at order (1) while LOGMEXP obtains stationary at second difference and it is integrated at order (2). As presented in table (1), it is obviously reveals that the variables LOGRGDP is I (1) and LOGMEXP is I (2). In this case, the unit root test shows the maximum order of integration is (2) for this analysis. Thus, this two extra lag (i.e., $dmax=2$) is added to the augmented VAR model with the optimum lag length for the implementation of the causality test.

Table 1. Results of ADF Test for LOGRGDP AND LOGMEXP

Sr. No	Variables	(t- statistic)	Prob.	Decision Rule for ADF non-stationary series)	Order of Co integration
1	LOGRGDP	-3.39**	0.0164	Reject	I(1)
2	LOGMEXP	-13.38***	0.0000	Reject	I(2)

Note: ***, **, * indicates 1%, 5% and 10% significant level.

2. The Optimum Lag Results

To decide the optimum lag lengths for the variables in the VAR, the lag lengths criteria such as final prediction error (FPE), Akaike information criterion (AIC) and Hannan-Quinn information criterion (HQ), and Schwarz information criterion (SC) are applied. As can be seen in table (2), the appropriate lag length criteria for the VAR model is five which minimizes the value of Final Prediction Error (FPE), Akaike Information Criterion (AIC), and Hannan-Quinn Information Criterion (HQ). Therefore, there is no doubt that lag length five is the optimum lag length as selected by VAR Lag length criterions and then it can set up a new lag order of $(k+ dmax)$ for VAR model in order to perform Toda-Yamamoto Granger causality analysis.

Table 2. Results of Optimum Lag Length

(Endogenous variables: LOGRGDP, LOGMEXP & Exogenous variables: C)

Lag	LR	FPE	AIC	SC	HQ
0	NA	0.003043	-0.119289	-0.033978	-0.088680
1	235.3078	5.42e-06	-6.450490	-6.194557*	-6.358663
2	4.954888	5.76e-06	-6.391093	-5.964539	-6.238049
3	2.667210	6.54e-06	-6.269316	-5.672140	-6.055054
4	16.21213	4.72e-06	-6.604592	-5.836794	-6.329112

5	9.813115	4.14e-06*	-6.749932*	-5.811512	-6.413235*
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Note: * refers to the lag order determined by lag criteria.

3. Results of Causality: Toda-Yamamoto Approach

In order to fulfill the objective of this study, finally, Toda and Yamamoto Causality-modified block exogeneity Wald Test is employed. According to this approach, the new lag order (k+dmax) is used for VAR model so as to prove the evidence of this test has an asymptotic chi-square distribution.

Table 3. Results of Toda and Yamamoto Granger Causality Test: Block Exogeneity Wald Tests

Null Hypothesis	Chi-sq	Prob.	Decision Rule
LOGRGDP Does Not Granger Cause LOGMEXP	3.020761	0.6968	Reject
LOGMEXP Does Not Granger Cause LOGRGDP	10.98688**	0.0516	Do not Reject

Note: ***, **, * indicates 1%, 5% and 10% significant level.

The order level VAR is estimated with maximal order of integration (m).

As can be stated in table (3), the computed result of equation (1) surprisingly reported that there is a one way unidirectional causality running from military expenditure to economic growth since the estimated Chi-square is statistically significant at the 5 % level. In this case, the null hypothesis of there is a Granger non causality relationship existence from military expenditure and economic growth is rejected and it must be accepted the alternative hypothesis that there is a granger cause from military expenditure to economic growth. In other words, the present value of economic growth is affected by the past value of military expenditure for the period from 1970 to 2018. On the other hand, as presented in table (4), the result of equation (2) reveals the p value of estimated Chi-square is not statistically significant at any level. In this case it cannot be rejected the null hypothesis that there is a Granger Non Causality running from economic growth to military expenditure. Thus, it is accepted that economic growth does not cause military expenditure. In other words, the present value of military expenditure does not affected by the past value of economic growth for the period from 1970 to 2018.

4. Diagnostic Test Results

Finally, in order to confirm validity of the estimates, the Breusch-Godfrey serial

correlation LM test, Heteroskedasticity test and Jarque-Bera normality test are carried out. Breusch-Godfrey serial correlation LM test describes that the estimation is free from serial correlation and there is homoscedastic feature of the residuals is indicated by Breusch-Pagan-Godfrey Heteroskedasticity test. In addition, Jacque-Bera statistic states that residuals are normal distribution and no root lies outside the unit circle is proved by AR root. By observing the p-values of each test statistics in Table (5), it can be concluded that the estimated model is valid and efficient.

Table 5. Diagnostic Test Results

Test Statistics	Chi-Square	Prob.(p-value)
Breusch-Godfrey Serial Correlation LM Test	4.465888	0.3466
Heteroskedasticity Test: Breusch-Pagan-Godfrey	78.28280	0.2863
Residual Normality test (J-B)	0.773800	0.9419
Roots of Characteristic Polynomial	Stability Condition	

Note: ***, **, * indicates 1%, 5% and 10% significant level.

V. Conclusion and Recommendation

This paper analyzes the causal relationship between military expenditure and economic growth in Myanmar from 1970 to 2018, which is over 49 year's period. The main econometric tool of the Toda and Yamamoto (1995) is employed in this analysis owing to the superior of this model. This study surprisingly found that there is a one way or a unidirectional causality running from military expenditure to economic growth in Myanmar. By this mean, the result indicates that military expenditure leads to economic growth of Myanmar. More specifically, the past value of military expenditure affects the present value of economic growth in Myanmar for the period from 1970 to 2018. Based on this finding, this study would like to provide suggestion that the empirical result does not intend to mention that government should ever increase military expenditure to capture economic growth of Myanmar. Because it is known that without peace and stability, a country cannot achieve a long run sustain economic growth. Especially a country which is frequently confronting economic hardships as well as domestic conflict and civil war is ever far from building in a modern developed nation. On one hand, as a country's resources are limited, increase use of military expenditure possibly crowd out nation's productive resources and then investment and production as hypothesized by neoclassical growth model. As a consequence, increase used in military expenditure eventually will lead to a slower economic growth for least developed nations like Myanmar. As Myanmar it is a least developed nation with a low-middle income country and currently it is experiencing a slow economic growth. Moreover, in

addition to having a long history of armed conflict, currently it is still encountering this conflict within some areas. Even the government tries hard to capture this affair with calling for the peace process but which could not solve until recently. Thus, it can be seen that the role of military affairs and its spending has been remain substantially over the years in Myanmar economy. As this study found that military spending causes economic growth, this study would be careful giving interpretation about an increase use of military expenditure might not be a good enough reason for economic growth of Myanmar. As peace, stability and tranquility is a fundamental requirement for economic development of Myanmar, the government should effectively and efficiently keep both hands and take parallel action on achieving the peace process as well as obtaining economic development process in order to grip a modern develop nation at a faster rate rather than employing increasing use of military expenditure to capture economic growth. Thus, the government, political leaders and the ethnic armed associations all together should put effort on the work of peace process by assisting, guiding and negotiation in reducing impasse factors that are confronting in current peace process so as to moving forward as a peaceful and a modern developed nation. By doing so, the government including all parties shall be obtained more admire and belief from their people and society especially who are deeply suffering from the economic and social hardships in the conflict areas. Moreover, the government should take opportunity to let them observe and belief the government as either a transformational leadership or public entrepreneurship who carries out their desires, happiness with a peaceful life.

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The Effect of Fiscal Policy Variable and Capital Formation on Economic Growth: A Case of Myanmar (1980-2018)

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ABSTRACT: The purpose of this study is to investigate the effects of fiscal policy variable and capital formation on economic growth in Myanmar. The study period is from 1980 to 2018 and restricted VAR is utilized as main econometric tools in this study. This study finds that government consumption expenditure has been affected to the Myanmar economy positively. In term of elasticity, the study discovers that the responsiveness of government consumption expenditure to economic growth is inelastic. Thus, a greater increase in government consumption expenditure has been leading to a smaller increase in economic growth in Myanmar. It is therefore recommended that policy makers should further improve its fiscal power through raising its general consumption expenditure and should pay attention on the point that rising consumption expenditure should be accompanied with a flexible and efficient production in an economy so as to increase in per capita income and to ensure long term economic growth. With respect to the fixed capital formation and economic growth, this study investigates that fixed capital formation has not been influenced on economic growth. Hence, the policy makers should be taken into account the reasons that cause inefficient and ineffective of investment capital in order to maintain economic growth. In addition, it is found that the effect of total labor force has both positive and negative impact on economic growth based on the time frame. Thus, policy makers should put more effort in building productive human capitals so as to support sustain long run economic development of Myanmar.

Key Words: *Economic Growth, Fiscal Policy, Government Consumption Expenditure, Fixed Capital Formation, Unrestricted Vector Auto Regressive (VAR)*

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I. Introduction

Fiscal policy can affect the rate of growth of aggregate output through many channels and it is regarded as an instrument of economic growth as well as a rationale for economic growth. Governments in both developed and developing countries usually employ fiscal policy instruments in trying to stabilize economic activities and to achieve a desired level of economic growth. However, whether how much this policy successfully affected on economic growth is depending on an effectiveness of this policy. Generally, an effective fiscal policy is assure to obtain economic growth by promoting the incentive for investment and production, providing more opportunities of employment, stimulating aggregated demand level, and the general prices level in a desired direction. On the other hand, an inefficient fiscal policy performs as a source of barriers in attaining economic growth by creating high inflation, high interest rate, and by crowding out of private investment and production in an economy. On one hand, Gross Fixed Capital Formation (GFCF) is one of the components of the expenditure on gross domestic product (GDP), and it indicates how much of a new value added it invested to an economy. In macroeconomic theory, a rise in investment should contribute towards higher aggregate demand and should increase productive capacity which in turns lead to a higher economic growth in the long-run.

II. Rationale of the Study

Myanmar with the total population 54 million, currently, which have been experienced a modest growth of economic performance with a broad-based increase in real GDP growth to 6.4 percent in 2017/18 from 5.9 percent in 2016/17¹⁾. In term of sector wide development in fiscal year 2017-18, agricultural sector contributes to GDP at 26.2% while manufacturing sector contributes to GDP at 31.6 % and the contribution of service sector to GDP is 42.1%²⁾. Among the economic sectors, it can be described that the share of industry and service sectors are much more than agricultural sector, however; agricultural sector in Myanmar still plays a key role since 64 percent of the total workforce is working in agricultural sector. Despite the sectorial performance of Myanmar has been moderately increasing, the presence of labor underutilization is obvious in Myanmar. According to the Annual Labor Force Survey (2017), labor force is 22.25 million and unemployment rate is only 1.0% but

1) Myanmar Economic Monitor, 2018

2) Ibid

there is a composite rate of labor underutilization at 6.8%. As a consequence, the neighboring countries like Thailand, Malaysia, and even Korea, Japan and Singapore become the main destinations for overseas employment of Myanmar people. Even though labor force of Myanmar having this opportunity to find jobs in both domestic and overseas, about 24.8% of people out of the total population of 54 million still live below the national poverty line³⁾. With respect to per capita income, the comparison of per capita income of Myanmar to the per capita income of Cambodia and Laos in the fiscal year of 2017-18 presented that the per capita income of Myanmar is lower than those of the two countries. Moreover, as inflation moderated from 7 percent in 2016/17 to 5.5 percent in 2017/18, it is reflected that Myanmar economy suffering from slow growth of economic activity both aggregate demand and aggregate supply side. In the Doing Business (2018) report, it is also presented that Myanmar's overall performance on ease of doing business lags the average for East Asia and Pacific (EAP) economies in most areas. According to this report, Myanmar's overall ranking in Doing Business 2018 was 171st out of 190 countries, and 24th out of 25 economies in the EAP region (Doing Business, 2018).

In term of fiscal operation and activities of Myanmar, it is indicated that general government receipts are budgeted to decline as a share of GDP from 18.2 percent in 2016/17 to 16.9 percent in 2017/18 while general government expenditures are also budgeted to increase from 20.9 percent of GDP in 2016/17 to 22.2 percent of GDP in 2017/18, driven by budgeted increases in other recurrent expenditures in priority ministries like health, and increased domestic interest payments because of payment of market interest rates on legacy CBM debt (Myanmar economic monitor, 2018). Thus, the fiscal deficit is budgeted to increase significantly to 5.8 percent of GDP in 2017/18 from a provisional actual rate of 2.7 percent in 2016/17⁴⁾. As Myanmar's overall revenue collection remains below potential, as a consequence, Myanmar has been suffering from the debt burden over the years in its fiscal operation.

In term of the gross fixed capital formation, as it is essentially net investment of Myanmar but it is also laid below the potential level. Because standard of living of population, rapid and sustainable economic growth can only be improved by macroeconomic policies, in this regard, it is necessary to evaluate the role of fiscal instrument and capital formation as whether their activities effectively contribute to economic growth of Myanmar.

III. Objectives of the Study

3) Ibid

4) Ibid

Thus, based on the rationale of the study, the specific objectives of this paper are to examine -have the fiscal variable and the fixed capital formation been utilized effect on economic growth of Myanmar and to investigate - how much the extent of each variable has been responded and affected to economic growth of Myanmar and to provide the policy implications for sustain economic development of Myanmar.

IV. Methodology

1. Variable Descriptions

In order to full fill the objectives of the study, four main variables namely real gross domestic product, general government consumption expenditure, fixed capital formation, and total labor force are utilized in this study. Among these variables, general government consumption expenditure stands for a proxy of fiscal policy variable. The fixed capital formation is used as a proxy of capital stock and total labor force is employed as a proxy of human capital. All variables except total labor force are inflation-adjusted by using year 2000 as a base year price and the value of each variable reflects the real value in this study.

2. Data Source

The data employed in this study is time series and the length of the data is covering from 1980 to 2018. These data are obtained from different sources. The value of gross domestic products is collected from the annual report of Ministry of Planning and Finance (MOPF), both data of government general consumption expenditure and the fixed capital formation is obtained from the World Development Indicator (WDI) and Statistic Data Home (UN), and total labor force data is taken from a series of the key indicators for Asia and the Pacific released by Asian Development Bank (ADB), respectively.

3. Theoretical Framework and Model Specification

The model is constructed based on the theory of economic growth and which is a function of fiscal variable, capital stock and human capital. This simple model is set out by using production function. A general form of this model is-

$$RGDP = f(\text{government spending, capital, labor}) + \varepsilon$$

RGDP represents real gross domestic product and ε - indicates the stochastic term. All variables are taken into natural logarithm and then the specific model is presented as follows-

$$\text{LOGRGDP} = f(\text{LOGRGDP, LOGCON-EXP, LOGFCAPF, TLF}) + \varepsilon$$

Where: LOGRGDP = Natural logarithm of Real Gross Domestic Product

LOGCON-EXP = Natural logarithm of General Government Final Consumption Expenditure

LOGFCAPF = Natural logarithm of Fixed Capital Formation

TLF = Total Labor Force

4. Methods of Estimation

As the nature of the data is a time series, firstly, this study follows the procedure of time series analysis and then cointegration test is used to determine whether there is integration among the variables and finally the Ordinary Least Squares (OLS)-based Restricted Vector Auto Regressive (VAR) model is employed to analyze the value of respective parameter estimate for this analysis.

5. Estimation Procedures

1) Descriptive Statistics before Estimation

Firstly, the descriptive statistics of each variable are tested to observe whether they are fitted to use in the model before estimation is started. The following Table (1) shows the summary statistics of all variables used in this study.

Table 1. Descriptive Statistics of Variables under Consideration

	LOGRGDP	LOGCON-EXP	LOGFCAPF	TLF
Mean	7.193591	5.668586	5.792668	20.88704
Median	7.052437	5.828563	5.688965	22.22290
Maximum	7.977236	7.647240	7.797489	24.92588
Minimum	6.748964	3.931420	4.140749	14.41000
Std. Dev.	0.392229	1.263346	1.308049	3.451375
Skewness	0.545648	0.128164	0.170411	-0.637465
Kurtosis	1.865862	1.638514	1.560857	1.946143
Jarque-Bera	4.025444	3.118942	3.554351	4.446104
Probability	0.133624	0.210247	0.169115	0.108278
Sum	280.5501	221.0748	225.9141	814.5946
Sum Sq. Dev.	5.846045	60.64967	65.01772	452.6555
Observations	39	39	39	39

Source: Based on secondary data (1980-2018)

As shown in Table (1), Log of real gross domestic product (LOGRGDP), log of general government consumption expenditure (LOGCON-EXP), log of fixed capital formation (LOGFCAPF) and total labor force (TLF) are approximately normal since each of their kurtosis and skewness is within their specification. Moreover, the Probability of Jarque-Bera statistics shows that residuals are normal distribution. Thus, it can be concluded that these variables are good enough to utilize for the estimation of the model.

2) ADF for Unit Root Test

In order to know whether the series of variables are integrated and whether they are stationary or non-stationary, Augmented Dickey Fuller unit root test is employed. As shown in Table (2), all variables are stationary at first difference and they are cointegrated at the same order at order (I). Thus, it is obvious that it can be proceed to cointegration test.

Table 2. Results of Unit Root Testing for LOGRGDP, LOGCON-EXP, LOGFCAPF and TLF

Sr. no	Variables	ADF		ADF (t- Critical Value)			Order of Co integration
		t- Statistic	p- value	1%	5%	10%	
1	LOGRGDP	-3.110922	0.0344	-3.621023	-2.943427	-2.610263	I(1)
2	LOGCON-EXP	-5.516444	0.0000	-3.621023	-2.943427	-2.610263	I(1)
3	LOGFCAPF	-3.278961	0.0232	-3.621023	-2.943427	-2.610263	I(1)
4	TLF	-6.526135	0.0001	-4.374307	-3.603202	-3.238054	I(1)

Note: ***, **, * indicate 1%, 5% and 10% significant level, respectively.

3) Determination of Optimum Lag Length

The optimal lag length for this test is determined by using Vector Auto Regressive (VAR) method and the length criteria. Among the criteria, sequential modified LR test statistic (LR), Final prediction error (FPE), Akaike information criteria (AIC), and Hannan-Quinn information criterion (HQ) indicates the optimum lag length at three since they provide the smallest value in each criterion. Beside, all diagnostic tests such as VAR Residual Serial Correlation LM Tests, VAR Residual Heteroskedasticity Tests and AR root test confirm that lag length three is as the best used for model estimation. Thus it is concluded that lag length three is the optimum lag for this model. Table (3) describes the determination of optimum length lag with the diagnostic tests results.

Table 3. The Results of VAR Lag Length for Cointegration test

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-22.95484	NA	5.25e-05	1.497491	1.673438	1.558901
1	201.0506	385.7871	5.07e-10	-10.05836	-9.178632*	-9.751315
2	223.7647	34.07117	3.62e-10	-10.43137	-8.847852	-9.878681
3	249.3499	32.69224*	2.33e-10*	-10.96388*	-8.676579	-10.16555*

Diagnostic Tests
 Serial Correlation LM Tests= 10.75099 (0.8246)
 White heteroskedasticity Test =258.2708 (0.1994)
 AR Roots of Characteristic Polynomial - No root lies outside the unit circle

Note: * expresses the lag order selected by lag-length criterion.

4) Cointegration Test Results

As shown in Table (4), the trace test shows that there is cointegration among variables and it is indicated that there is long run equilibrium between variables in the model whereas max-eigenvalue test proves that there is no long run equilibrium between variables in the model since it is shown that no cointegration among variables. Accordingly, the cointegration result therefore indicates that either the error correction model (VECM) or vector autoregressive model (VAR) can be used depending on which method produces the more potent results. In this case, the Max-eigenvalue test provides the more potent result than have shown in the Trace-Test. This study therefore accepts Max-eigenvalue test results and assumes that there is no cointegration between variables. By this mean, it can be concluded that economic growth and fiscal policy variable, capital stock and human resource unfortunately do not create a long run equilibrium relationship. Based on this evidence, it is confirm that VAR analysis is the best suited method for using the estimation.

Table 4. The Results of Unrestricted Cointegration Rank Test

Max-Eigen value Test				Trace- Test			
H0: Ho integration	H 0 : N o integration	Max-Eigen Statistic	Critical value	H 0 : N o integration	Trace Statistic	Critical value	p-value (0.05)
None	27.12899	27.58434	0.0571	None*	61.26161	47.85613	0.0017
At most 1	20.87129	21.13162	0.0543	At most 1*	34.13262	29.79707	0.0149
At most 2	11.42709	14.26460	0.1341	At most 2	13.26133	15.49471	0.1056
At most 3	1.834235	3.841466	0.1756	At most 3	1.834235	3.841466	0.1756

Note: * denotes the trace test indicates (2) cointegrating eqn(s) at the 0.05 level.

5) The VAR Results: The Effect of Fiscal Policy on Economic Growth

As the evidence of cointegration test confirms that the Unrestricted VAR model is the best suited for estimation, the Unrestricted VAR model is generically constructed to analyze the effect of fiscal policy on economic growth as follow.

$$\Delta \text{LOGRGDP}_t = \Delta \sum_{\tau=0}^k \beta_{1,i} \text{LOGRGDP}_{t-\tau} + \Delta \sum_{\tau=0}^k \beta_{2,i} \text{LOGCON-EXP}_{t-\tau} + \Delta \sum_{\tau=0}^k \beta_{3,i} \text{LOGFCAPF}_{t-\tau} + \Delta \sum_{\tau=0}^k \beta_{4,i} \text{TLF}_{t-\tau} + \Delta \varepsilon_t$$

The estimated results of Unrestricted VAR model are presented in the following Table (5). The results are produced by using the Ordinary Least Square (OLS) – based of Unrestricted VAR.

Table 5. VAR Estimation Results: The Effect of Fiscal Variable, Capital Stock and Human Capital on Economic Growth

Dependent Variable: D(LOGRGDP)				
	Coefficient	Std. Error	t-Statistic	Prob.
LOGRGDP 1	0.944561***	0.219578	4.301705	0.0003
LOGRGDP 2	-0.418225	0.273430	-1.529550	0.1398
LOGRGDP 3	0.172915	0.187827	0.920608	0.3668
LOGCON-EXP 1	0.100020**	0.035800	2.793851	0.0103
LOGCON-EXP 2	-0.049017	0.044176	-1.109582	0.2786
LOGCON-EXP 3	0.063424	0.038157	1.662174	0.1100
LOGFCAPF 1	0.004850	0.062483	0.077620	0.9388
LOGFCAPF 2	0.038320	0.091891	0.417014	0.6805
LOGFCAPF 3	-0.025641	0.067646	-0.379050	0.7081
LF 1	-0.050478**	0.019048	-2.650083	0.0143
LF 2	0.047652*	0.026418	1.803766	0.0844
LF 3	-0.009552	0.016880	-0.565889	0.5769
C	1.714624	0.740111	2.316711	0.0298
R-squared	0.998873	Mean dependent var	7.228499	
Adjusted R-squared	0.998285	S.D. dependent var	0.388201	
S.E. of regression	0.016074	Akaike info criterion	-5.148972	
Sum squared resid	0.005943	Schwarz criterion	-4.577146	
Log likelihood	105.6815	Hannan-Quinn criter.	-4.949389	
F-statistic	1699.173	Durbin-Watson stat	1.981547	
Prob(F-statistic)	0.000000			

Note: ***, **, * indicate the significant level at 1%, 5% and 10%, respectively.

Sample (adjusted): 1984 – 2018, included observations - 35 after adjustments

Firstly, it can be seen that the value of R-squared and adjusted R-squared is 99% which indicates that the fiscal variable of government consumption expenditure (LOGCON-EXP), the fixed capital formation (LOGFCAPF) and total labor force (TLF) can strongly explain to the changes of economic growth (LOGRGDP). Moreover, the p-value of F- statistic shows that the multiple regression equation for the effect of fiscal policy on economic growth is statistically significant at 1%. In addition to this, the value of DW statistics is 1.9 which states that there is no evidence of autocorrelation existence in this estimation. Overall, it can be concluded that the

Ordinary Least Squares (OLS)-based Restricted VAR estimation has a very good fit and the results obtained from the multiple regression are sensible and acceptable. In the second, it is found that the current year of LOGCON-EXP has positive relationship to LOGRGDP since p value is significant at 5% level. Though the last year and the previous last year are not effected to LOGRGDP, the current year of fiscal variable so called the government consumption expenditure has positive impact on economic growth. Specifically, a one percent increases in government consumption expenditure causes economic growth to increase by 0.10 percent over time.

Hence, the result highlights that fiscal policy has been used to influence economic growth reflects as a significant tool for maintaining economic status of Myanmar economy. In term of elasticity, the result reveals that the responsiveness of government consumption expenditure to economic growth is inelastic since the value of elasticity is less than one. Thus, it can be described that a greater increase in government consumption expenditure leads to a smaller and slower increase in economic growth. In other words, a change in fiscal variable has been slowly able to stimulate the economic activities of Myanmar. In the third, it is surprisingly seen that the current year, the last year and the previous last year of LOGFCAPF does not have any significant effect on LOGRGDP since the p-values of the current year, the last year and the previous last year of LOGFCAPF are not significant at any level though it has a positive sign. Therefore, it can be expressed that fixed capital formation and economic growth has been established a positive relationship but it does not support to economic growth. Moreover, total labor force as a human capital (TLF) effects on economic growth since p-values are significant at 5% and 10% level respectively with different directions meaning that the current year of total labor force has a negative relationship to economic growth while the last year of total labor force has a positive relationship to economic growth.

A one unit increase in the last year of total labor force leads to the economic growth to increase by 5% whereas a one unit increase in the current year of total labor force causes the economic growth to decrease by 5%. Based on this result, it is possible to say that building the qualified human capital is one of the main sources of driving force for Myanmar economy to grow. The more it can produce the qualified workers or transform the labor force as the skillful labor force, the greater economic performance it can be achieved vice visa. In the last, it is found that the last year of real GDP is supported to the current year of real GDP. Thus, the current year of economic growth depend on the condition of the last year of economic performance. The result reveals that a one percent increase in the last year of GDP leads to current year of GDP to increase by 0.94 percent in the case of Myanmar economy.

6) Diagnostic Test Results of VAR Estimation

In order to confirm whether the above VAR estimation result is free from spurious and whether it is effective estimation, it is checked by the diagnostic tests. These are done by using Breusch-Godfrey residual serial correlation LM Test, heteroskedasticity test and normality test. Table (6) shows of diagnostic test results for the estimated model. The p value of LM test is not significant which shows there is no serial correlation among residuals while Heteroskedasticity test proves that no heteroskedasticity since p values of the Chi Square and F-statistic are not significant. Moreover, Jacque-Bera statistics shows that residual is normally distributed. Finally, the AR roots present there is stability obtained in the estimated model. Thus, all diagnostic tests results prove that the estimated model is effective, stable and no uncertainty exists in the model.

Table 6. Diagnostic Test Results

Test Statistics	Chi-Square	Prob.(p-value)
Breusch-Godfrey Serial Correlation LM Test	1.781937	0.4103
Heteroskedasticity Test: Breusch-Pagan-Godfrey	18.41428	0.1037
Residual Normality test (J-B)	1.9057	0.3856
Roots of Characteristic Polynomial	Stability condition satisfied by VAR	

Note: ***, ** * indicate the significant level at 1%, 5% and 10%, respectively.

V. Conclusion and Recommendation

The aims of this study are to evaluate the fiscal variable and the fixed capital formation been utilized effect on economic growth of Myanmar, to investigate how much they have been responded to economic growth of Myanmar, and to observe whether their roles have been functioned as an important instruments in economic growth of Myanmar. The study period is from 1980 to 2018. All variables series are stationary at first difference and integrated at same order (I). The two cointegration tests determine the different results for cointegration. Trace test confirm that there is a long run relationship between variables while the Eigen test indicates that there is no long run relationship between variables. This study chooses the Eigen statistics and accepts the hypothesis that there is no long run relationship between variables. Because VAR estimation results are more reliable than the ECM estimation results and all diagnostic tests confirms that the model is efficient, thus it can be concluded that Eigen statistics is more powerful in this case. Accordingly, the study found that the variables in this model such as government general consumption expenditure, fixed capital formation, total labor force and economic growth cannot establish a long run equilibrium relationship. With respect to fiscal policy variable, based on the

VAR estimation, this study observes that the government consumption expenditure has been affected to the Myanmar economy positively. Thus, the result highlights that fiscal policy has been used to influence economic growth acts as a significant tool for stimulation of the health status of Myanmar economy. In term of elasticity, the study discovers that the responsiveness of government consumption expenditure to economic growth is inelastic since the value of elasticity is less than one. Thus, it can be described that a greater increase in government consumption expenditure has been leading to a smaller increase in economic growth.

Based on this finding, it is recommended that the government should further improve its fiscal power through raising its general consumption expenditure. However, it should pay attention on the point that the rising consumption expenditure should be accompanied with a flexible and efficient production in an economy so as to assure long term economic growth. Therefore, by using effective fiscal policy, government can attract investment and promote production, can create more opportunities of employment, can stimulate aggregated demand level and the general prices level in an economy. This mechanism in turn will leads to an increase in per capita income and total production (GDP). With respect to the fixed capital formation and economic growth, this study finds that the fixed capital formation does not provide any effect on economic growth. In addition the responsiveness of the fixed capital formation to GDP is very inelastic which means that it does not strongly stimulate to economic growth. As a fixed capital formation is essentially net investment, the more a nation can raise its additional investment capital, the higher a nation can achieve economic growth in the long term. Macroeconomic theory proves that a rise in investment should contribute towards higher aggregate demand and also increase productive capacity. However, raising investment is not enough to increase productivity; investment activity should be more effective and efficient investment so as to assure increase in demand and productivity of a nation. Based on this fact, the policy makers should be assure that how much is the effectiveness of investment and its affect to Myanmar economy and it should be taken into account and investigate the reasons that cause inefficient and ineffective of investment capital (for example, the possibility of corruption and bribery, accountability, and poor management etc.,) in order to maintain economic growth.

In addition, it is found that the effect of total labor force has both positive and negative impact on economic growth based on the time frame. By this means qualitative improvement in worker can enhance output while less improvement in quality of worker can retard output and then productivity. Thus, it is suggested that in order to raise output and productivity, human capital must be produced usually by means of teachers, schoolrooms, libraries, computer labs, and time devoted to studying. Moreover, providing capacity building to human capital through giving

training, workshop, providing professional and vocational institute and collaboration with international organizations are essential for upgrading the quality of labor force of Myanmar, to be more productive citizens.

To sum up, based on the VAR analysis, this study can be concluded that fiscal policy which has been used to influence on economic growth eventually affected the growth of Myanmar while capital formation has not been affected on economic growth of Myanmar. On the other hand, building human capital is more important factor for Myanmar and it is needed to consider as a determinant of economic growth of Myanmar Economy.

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Analysis of major issues for entering Myanmar as a Korean information and communication construction company

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ABSTRACT : In the case of the information and communications construction business, there is a lot of interest in the advancement of developing countries such as Myanmar, and the developing country market is very important in terms of creating new demand and expanding the business. Myanmar is called the Land of Opportunities. The reason is that there are many business opportunities from the perspective of a company. However, the greater the opportunity, the greater the risk. In the case of emerging markets such as Myanmar, the importance of network infrastructure and network advancement are rapidly increasing, and the information and communication construction business market is expected to face various changes as follows. According to the demand for network advancement due to the rapid increase in data traffic, new construction demand is increasing through the installation of new next-generation network equipment. Therefore, the ability to actively adapt and utilize these changes in the market environment is required. In addition, companies entering Myanmar in the information and communication construction business are required to closely review the information and communication environment, regulations, and demands of the target countries, and to establish an entry strategy based on this.

Key words : *Information and Communication Construction Company, ICT Industry Technology, Network Infrastructure, Mobile, Broadband Network,*

I. Introduction

Recently, rapid changes in the service and policy environment, including ICT industry technology, have various effects on the information and communication construction business, which is responsible for the construction and construction of network infrastructure.

In the case of the information and communications construction business, there is a lot of interest in the advancement of developing countries such as Myanmar, and the developing country market is very important in terms of creating new demand and expanding the business.

Myanmar is called the Land of Opportunities. The reason is that there are many business opportunities from the perspective of a company. However, the greater the opportunity, the greater the risk. Companies entering Myanmar in the information and communication construction business are required to closely review the information and communication environment, regulations, and demands of the target country, and establish an entry strategy based on this.¹⁾

In Myanmar, since the opening of the economy to the outside in 2011, information and communication has been rapidly developing, and accordingly, the demand for overseas expansion of the information and communication construction business is increasing.

On the other hand, as various industrial fields and ICT converged under the 4th Industrial Revolution, the importance of information and communication construction projects to support this has been continuously increasing.

In addition, the importance of the network industry, which is the basis for the growth of the ICT ecosystem, is increasing, and future networks are continuously developing in the trend of broadband, convergence, internalization, intelligence, and openness. Accordingly, the importance of the role of the information and communication construction business in charge of network infrastructure construction

1) The types of information and communication construction business are as follows. Communication equipment construction (communication facility construction, exchange equipment construction, transmission equipment construction, premises communication equipment construction, mobile communication equipment construction, satellite communication equipment construction, fixed wireless communication equipment construction), broadcasting equipment construction (broadcasting station equipment construction, broadcasting transmission line construction) Equipment construction), information equipment construction (information control security equipment construction, information network equipment construction, information media equipment construction, aviation/port communication equipment construction, ship communication/navigation/fishing equipment construction, railway communication/signal equipment construction), other facilities Construction (electrical facility construction for exclusive use of information and communication), etc.

and construction is also increasing significantly.

In the case of emerging markets such as Myanmar, the importance of network infrastructure and network advancement are rapidly increasing, and the information and communication construction business market is expected to face various changes as follows.

In accordance with the demand for network advancement due to the rapid increase in data traffic, the generation of new construction demand through new installation of next-generation network equipment is increasing, and thus, it is required to actively utilize such changes in the market environment.

In addition, as the need to establish and maintain a stable ICT infrastructure that is the basis of the ICT ecosystem is increasing, construction technology with expertise is required.

And in order to meet the changes in the ICT industry, communication consumption patterns, and the ICT paradigm in Myanmar under COVID-19, multilateral efforts are required to analyze current issues and resolve the issues.

Therefore, in this study, major issues to be considered and strategies to enter Myanmar were reviewed in the information and communication construction businesses.²⁾

II. Myanmar Information and Communication Market Environment

Myanmar started liberalizing the telecommunications market in 2013. Previously, Myanmar Post and Telecommunication (MPT) had a monopoly.

In 2013, the Myanmar government began taking steps to open up the telecommunications market and issued licenses to new service providers. In 2014, Ooredoo and Telenor entered the Myanmar market, lowering telecom service prices, rapidly increasing the number of subscribers, and expanding Myanmar telecom infrastructure. In 2017, Mytel became the fourth telecommunications operator in Myanmar.

2) The information and communication construction business has complex industrial characteristics that closely influence the technical and industrial characteristics and flows of various industries. It is classified as a construction industry according to the Korean Standard Industrial Classification. At the same time, it is closely related to information and communication related facilities and information and communication equipment manufacturing industry, so it is an industrial area that requires continuous research and development according to the characteristics of rapid technological advancement in the information and communication field.

At the end of 2013, Myanmar had only 13% of information and communication penetration in the monopoly structure provided only by the monopoly operator MPT. The Myanmar government selected overseas business operators to create a competitive environment and increase the market penetration rate to 75-80%.

As of the third quarter of 2019, the market penetration rate by connection is 124%, the total number of mobile connections is over 67 million, and the compound growth rate is 48%. With the entry of new players and fair competition, Myanmar's total connections have grown steadily, and as of 2019, it has recorded a high growth rate of 17% per year.

Myanmar is starting to increase competition in the broadband sector, but remains at a very low level as operators do not invest in fixed broadband infrastructure.³⁾

Currently, the majority of Myanmar consumers are accessing the Internet through mobile phones due to the high penetration of SIM cards and smartphones (Oxford Business Group, 2020).

The mobile payment system is expanding and preparing for 5G services nationwide (Oxford Business Group, 2020a).

The current Covid-19 is traditionally driving increasing demand for home broadband in the mobile-first market.

The Myanmar government has been aware of the increasing cyber security problem due to the expansion of communication use, and has been striving to develop a law dedicated to cyber security since 2018. And it is trying to raise awareness through the opening of the National Cyber Security Center.

With Myanmar's rapid economic growth, strengthening the telecommunications infrastructure is now an urgent task. Therefore, investment in Myanmar's telecommunications infrastructure is progressing rapidly.

Investments in the Myanmar mobile telecommunications industry are already being made among the top four telecommunications companies: MyTel in Vietnam, Ooredoo in Qatar, Telenor in Norway, and Myanma Posts and Telecommunications (MPT) in Myanmar (AECconnect.com). Telenor and Ooredoo have invested more than \$2 billion in the Myanmar mobile communications industry since they entered the market in 2014. MPT has committed to invest \$2 billion over 10 years and cooperate with Japan's KDDI Corporation and Sumitomo Corporation to ensure superior telecommunications services.

The communication environment in Myanmar is rapidly changing, and the government is also expanding its openness and investment to revitalize the changing environment. However, compared to neighboring countries, the level is significantly

3) The fixed-line broadband market is expected to grow very rapidly by 2023, but the overall market penetration rate is still expected to remain low compared to other countries (GlobeNewswire, 2020.2).

lower.

Myanmar ranks lowest in ASEAN on four digital readiness indicators: ICT development, e-government development, network readiness and cybersecurity (Oxford Business Group, 2020). To solve this problem, the Myanmar government has announced "the Myanmar Digital Economy Roadmap 2018-25" and is actively implementing policies.⁴⁾

III. Major issues when entering Myanmar for information and communication construction business

1. Major issues related to the business environment of the Myanmar information and communication construction business

The main issues for the Korean telecommunications construction business to enter Myanmar are as follows. First, it is a problem of unexpected additional costs when entering the market due to Myanmar's poor communication infrastructure and regulatory environment. Myanmar's basic telecommunications infrastructure is insufficient and the regulatory environment is also poor, so when a public business enters Myanmar, unexpected additional costs and efforts may be entailed. In Myanmar, regulations are not clear and there are aspects that are difficult to decipher, so there are aspects that are difficult to solve when problems such as laws arise.

Second, the current COVID-19 is an environment in which digital e-commerce and mobile commerce can flourish, and the trends in the information and communications industry are changing around the world, including Myanmar. Since the COVID-19 outbreak, frequent indoor entertainment activities, virtual meetings, and video calls with friends and family have been conducted, and related projects that can demonstrate this are increasing. Myanmar has very poor infrastructure that enables indoor entertainment, telecommuting, virtual conferences, and e-commerce, and projects such as information and communication facilities and services to meet such demand are expanding, and it is highly likely to expand in the future.

Third, Myanmar ranks lowest in ASEAN in four digital readiness indicators: ICT development, e-government development, network readiness and cybersecurity. Myanmar's ICT development index ranks 135th in the world, and the wired

4) The plan includes 14 projects, including increasing foreign direct investment (FDI) in the digital industry from \$6 billion to \$12 billion in the same period, such as increasing the share of online financial transactions in the economy from 0.5% in 2019 to 30% by 2025. You have set your goals.

broadband penetration rate is very low at 0.1% in 2018. Myanmar ranks 157th out of 193 countries in the 2018 UN e-government survey. Myanmar was ranked 128th out of 175 countries in the 2018 International Telecommunication Union (ITU) Global Cybersecurity Index Survey. Also, Myanmar is very vulnerable to cybersecurity.⁵⁾

Fourth, Myanmar's poor digital ecosystem and immature online consumption market. Myanmar has various plans for the growth of the digital economy and is actively participating in efforts to improve the foundation of the digital ecosystem and convert the population of smartphones to online consumers.

Fifth, it is Myanmar's poor cybersecurity and unclear regulations. Myanmar is less effective due to the vague or unclear legal framework that includes data privacy, cybersecurity, cybercrime and intellectual property.⁶⁾

2. Major issues related to companies entering the information and communication construction business

The following are various issues that can be encountered when the Korean telecommunications construction business enters Myanmar.

First, it is difficult to collect local business information from companies in Myanmar.⁷⁾ It is difficult to collect high-quality information in the early planning stage of a project that is directly connected to construction orders, and there is a problem in connection with international organizations and overseas engineering companies.⁸⁾ In addition, in order for a specialized construction company to independently enter Myanmar, it is necessary to understand the Myanmar language, funds, local regulations and cultural environment related to laws and labor, but a lot of time and money are required to resolve this.

Second, local financing is difficult in Myanmar. In Myanmar, it is very difficult to raise funds to carry out projects locally, and the procurement cost is very high. In the case of specialized construction companies, it is known that the ability to raise funds after entering Myanmar is weak. Since most specialized construction companies

5) The Myanmar government is intensively placing orders for various projects to raise these rankings, and investments in communication infrastructure are progressing rapidly.

6) The Myanmar government is also aware of the seriousness of these problems as cybercrime increases, and is carrying out various projects to strengthen cybersecurity.

7) Most of Korea's large corporations are collecting information for each individual company through overseas branches, local corporations, and information media. Therefore, in order to collect Myanmar information, efforts are required to obtain high-quality information related to local construction as soon as possible by establishing a local corporation. However, in the case of small and medium-sized companies, most of them have no basis for overseas expansion, lack of their own information collection network, limited budget, and manpower, so there are limitations in collecting various information abroad.

8) In the case of a bid announcement in Myanmar, there are cases where the successful bidder has already been determined internally.

have low external credit ratings, it is not easy to issue a guarantee if they are asked to submit a payment guarantee to a bank.

Third, local warranty issues arise when participating in Myanmar construction.⁹⁾ There may be cases in which the contract is abandoned even after receiving a construction order due to a warranty problem, and in some cases, the bidding itself is abandoned due to not receiving the bid guarantee.¹⁰⁾

Fourth, there is a lack of local construction experience in Myanmar. In general, overseas expansion in the field of information and communication construction is currently being made mainly by large corporations with construction experience and capital procurement capabilities. It is even more unfavorable for small and medium-sized professional information and communication construction companies, which are relatively weak in technology and capital, to advance overseas.

Fifth, it is difficult to understand and apply laws, contracts, and communication with Myanmar field personnel. In order to communicate with field personnel, English and Myanmar must be available, but in the case of middle song companies, professional technicians have language communication problems. In addition, as the local laws and application systems in Myanmar are different from those of Korea, there is a possibility that additional costs may be incurred when a problem occurs, and consideration is required to prepare for this.

Sixth, the formation of domestic and foreign companies and local networks is insufficient. The direct level of construction companies in Myanmar is difficult, and when entering Myanmar through subcontracting, networks with domestic and local companies in Myanmar are important. If it is difficult to legally solve a problem when a problem occurs locally, it is effective to solve it through a local network, and a long-term effort to form such a network is required. In the case of Myanmar, in order to win construction orders, it is very important to establish trust with local companies, and preliminary work is required to establish this.

Seventh, local culture and labor-management problem solving skills are insufficient. In the case of small and medium-sized Korean companies, misunderstandings among Myanmarians due to various reasons such as language communication often lead to labor disputes. Myanmar has cultural characteristics different from other Southeast Asia. It has a strong Buddhist culture and pride, and has high self-esteem for its own culture, such as a culture that respects the elderly

9) There are often cases of giving up contracts even after receiving construction orders due to warranty issues, and sometimes abandoning the bid itself because a bid guarantee was not issued (Information and Communication News, 2019.10.14.)

10) In the case of the Information and Communication Mutual Aid Association, which is in charge of guaranteeing the information and communication construction business, foreign exchange services cannot be handled. Therefore, it is impossible to guarantee a direct guarantee to an overseas client or to a local bank.

and respects the elderly. Therefore, in order to prevent labor-management problems, it is necessary to understand the culture of Myanmar and to refrain from speaking and acting that disturb your pride.

Secondly, efforts for localization are lacking. Comparing the problems arising from the comparison between Korean companies and Myanmar companies, it appears that there are more problems in advanced companies, which are known to have some problems in localization of Korean companies. Having a local corporation, training local employees, acquiring local culture and language and respecting local people, expanding local human networks, expanding understanding of local laws and applications, etc. are known to be important factors for localization. Therefore, efforts to localize Myanmar are required in order to secure and grow the competitiveness of advanced companies continuously.

IV. SWOT analysis of companies entering the information and communication construction business

SWOT analysis is an approach that requires systemic thinking of elements related to new products, technologies, management, or plans, and a diagnostic method that comprehensively analyzes causes, and is classified into internal factors (strengths, weaknesses) and external factors (opportunities, threats). It enables decision-making and comparisons between the strengths, weaknesses, opportunities and threats of the environment..¹¹⁾

Myanmar is known as the last gold market or land of opportunity left on the planet, and the general SWOP analysis of the market is as follows.

For reference, s is the strength (S) of information and communication construction companies in Myanmar, w is the weakness of information and communication construction companies in Myanmar (W), and o is the opportunity factor (O) for information and communication construction companies in Myanmar. , p is the risk factor (P) of companies entering Myanmar as an information and communication construction company.

11) KOTRA, Korea ICT, Shine in the World-ICT Overseas Expansion Success Story Book, 2017.

Table 1. Myanmar market SWOT analysis

Strength	Weakness
<ul style="list-style-type: none"> • Low labor cost • The market is likely to expand as it is located adjacent to large population countries such as India and China. • Growing consumption market and increasing demand • Abundance of natural resources 	<ul style="list-style-type: none"> • High land prices, lack of large-scale land • Poor basic infrastructure environment • Frequent legislation and revision • Limited demand due to low national income • Low understanding of capitalist system through Buddhist culture and socialist experience
Opportunity	Threat
<ul style="list-style-type: none"> • Improving foreign investment environment by revising the investment law • Flexibility and scalability of business due to loose legal regulations • Outbreak of the middle class and the Korean Wave • Increasing infrastructure related projects such as construction and telecommunications • Expanding the possibility of economic growth through the development of three major economic zones (Thillawa, Kyaukpyu, Dawei) • Possibility of rapid economic growth and sharing of growth fruits (common market) 	<ul style="list-style-type: none"> • Possibility of reducing foreign investment (FDI) and foreign investment due to criticism from the international community due to the Rohingya incident • Broadening of international exchange rate fluctuations due to US interest rate hike • Local production cost increase due to rapid increase in minimum wage • Conflict exists between the new government and the military, requiring additional costs and efforts such as licensing • Possibility to be excluded from the global production network due to the 4th industrial revolution

The following is a SWOP analysis of companies entering Myanmar in the information and communication construction business.

Table 2. SWOT analysis of companies planning to enter Myanmar

Strength	Weakness
<ul style="list-style-type: none"> · Experience in building infrastructure such as world-class wired/wireless communication and communication networks · High reliability in construction as an advanced country in information and communication · High technology related to construction, etc. · An atmosphere of learning about the Korean experience and the environment for winning a friendly project with the Korean Wave, etc. 	<ul style="list-style-type: none"> · Small environment and low R&D investment of companies engaged in the information and communication construction business · Microscopicity in terms of technology and skilled manpower · Lack of local intelligence, financial power, construction experience, domestic/overseas/local network formation, local legal understanding, language and ability to solve labor-management problems · Lack of localization efforts and efforts to understand · Poor infrastructure, lack of ability to adapt to regulatory environment and cultural differences
Opportunity	Threat
<ul style="list-style-type: none"> · Myanmar government's high will and continued expansion of investment in information and communications infrastructure · Increased demand for new projects for facilities such as entertainment, e-commerce, and wired high-speed Internet due to COVID-19 · Low associated costs due to low regulatory barriers · Expanding the possibility of sustaining project orders due to high economic growth and growth in the information and communication field 	<ul style="list-style-type: none"> · Slowdown in project orders due to economic deterioration due to COVID-19 · Possibility of rapid change and lack of laws/regulations related to information and communication construction business · Rapid project environment changes according to information and communication trends and digital environment changes · Unexpected additional cost and effort incurred when performing a project due to an outdated SOC infrastructure and system

The following is a review of detailed entry strategies for information and communication construction companies to enter Myanmar based on SWOP analysis.

Table 3. Detailed approach strategy based on SWOP analysis of information and communication construction business

Strategic direction	Detailed strategy
SO strategy (capacity enhancement)	<ul style="list-style-type: none"> · Expanding the company's project execution capability suitable for the digital environment under COVID-19 · Promotion of advanced infrastructure construction experience · Long-term and reliable project execution that can expand a favorable project-level environment rather than short-term profits
ST strategy (strengthening strengths)	<ul style="list-style-type: none"> · Expanding the promotion of excellent technology to project-related organizations and companies · Reinforcement of participation in events or promotion activities that can secure credibility · Creating a friendly environment by introducing Korean experience development experiences
WO Strategy (Capture Opportunity)	<ul style="list-style-type: none"> · Development of appropriate technology optimized for Myanmar · Acquisition of information on changes in the information and communication environment of Myanmar · Network construction or active use of groups already established · Localization efforts and respect for local culture/local people from a long-term perspective · Expand project information collection using Korean and local networks
WT strategy (threat response)	<ul style="list-style-type: none"> · Advance with companies with experience and network · Expand efforts to understand local culture and language · Understanding and adapting to the rapidly changing Myanmar digital environment

V. Conclusion and Implications

In conclusion, it is clear that Myanmar is a land of opportunity despite the various dangers. Various analyzes and strategies and preparations based on them are required to reduce the existing risks.

Through this study, the following implications were derived. First, when entering

the Myanmar information and communication infrastructure development project, it is necessary to promote joint ventures with large companies.¹²⁾ In order to reduce the initial investment cost, time, and risk associated with overseas expansion, it is necessary to promote joint venture with large domestic companies when receiving an order for infrastructure construction in a package form. A specialized information and communication construction company can participate as a cooperative company of a large company and accumulate construction performance and experience through subcontracting rather than the original contract.¹³⁾

Second, it is required to establish an information system to collect various useful information such as project orders.¹⁴⁾ Considering the ease of entry into the market, marketability, and entry conditions of domestic companies, construction companies must promote entry into Myanmar, but there are limitations in collecting information and establishing networks from the standpoint of companies that want to enter Myanmar. In order to overcome these limitations, it is necessary to establish an information system that provides market and bidding information for Myanmar construction projects. In addition, it is necessary to grasp advance information related to entry conditions, regional markets, bidding, etc. using various channels utilizing public institutions and related organizations (KOTRA, Small and Medium Business Administration, Korea Chamber of Commerce, Trade Association, etc.).

12) Entry into the overseas market can be divided into subcontracting of domestic companies, subcontracting of foreign companies, and independent entry according to the type of entry, and each entry method shows different characteristics.

13) Overseas expansion in the field of information and communication construction is currently being made by large corporations with construction experience and capital procurement capabilities. Therefore, it is more unfavorable for small and medium-sized professional information and communication construction companies, which are relatively weak in technology and capital, to advance overseas.(Information and Communication News, 2019.10.14.)

14) According to data from the Korea Institute of Information and Communication Industry, about 35% of information and communication construction companies are interested in overseas business. In the case of specialized construction companies, it is confirmed that there are many difficulties in advancing into independent companies, as almost all competencies such as capital and information power are exposed except for excellent technological prowess. It is not easy for a specialized construction company to succeed in its own overseas expansion. There are language issues, funding and guarantee issues, and legal and labor issues. Therefore, trial and error can be reduced if the support system provided by various organizations is well used (Information and Communication News, 2019.10.14.)

Table 4. Myanmar market entry strategy for information and communication construction business

Entry way	Subcontracting method of domestic companies	Foreign company subcontracting method	Independent method
way	<ul style="list-style-type: none"> Participated as a subcontractor for domestic construction companies 	<ul style="list-style-type: none"> Participated as a subcontractor for foreign construction companies 	<ul style="list-style-type: none"> Direct contract with orderer (private/public)
Condition	<ul style="list-style-type: none"> Mutual trust with the original contractor Construction performance capability 	<ul style="list-style-type: none"> Mutual trust with the original contractor International contract ability and good financial position Technology with comparative advantage 	<ul style="list-style-type: none"> Accumulation of overseas construction experience Good financial position Risk and claim management ability
Advantages	<ul style="list-style-type: none"> Accumulation of overseas experience Low relative risk 	<ul style="list-style-type: none"> Accumulation of overseas experience Accumulation of trust with foreign companies Medium relative risk 	<ul style="list-style-type: none"> Accumulate local awareness Sustainable orders
Disadvantages	<ul style="list-style-type: none"> Independent business impossible 	<ul style="list-style-type: none"> Declining reliability of failure site Claims and risks always exist 	<ul style="list-style-type: none"> High risk in case of business failure
Possibility	<ul style="list-style-type: none"> High 	<ul style="list-style-type: none"> Medium 	<ul style="list-style-type: none"> Medium

Source: Information and Communication Industry Research Institute, 2015.

Third, it is the establishment of a long-term and detailed strategy by referring to success cases. Companies preparing to enter the Myanmar market must first secure cooperation with domestic companies that have successfully entered the Myanmar market, and establish a thorough entry strategy by referring to success stories of the same industry or construction industry. In addition, short-term returns are important, but it is important to consider long-term returns based on long-term plans that take into account the characteristics of the Myanmar market.

Fourth, it is important to secure a local network. If it is difficult to legally solve a

problem when a problem occurs locally, it is effective to solve it through a local network, and a long-term effort to form such a network is required. In addition, in the case of Myanmar, in order to win construction orders, it is very important to establish trust with local companies, and it is required to secure a long-term, mutually cooperative network in advance. In order to secure a local network, it is important to collaborate with local organizations with high reliability, such as the local UMFCCI (Myanmar Chamber of Commerce).

Fifth, it is necessary to understand the local culture, language, and laws, and to localize the company. Compared to other countries, Korean companies have labor-management problems, which are known to have some problems with localization of Korean companies. Having a local corporation is the first step in localization, and the training of local employees, acquisition of local culture and language and respect for local people, expansion of local human networks, and expansion of understanding of local laws and applications are important factors for localization.

Sixth, an approach is needed from a long-term perspective. Myanmar is an underdeveloped country with high growth potential, and it is predicted that the long-term value of entering companies will be very high in terms of being able to grow like Myanmar's economic growth. Therefore, rather than seeking for short-term profits, it is more desirable for companies to grow through long-term mutual benefits.

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ANALYSIS OF THE CUSTOMER SATISFACTION ON ACTIVITIES OF MYA SEIN YAUNG MICROFINANCE INSTITUTION IN PADAGYI VILLAGE, KYAUKTAN TOWNSHIP

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ABSTRACT : This study explores customer satisfaction of the activities of Microfinance Institution (MFIs) in Padagyi Village. This study aims to study to explore the activity of microfinance in Padagyi Village and to examine the customer satisfaction with respect to these MFIs. Mya Sein Yaung MFIs give his clients financial services such as microfinance program and credit programmed. The clients of Mya Sein Yaung MFP are 400 and 30 households are interview with structure questionnaires. To increase the loan amount, the clients are needed to repayment at the right time. This, the responsible person needed to evaluate their loan program then services, to offer the clients, how to communicate their clients, interest rate, insurance program. To analyze the discrepancy gap between customer's expectations and perceptions toward service quality of the studied MFIs, SERVQUAL model was used. The service quality was consisted of five dimensions: tangibility, reliability, responsiveness, assurance and empathy and Mya Sein Yaung Microfinance Institution are negative. Therefore, MFIs were still need to improve the rest important dimension. This result shows that the surveyed customers are not satisfaction with the service provided by MFIs.

Key words: *Microfinance institutions, customer expectations and perception, SERVQUAL model, five dimensions*

I. Introduction

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According to the financial institution of Myanmar Law 1990, traditional banks and financial institution are not allowed to provide uncollateralized credit. All banks credit has to be collateralized either with real estate or by a fixed deposit account. Many lenders provide credit with average monthly interest rates of around 10%. And from worker borrow from their employers at similar interest rate, or take advance on their wages without collated.

To respond the above the bottleneck and to faster economic growth, microfinance was first introduced to Myanmar in 1997 by United Nations Development Program (UNDP) Human Development Initiative (HDI), a pilot project that was regulated by a special MOD with authorizes. A number of microfinance initiatives under a part of HDI were implement through various international non-government organizations (INGOS) such as Economic Development Associates (EDA), Gameen Trust, Group de recherche et discharges technologies (GRET) and Partner Agencies Collaborating Together (PACT) in the Delta area (Ayeyarwady Division), the Dry Zone and Shan State. Later on, other INGO also began providing microfinance services as a part of their broader poverty alleviation intervention.

In 2011 November, the new government adopted the Microfinance Law that allows to local and foreign investors to establish privately owned Microfinance institution (MFIS). And the government established poverty alleviation with eight devices for the country development. One of the eight devices is microfinance. According to this poverty alleviation, microfinance create employment and income, allows the poor to smooth consumption and meet social, religious and other obligation, especially women. So, the government was encouraged to establish the microfinance in the cooperative and non-government organization (NGO). Therefore, microfinance sector is most important to social-economic development in Myanmar.

II. Rationale of the Study

Microfinance industry is now affected by strong competition of commercial banks which have begun to target MFI's traditional customers, and the microfinance client is becoming more sophisticated concerning the quality of service they require or expect. (Dabbers2002). These factors may negatively affect the MFI's. In fact, the microfinance industry is losing customer because of both the aggressive competition and MFI's weakness to satisfy their clients (Urguizo 2006). These show why MFI's are concerned about customer satisfaction and retention. IFADC (2007) justifies also why microfinance supervisors must pay attention to understand their customer's

preferences and priorities to survive in a competitive environment.

Satisfaction is not a static idea and it changes as soon as a client finds a better deal that meets his expectations. In this perspective, firms must focus on customer satisfaction, studying and determining as soon as possible the customer satisfaction level, to adjust the product to customer needs. Indeed, customer satisfaction has greater significance for the future of an institution and it is seen as a basis for securing market position and achieving other objectives of the institution (Korus, 2002). The causes of poverty include changing trends in a country's economy, lack of education, high divorce rate which causes feminization of poverty, overpopulation, epidemic diseases such as AIDS and malaria, and environmental problems such as lack of rainfall." The issue of poverty can be solved through education, economic security, water and sanitation, health care and job creation. There are many people earning less than \$2 per day. Non-governmental organizations, governments and other organizations have played an important role in identifying major causes of poverty and striving to provide solutions.

Myanmar established poverty alleviation with the eight devices for the country development. One of the eight devices is microfinance. In November, 2011 the new Myanmar government adopted the Microfinance law that allows to both local and foreign investors to establish privately owned Microfinance institutions (MFIs). The government encourages establishing the microfinance not only in the co-operatives and NGOs but also in INGOs. There is interest of several international MFIs and investors to enter the market. World Bank and other donors are prepared to support microfinance supervisors. For MFIs, customer satisfaction is one of the important tools to run their business smoothly and to achieve the mission statement of these businesses.

Microfinance is powerful for improving livelihoods of rural people and is an effective development tool for poverty reduction for the simple reason that financial services enable poor and low-income households to take advantage of economic opportunities to build assets, and to reduce their vulnerability to external shocks that adversely affect their living standards. This study highlights how MFIs provide customer satisfaction on activities of Mya Sein Young Microfinance Institution in Padagyi Village, Kyauktan Township.

III. Objectives of the Study

The objectives of the study are as follows;

- (i) To explore the activities of microfinance institutions in Padagyi village, Kyauktan

Township.

(ii) To examine the customer satisfaction with respect to the service of microfinance institutions in Kyauktan Township.

IV. Scope and Method of the study

This research is aimed to do in Padagyi Village, Kyauktan Township in Yangon Division. There are totally eight NGOs and INGO MFIs in Kyauktan Township. Among them, Mya Sein Yaung was studied in this study. The study only 30 households from each MFIs in Padagyi VillageKyauktan Township area by using simple random sampling method. In this study required data will be collected by using primary and face to face survey method by using structured questions. Secondary data is obtained from internet sources, websites.

V. Literature Review

1. Definition of Microfinance

Microfinance is defined as financial services for poor and low-income clients offered by different types of service providers. Microfinance can not only create income generation and earning opportunities, but also meet necessities of life; microfinance can serve as emergencies from natural disasters and protect them from further improvement during.

2. Characteristics of Microfinance

Microfinance gives access to financial and non-Financial services to low-income people, who wish to access money for starting or developing an income generation activity. The individual loans and savings of the poor clients are small. Microfinance come into being from the appreciation that micro-entrepreneurs and interest, on time and also make saving, provided financial services are tailored to suit their need. Microfinance as a discipline has created financials products and services that together have enabled low-income people to become clients of a banking intermediary.

3. Dimension of Service Quality

Five dimensions were purified and developed into five dimensions-tangibility,

reliability, responsiveness, assurance and empathy to measure service quality, SERVQUAL Parasuraman and Zenithal, 1982. These Five dimensions identified in Tables.

Table 1. Five Broad Dimension of Service Quality

Dimension	Definition
Tangibles	Appearance of physical facilities, equipment, personnel and
Reliability	Ability to perform the promised service dependably and accurately.
Responsiveness	Willingness to help customers and provide prompt service
Assurance	Employees' knowledge and courtesy and their ability to inspire trust and Confidence
Empathy	Caring, easy access, good communication, customer understanding and individual lazed attention given to customers.

Source: Adapted from Zenithal (1990)

4. Service Quality Model

The SERVQUAL model is considered as the pioneer model in customer satisfaction measurement. Developed by Parasuraman et al.1985, the model has been recognized as the most representative tool in approaching customer satisfaction issues. The central idea is that service quality is "a function of the difference scores or gaps between expectations and perceptions (P-E)". "SERVQUAL contains 22 pairs liker scale statements structured around five service quality dimensions in order to measure service quality dimensions in order to measure service quality (Cronin and Yaylor 1992).Reliability, Responsiveness, Assurance, Empathy, Tangibles,"(Bloemer, Rugter et al 1999).

In This perspective, customer satisfaction is analyzed as multidimensional concept resulting from a comparative approach between customer's expectations and perceived quality delivered by the firm (cf. Parasuraman et al 1985). Thus, "a positive gap score implies that expectation have been met or exceeded and a negative score implies that expectations are not being met" (Parasuraman,et al .1988).cited by (Safakli,nd Barnes 2005, Parasuraman, et al .1985). Based on their findings they developed a service quality, model based on gap analysis which is illustrated in –GAP model parasuraman et al, 2004:46).Based on their findings they developed a service quality model based on gap analysis which is illustrated in-GAP model (Parasuraman et al, 2004:46). The quality gap according to Parasuraman (2004) and Táchira and Baker (2007) are five. These are:

- Gap-1: The difference between what customer really (actually) expect and what management this (perceptions) of customer expectations. This gap is referred to as the understanding or knowledge gap.
- Gap-2: Is what is called the standard gap. It is the difference between

management perception of customer service quality expectations and service quality specifications.

- Gap-3: This gap is also known as the delivery gap. The difference between services quality specifications and the actual service quality delivered.
- Gap-4: This gap too is termed as the communication gap. It is the difference between the delivery of service and the external information (Communication) regarding promises made to customers or implied.
- Gap-5: Is difference between customers' expectation of service quality and actual service received. Figure 2.2 gives a picture of the five gaps of SERVQUAL. Now, ServQual model is analyzed and modified by some authors seeking to adapt it or to correct some mistakes it may be perceived to contain.

5. Conceptual Framework of the Study

In this framework of the five services quality dimensions have been used for this study; tangible, reliability, responsiveness, assurance and empathy; for assessing service quality of Microfinance Institution in Mya Sein Yaung. This framework is only focus measuring customer satisfaction gap (Gap 5); the gap between customers perceives service quality performance and expectation on service of MFIs in Mya Sein Yaung by the clients. Customer Satisfaction is the result of different between these two. The major element of SERVQUAL Gaps Model development by Zeithaml, Berry and Parasuraman (1998) is used as the conceptual framework in this study (Only Gap 5) in finger 2.

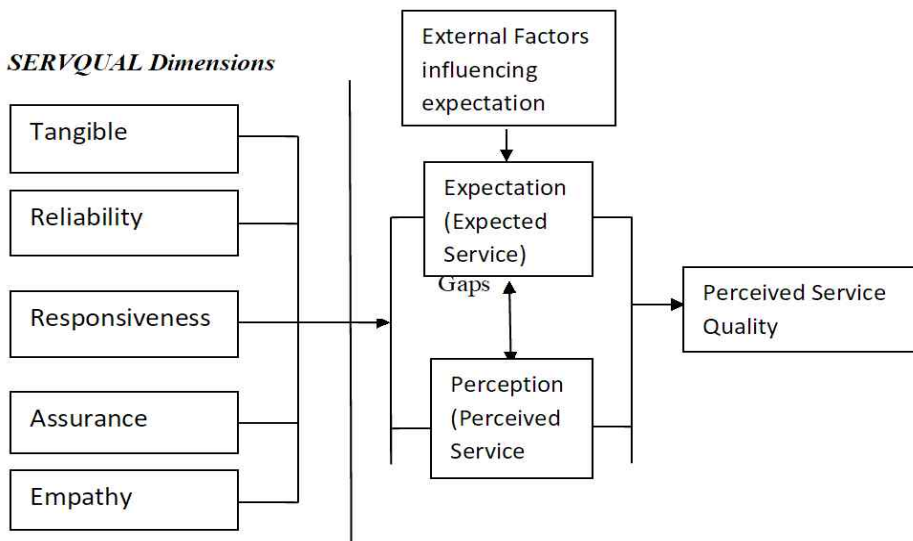


Figure 1 Measuring Service Quality using SERVQUAL Model

Source; Kumar et al, 2009

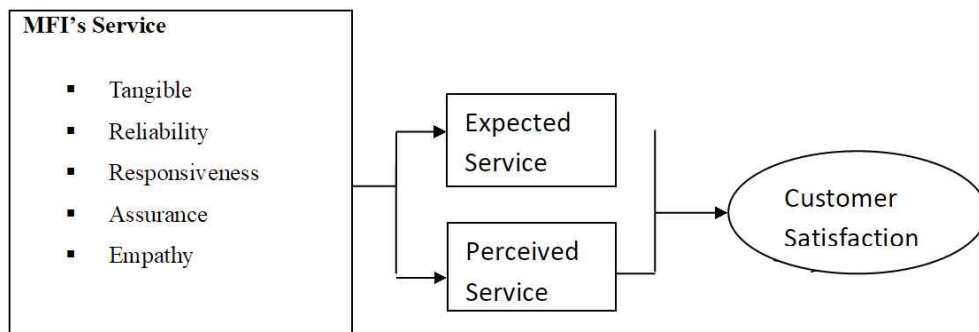


Figure 2: Conceptual Framework of Customer Satisfaction toward Mya Sein Young Service Quality
Source: A, Parasuraman, V, A Zeithaml, and L. L. Berry

VI. Process of Microfinance Activities in Myanmar

The establishment of a Microfinance Project in Myanmar which provides the rural poor access to credit and allows them to initiate or expand income earning activities, is relatively new but an innovative approach to poverty alleviation practiced in many developing countries.

The following steps are carried out to perform the Microfinance activities by the participating MFIs.

Step 1, Township officers (To) select villages based on comparatively fair accessibility. And then the villages can identify themselves for eligibility to the project and also house-to house baseline data collection and secondary data from authorities concerned assist in screening the potential clients from the specific villages.

Step 2, is sensitization and mobilization. In this step, all the staffs of the MFIs went down the proposed villages and presented the goals, objectives, rules and regulations village leaders and request their assistance and participation in advocating for the credit activities. The project is then presented to villagers who are interested to join the project.

Step 3, Credit and Saving Groups Formation is done by selecting group members through the group's own decision. This is the most fundamental and the most important activity of the project implementation. The Solidarity Group lending methodology is used. A group can be labeled as strong if it is collection of individuals who are gathered together and group that it is their self-interest to ensure that all members of the group fulfill their own obligations.

Step 4, group recognition is carried out. It is most effective method that is

available for the programmer to exercise quality control over its client base. Quality control in this instance means ensuring that all members meet the eligibility criteria, have good understanding of objectives.

Step 5, all new groups must be trained on the services of the credit programmed. Though the trainings new members have to be aware and clear about all the responsibilities, rules and regulations of the Microfinance programmed create of obligation through verbal contract between the borrowers and filed workers, aware and commit the saving. Non formal Education (NFE) of Microfinance modules are applied here in these trainings.

Step 6, loan processing and disbursements are made. The priority list for receiving loan is drawn by the group members themselves by taking the individual requirements into consideration. The group lender will receive the loan at the last and final batch.

Step 7, is repayment collection. The loans will have to be repaid (principle interest) at the target dates. The repayment schedules are fixed at borrowing contracts, loan collection methods and interest rates are different among MFIs. Loan collection is done through the group lenders who hands over the payment to the Credit and Saving Promotes (CSR).

Step 8, is MFS Monitoring. MIS is developed in each project sites for monitoring the project progress. MIS reports are regularly submitted from township offices to regional offices and regional offices to Head offices.

VII. Analysis and Findings

Demographic Characteristics of Respondents

Thirty clients are chosen from each MFI under study. Demographic characteristics, such as gender, age, material status, occupation and all the characteristics in part one are consider as relevant factors that might help to understand the client's attitude on MFIs activities. The detail information about personal data of the respondent are shown as below:

Table 2. Gender of Respondents

Sex	MFI	MyaSeinYaung(MFIs)	
		Frequency	%
Male		4	13.33
Female		26	86.67
Total		30	100

Source: Surveyed Data, 2019

As shown in Table (2), 13.33% of respondents are male and the rest 86.67% of respondent are female clients. This data suggests that it might be more lend for female than male because of most MFIs is targeted for women.

Table 3. Age of Respondents

Age	MFI	Mya Sein Yaung(MFIs)	
		Frequency	%
< = 20		0	0
21-30		0	0
31-40		8	26.67
41-50		12	40
51-60		8	26.67
>- 70		2	6.67
Total		30	100

Source: Surveyed Data, 2019

Based on the Table (3) most of the clients or respondents are in the age of 41-50(40% of respondents (12) clients is the most the remaining of 2 clients, 6.67 is the least respondents in this study. It can be seen that clients are responsible person in the family in this age.

Table 4. Education of Respondents

Education Level	MFI	Mya Sein Yaung(MFIs)	
		Frequency	%
Literate		8	26.67
Primary		16	53.33
Middle		3	10
High		2	6.67
Graduate		1	3.33
Other		0	0
Total		30	100

Source: Surveyed Data, 2019

According to Table (4) Primary level is the highest respondent of 16 clients and 53.33%. It can be found that, 1 graduate, 3.3% is the last in this study.

Table 5. Occupation of Respondents

MFI Occupation	Mya Sein Yaung(MFIs)	
	Frequency	%
Shopkeeper	12	40
Breed	10	33.33
Civil servant	1	3.33
other	7	23.33
Total	30	100

Source: Surveyed Data, 2019

According to Table (5) most respondents are Shopkeeper (or) Seller. This Shopkeeper (or) Seller represents large group having frequency 12 and percentage (40 %). The second largest is 33.33% in the Breed. So, the clients are inverting microfinance funds in micro-enterprises.

Table 6. Monthly income of Respondents

MFI Income (ks'000)	Mya Sein Yaung(MFIs)	
	Frequency	%
< = 50	1	3.33
51-100 ks	13	43.33
101 -150 ks	12	40
>150 ks	4	13.33
Total	30	100

Source: Surveyed Data, 2019

As shown in Table (6) income level of clients getting MFIs services is mostly on income 50,001 – 100,000 kyat, having 13 clients and 43.33%. Most of the clients may be lower income people or base person who was investing microenterprise or small business with their own income. In addition, income level between 100,001 kyat and 150,000 kyat is second largest group.

Table 7. Loan Life of Respondents

Loan life \ MFI	Mya Sein Yaung(MFIs)	
	Frequency	%
Under 1 year	3	10
2 year	19	63.33
3 year	8	26.67
Total	30	100

Source: Surveyed Data, 2019

According to the Table (7), out of the total clients, out of the total clients, the persons who take selected sample MFI between 2 years are largest in number.

Table 8: Delinquency of Respondent

Delinquency \ MFI	Mya Sein Yaung(MFIs)	
	Frequency	%
Yes	0	0
No	30	100
Total	30	100

Source: Surveyed Data, 2019

According to Table (8) the most isn't delinquency client that the frequency 30 and percentage 100%.

Table 9: Analysis of Customer Satisfaction of Expectation toward Service Quality

MFIs \ Dimension	Customer's Expectation	
	Mean	Level
Tangible	4.17	High
Reliability	4.07	High
Responsiveness	3.57	High
Assurance	4.10	High
Empathy	3.47	High
Overall Mean score	6.46	Highest

Source; Surveyed Data, 2019

According to Table (9) the overall satisfaction of expectation towards the five dimensions was at a highest level 6.46. The result of customers' expectation showed that 'Tangible' dimension was at the high level 4.17, Reliability 4.07, Responsiveness 3.57, Assurance 4.10, Empathy 3.47. Most customers expected personable because

every customer is highly expecting the provision of caring and individualized attention from the field officer.

Table 10. Analysis of Customer Satisfaction of Perception toward Service Quality

MFIs Dimension	Customer's Perception Mya Sein Yaung(MFIs)	
	Mean	Level
Tangible	3	High
Reliability	3.20	High
Responsiveness	2	High
Assurance	3.10	High
Empathy	3	High
Overall Mean score	4.76	Highest

Source: Surveyed Data, 2019

According to Table (10) the overall satisfaction of perception toward the five dimensions was at the highest level 4.76. The result of customer's perception showed that 'tangible 3', high level, Reliable 3.20 high level, Responsiveness 2, low level Assurance 3.10, Empathy 3 is high level.

Table 11. SERVQUAL Gaps for Expectation and Perception of Five Dimensions by Selected MFIs

MFIs Dimension	Customer's Service Gap Mya Sein Yaung(MFIs)		
	E	P	P-E
Tangible	4.17	3	-1.17
Reliability	4.07	3.20	-0.87
Responsiveness	3.57	2	-1.57
Assurance	4.10	3.10	-1
Empathy	3.47	3	-0.47

Source: Surveyed data, 2019

Table (11) clearly shows analysis of gap scores for expectation and of five dimensions by selected MFIs. By using the SERVQUAL model, the gap is calculated the different between the mean value of expectations and these of perceptions. Almost all the dimensions of service gaps in selected MFIs are negative. The negation value means that the expectations of the customers indicating there is a necessary for improvement.

Mya Sein Yaung MFI has the highest service gap because this business's service performance is bit closer to customer's expectations due to their service provide. Finally, the whole of the Mya Sein Yaung are not customer satisfaction with their

clients.

VIII. Conclusions

The study demonstrates the customers' expectations and perceptions mean of selected Microfinance Institutions (MFI). Microfinance Institution is to provide the needs of the low-income people for provides social needs of then. This chapter describes the finding of the study in Padagyi Village in Kyauktan Township. Furthermore, this study tries to find out how customers' perceptions of service quality dimensions are for away meeting expectations. There are (30) responsible are Servqual to know the customer satisfaction on activities of Mya Sein Yaung MFIs in Padagyi Village in Kyauktan Township. It can be found that, most the respondents are want and most of their education level is primary level. Their income level is between 51,000 kyat and 100,000ks. Most of women takes loans about 2 years and it is (63.33%) of respondents when student the customer satisfaction of expectations towards service quality by using SERVQUAL all of the dimension of service gaps in selected MFIs are negative. By doing so, the President in the MFIs will pay more attention to those dimensions where the service gaps are large.

Because by using the SERVQUAL model, the gap is calculated the different between the mean value of expectation and these of perceptions. Almost all the dimension of service gaps in selected MFIs is negative. This result show that the surveyed customers are not satisfied with the service provided by the MFIs so, the MFI president of the Mya Sein Yaung should try to fulfill the needs of their clients as a starting point for improving the level of service quality offered for the customer satisfaction.

According to the results, the performance dimension of MFI in Mya Sein Yaung is negative. In order to improve customers' satisfaction on this institution, MFI's presidents need to provide the non-financial services and insurance program. The customers' expectations will be high by looking at their institution images. In order to maintain customers' satisfaction on Mya Sein Yaung, MFI's president should design loan program, saving program, provide social problem, microfinance insurance program, and trading and education program within the MFI. This MFI's field officers need to be ready for solving the client's problems and seek new clients who are low-income people and want to improve their life. They also should have the knowledge, skill and ability to answer the clients 'questions, to understand help the customers. The responsible person needed to watch the strength and weakness of their loan program and saving program to adapt the client's needs.

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