# YANGON UNIVERSITY OF ECONOMICS DEPARTMENT OF MANAGEMENT STUDIES MBA PROGRAMME

# FACTORS INFLUENCING USER PERCEPTION OF ERP SOFTWARE IN WIN BROTHERS GROUP OF COMPANIES

MYAT SANDI NYO

EMBA II – 59

EMBA 17<sup>th</sup> BATCH

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#### **ACADEMIC YEAR (2018-2022)**

**Submitted By:** 

Daw Kay Thi Soe

Myat Sandi Nyo

Associate Professor

EMBA II - 59

Department of Management Studies

EMBA 17<sup>th</sup> Batch

Yangon University of Economics

2018-2022

**Supervised By:** 

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A thesis submitted to the Board of Examiners in partial fulfillment of the requirements for the degree of Master of Business Administration (MBA)

Supervised By:	Submitted By:
Daw Kay Thi Soe	Myat Sandi Nyo
Associate Professor	EMBA II - 59
Department of Management Studies	EMBA 17 <sup>th</sup> Batch
Yangon University of Economics	2018-2022

#### **ACCEPTANCE**

This is to certify that the thesis entitled "Factors influencing User Perception of ERP Software in Win Brothers Group of Companies" has been accepted by the Examination Board for awarding Master of Business Administration (MBA) degree.

	<b>Board of Examiners</b>	
	(Chairman)	
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	Yangon University of Economics	
(Supervisor)		(Examiner)
(Examiner)		(Examiner)

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#### **ABSTRACT**

This study aims to examine the factors influencing user performance of using ERP software in Win Brothers Group of Companies. This study is conducted on a survey with all 85 employees who are using ERP systems from 5 different companies related to production, trading, distribution, and logistics services. The sampling method is the census method. This study analyzed the individual factors and organizational factors affecting to perceived usefulness and perceived ease of use. Regarding to individual factors, computer self-efficacy had no direct effect on perceived usefulness of ERP system. Subjective norms and computer anxiety still remain predominant factors that can affect to perceived usefulness of ERP software. Regarding to the organizational factors, user training was the largest contributing factor to create positive perceived ease of use of ERP software in Win Brothers Group of Companies, followed by top management support. The perceived usefulness and perceived ease of use have the positive significant relationship with the user performance. The study found out that perceived usefulness is the most significant influencing factor affecting User Performance at Win Brothers Group of Companies. The management or decision makers from Win Brothers Group of Companies should think about top management support to employees and the effectiveness of the user training. Top management should promote the ERP software in the organization and provide training to employees to familiar with ERP software.

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#### LIST OF ABBREVIATION

MIS : Management Information System

ERP : Enterprise Resource Planning System

TAM : Technology Acceptance Model

TOE : Technology-Organization-Environmental Framework

IT : Information Technology

ICT : Information and Communication Technology

SAP : System Application Product

BI : Business Intelligence

B2B : Business to Business

DDGS : Distiller's' dried grains with soluble

#### **CHAPTER 1**

#### INTRODUCTION

With the rapid growth in use of computing, academicians and practitioners have recognized that information technology success can be measured by its impact on an individual's work. Organizations that spend millions of dollars on information technology are primarily concerned about how their investment will influence organizational and individual performance. The impact of information technology on work at the individual level is a direct consequence of system use, which in turn is a major factor in determining organizational impact. Organizations need to understand the system adoption from the user's perspective to prepare their employees to face new challenges and learn how to make good use of the technology to reap tangible benefits.

In addition to this, the importance of software cannot be denied. Computers and other similar technologies were not as vital in business in the past. However, software became an essential part of any business activity as technology advanced. Before individuals can start a business, they need to decide if they want to use an existing software system or build a new system from scratch. The importance of software in companies cannot be understood by someone who has never used or researched it. If the business owner does not use the software properly, the company's productivity will go down. Therefore, it becomes critically important for the business owner to make sure that the system is important.

In the information system implementation, the users should consider the system's benefits and advantages. It can be captured by the technology acceptance model. The technology acceptance model provides the framework to investigate the impact of external variables on beliefs, personal abilities, attitude, mindset, motivation, and intention in information technology acceptance, Davis, (1989). In the current information age, companies are having a hard time creating different types of systems that can work together to share and exchange information transparently. One way to overcome this problem is to employ enterprise applications. Enterprise Resource Planning (ERP) systems are used in a variety of businesses, including trading, distribution, services, manufacturing, non-domestic services, government and not-for-profit organizations.

This study aims to understand the user perception of ERP software from Win Brothers Group of Companies and its impact on the employee performance. Win Brothers Group of Co., Ltd is one of the most dynamic conglomerates in Myanmar. The company was established in 1990 by Win family in Mandalay. Win Brothers Group integrated operations have diversified into strategic sectors such as Alcoholic Beverages Products, Industrial Gas, Agriculture, Sugar, Building Material, Mining and Distribution. Win Brothers Group of Companies was used different kinds of ERP system in the past. In this information age when the company have new market, new products or services, increase demand, company need to upgrade the software. Increased growth puts pressure on the legacy ERP, and some of the growth factors require additional functions and applications.

For the successful implementation of ERP, there should be top management support, employee involvement, clearly defined project scope, plan to optimize the business processes, proactive change management, project management tools and human resource who can implement ERP software successfully. Win Brothers Group of Companies have implemented SAP By Design ERP Software since 2019 and many users are utilizing currently.

#### 1.1 Rationale of the Study

Enterprise resource planning (ERP) refers to a type of software that organizations use to manage day-to-day business activities such as finance, HR, manufacturing, sales, supply chain, services, procurement, and others. A complete ERP suite also includes enterprise performance management, software that helps plan, budget, predict, and report on an organization's financial results.

ERP systems tie together a multitude of business processes and enable the flow of data between them. By collecting an organization's shared transactional data from multiple sources, ERP systems eliminate data duplication and provide data integrity with a single source of truth. ERP systems are critical for managing thousands of businesses of all sizes and in all industries. To these companies, ERP is as indispensable as the electricity that keeps the lights on.

The software market in Myanmar is still largely underdeveloped, with relatively few companies operating in this space. The finance sector seems to be an early adopter of technology IT usage is limited to many companies. The user intention to use software is important factors. Implementing ERP software in Myanmar companies is much more

challenging than it is in well-organized companies in developed countries. The specific complexities and complications of organizational structure and local business culture characteristics.

ERP is critical for Myanmar companies to develop and take part in the development of economy. Careful adaptation with methodological adjustments is required. This study will provide a better insight of user perception such as perceived usefulness and perceived ease of use of ERP by identifying individual and organizational factors, and employee performance. By understanding the factors of influencing user perception of ERP software and the impact on user performance will enable management to make decision leading to higher achievement of ERP software implementation in Win Brothers Group of companies.

#### 1.2 Objective of the study

The objectives of the study are

- (1) To identify the factors affecting user perception on using ERP Software in Win Brothers Group of Companies.
- (2) To examine the influencing perception on User Performance in using ERP Software in Win Brothers Group of Companies.

#### 1.3 Scope and Method of the Study

This study focuses on analysis of factors influencing using ERP system and user's satisfaction survey. In this study, census survey method is used to collect required data. This study conduct survey to 85 ERP system users including different of designation levels are requested to involve in this survey. And then prepared questionnaires which to be analyzed the perception of the ERP system users, who are working in this organization which was selected to do this study. The analysis results are done by using survey data with descriptive and quantitative research method.

The primary data is collected from the employees by preparing survey forms. The prepared questionnaire is distributed to 85 employees of operational, middle and senior management levels. The questionnaire is prepared to explore all the factors influencing user perception on using ERP system and their influencing perception on user performance of ERP users. Then the survey forms were collected back and then the data is put into spreadsheets that must be formulating the result. Secondary data will be

collected in materials from literatures, library and respective organizations and internet.

#### 1.4 Organization of the Study

This paper is structed into five different chapters. Chapter 1 is the introduction about Management Information System, Enterprise Resource Planning software, rationale of the study, objective of the study, scope, and method of the study. Chapter 2 contains theoretical background of the study. Chapter 3 includes profile and implementation of ERP software in Win Brothers Group of Companies. Chapter 4 presents the analysis on factors influencing user perception of ERP software at Win Brothers Group of Companies. Chapter 5 is the conclusion of the study with finding, discussions, suggestions, recommendations and needs for further research.

#### **CHAPTER 2**

#### THEORETICAL BACKGROUND

This chapter focus on the theoretical background which is used in this study. The theoretical background relevant to this study consists of different parts: enterprise resource planning system, technology acceptance model, the factors influencing on ERP software, factors influencing on user performance and conceptual framework of this study.

#### 2.1 Enterprise Resource Planning (ERP) System

The enterprise resource planning system is part of the larger management information system, with the goal of automating and digitizing routine tasks. Enterprise resource planning systems can be viewed in a variety of perspectives: as a software product, as an infrastructure, as well as from the perspective of a vendor or a user, Bernroider(2008). Another definition, from the perspective of top management, defines enterprise resource planning systems as integrated software that is used to assist in managing a firm's resources and to integrate all organizational units and functions into a single system that can satisfy the majority of needs.

According to Hong and Kim (2002), the majority of organizations deployed enterprise resource planning systems to boost performance, efficiency, and overall operations. However, the goals were not achieved in the majority of cases due to the high failure rate of the ERP implementation and unsatisfactory performance, which shifted the debate to more contentious issues regarding the system's influence and payout in businesses. McAfee (2002) investigated that the impact of enterprise technology on operation performance and discovered that performance had significantly improved. The study proved the significant impacts of the ERP implementation for individuals and organizations, showing that ERP systems need to be investigated from various perspectives to identify the actual value of these systems.

#### 2.2 Technology Acceptance Model (TAM)

There are numerous theoretical models that explain user acceptance of information systems. The technology acceptance model or TAM is a widely applied information system model to explain end user adoption of information technology. It is

a powerful model of user acceptance of computer technology. The technology acceptance model is based on the theory of reasoned action (TRA) (Azjen & Fishbein, 1980) which postulates that an individual's behavioral intention to use a system is determined by two beliefs which are perceived usefulness and perceived ease of use (Venkatesh and Davis, 2000).

According to Davis (1989) perceived usefulness defined as the degree to which an individual believes that utilizing a certain system will improve his or her job performance. Individuals' perceived usefulness is almost certainly the outcome of better job performance and user motivation (Farrow & Robey, 1982). According to studies, perceived usefulness is positively correlated with system usage (Thompson, Higgins, & Howell, 1991). Perceived ease of use is described as a person's belief that utilizing the system will be free of effort.

According to TAM, perceived usefulness is also influenced by perceived ease of use because, other things being equal, the easier the system is to use, the more useful it can be. Individuals who experience ease of use are more likely to believe in the system's convenience and usefulness. Davis et al. (1989) discovered that usefulness was more strongly associated with usage than ease of use.

#### 2.3 Influencing Factors on ERP Software

The research model was developed based on Technology Acceptance Model (TAM) along with extending individual and organizational factors as the determinants of user's perceptions about ERP software.

#### 2.3.1 Individual Factors

Individual factors refer to individual's cognitive perceptions of innovation and themselves, Talukder (2012). Individual factors represent user's perspective on a new technology and its impact on work. For instance, it refers to the extent to which a participant's enthusiasm for adopting new technologies for safety, or the extent to which a participant believes that employees can benefit from using ERP software in their work. In this study, individual factors are subjective norm, computer self-efficacy and computer anxiety.

#### **Subjective Norms**

Subjective norms have been shown to have a significant direct and indirect influence on an individual's intention to use computer technology. Nevertheless, subjective norm may not be consistent in predicting intention to use computers, with some studies revealing that such relationships are not significant at all (Davis, 1986). Indeed, early TAM researchers abandoned subjective norms as a study subject on the realization that there were no significant results as far as intentions were concerned. However, Lee (2006) and Lu et al. (2009) have shown that subjective effects have a significant effect on perceived usefulness.

#### **Computer Self-efficacy**

Computer Self-efficacy has been a critical pillar in social learning theory (Bandura and Wessels, 1997). Self-efficacy refers to an individual's perception that he or she is capable of completing a specific task or undertaking an activity successfully (Bandura, 1997). Additionally, perceived self-efficacy is the belief in an individual's capabilities in organizing and executing a course of action that is necessary for a desired outcome. Self-efficacy could be an important factor when considering whether a new process should be adopted.

#### **Computer Anxiety**

It is essential to conduct research on computer anxiety since it has been proved that computer anxiety causes people to avoid computers, and also because computer anxiety is a phobic condition that can be altered. Computer anxiety can be defined as the level of an individual's feeling of uneasiness or even fear when confronted with the prospect of using computers. Shu and Wang (2011) defined computer anxiety as the inability of an individual to deal with the new and developing information technology usage, whether in the professional or social realms. Computer anxiety can make some people avoid using computers to complete tasks.

#### 2.3.2 Organizational Factors

Analyzing and studying user is important when looking into usage of ERP software. Users are influenced by a variety of organizational factors. Therefore, these factors and their influence on the user's beliefs could be a major determinant of user perceptions. Introducing to a new software brings ambiguity and risk and top management commitment and support reduces negative reactions and create a positive feeling. In this study, organizational factors are top management support and user training.

#### **Top Management Support**

Implementing ERP system go beyond simply changing software systems, as it also involves repositioning the organization and transforming each business practice. For this reason, it is imperative that senior management openly, explicitly and sincerely (through financial and non-financial means) support the entire ERP implementing process. If employees receive enough support during this process, their productivity and satisfaction in the workplace is likely to improve significantly. In addition, providing training to employees reduces the likelihood of workplace stress that can result from operating such systems.

There has been an immense application of top management support in computing environments. Research by DeLone (1988) found that the participation of senior executives in the computerization process improved the success of the use of computers in small manufacturing enterprises. According to Henry and Stone (1995), top management support allows the organization to persuade and encourage employee behavior. It was also noted that support from top management was a significant factor in influencing users' attitudes towards management information systems (Zmud, 1979) and reduces computer anxiety (Igbaria and Chakrabarti, 1990).

#### **User Training**

The organizations are increasingly depending on the skills of their employees acquire during their career, and it is important for these organizations to be aware of their employee knowledge and skills especially in regards to information technology. The lack of suitable skilled employees and managerial staff with sufficient information and communication technology knowledge is a significant factor that

determines the implementations and use of information technology (MacGregor et al.,1996). Allison (1999) found that when companies have skilled and knowledge employees their ability to adopt and use of information technology increases, this leading to successful adoption of ERP in their business.

#### 2.4 Influencing Perceptions on User Performance

Individual perceptions are important in the determination of their behavioral intention of adopting a system is determined by their belief that the system will be important improving their performance in workplace. Moreover, individuals' perceptions in technology acceptance model are mutually contingent on both perceived usefulness and perceived ease of use. The relationship between technology acceptance model constructs have been replicated in this study. The influencing perceptions on user performance are perceived usefulness and perceived ease of use.

#### **User Performance**

Organizations require high-performing individuals to accomplish their objectives, deliver their specialized products and services, and ultimately achieve competitive advantage. Additionally, individual performance is critical. Task completion and performance at a high level can provide satisfaction, as well as a sense of accomplishment and pride. Inadequate performance and failure to meet objectives may be interpreted as unsatisfying or even as personal failure. Individual job requirements are rapidly changing as a result of technological advancements and changes in organizational structures and processes. As a result, the importance of continuous learning and competence development increases. Individuals must be willing and capable of engaging in continuous learning processes in order to successfully complete their current and future tasks. This development has ramifications for performance theory. Campbell (1999), and Hesketh and Neal (1999) proposed that learning be incorporated into the concept of performance. Similarly, Plamondon (2000) recently proposed 'adaptive performance' as a new concept of performance in which 'learning' plays a significant role.

Computers and information systems, in particular, play a critical role in the majority of work processes. Individual work behavior, and thus performance, is often inextricably linked to the use of technology-based systems in many jobs. For instance, it is nearly impossible to imagine the work of a CNC machine operator in isolation from

the CNC machine. This development has implications for how performance is conceptualized and measured. As Hesketh and Neal (1999) point out, the widespread use of technology in work processes jeopardizes traditional views of performance, which conceptualize performance as completely under the individual's control (Campbell, 1990). In practice, it becomes extremely hard to separate technologies from the individual's contribution to performance. Hesketh and Neal introduced a person by technology (P × T) interaction perspective on performance and the study found that the way an individual uses the technology is an important performance component. Additionally, as well-designed user interfaces for technically sophisticated devices become more prevalent, the importance of specific skills and knowledge required in previous work systems diminishes, while other skills and knowledge become more critical in the performance process.

#### **Perceived Usefulness**

Perceived usefulness, on the other hand, refers to whether or not the system delivers accurate, timely, relevant, secure and valid information to the users. Therefore, using the system will improve job performance, productivity, effectiveness and quality of work. According to Bhattacherjee (2002), a person's willingness to interact with a particular system is already considered as useful. Thus, it is expected that users will adopt a system if they perceive that the system will assist them to attain desired performance outcomes.

Perceived usefulness and perceived ease of use are interrelated and used together in most research aspects as they affect each other in individual aspects (Davis, 1989). Perceived usefulness is viewed as a term related to individual impacts such as improved individual productivity and performance. Furthermore, both terms are related to information system and information quality, as mentioned by many researchers. For example, Wixom and Watson (2001) have found that the information quality, system quality and perceived usefulness are related to one another, expressing that the higher the level of Information quality and system quality, the more useful a system is (Haley et al., 1999)

#### **Perceived Ease of Use**

Perceived ease of use refers to the degree to which users believe that using a particular system would be easy to manage, manipulate, aggregate and be free of effort

or free from difficulty, Davis(1989).Perceived ease of use demonstrates the degree to which a system is seen as being not too difficult to understand, learn or operate. Perceived ease of use has been found to influence user's behaviors, either directly or indirectly, through the system's usefulness.

#### 2.5 Previous Studies

The conceptual framework of the study is based from previous studies and created as own compilation. According to the study of Davis (1989), the person's attitude in technology acceptance model is mutually dependent on both perceived usefulness and perceived ease of use. This study aims to explores a foundation for evaluating how internal beliefs, attitudes and the intention of using technological gadgets (such as computers) is affected by external factors.

Perceived Usefulness

Attitude

Perceived Intention to Use

Perceived Ease of Use

Perceived Ease of Use

Figure (2.1) Technology Acceptance Model

Source: Davis et al. (1989)

In Figure (2.1), Davis (1986) explains perceived usefulness is the degree to which an individual believes that using a particular system would enhance his or her job performance. Perceived ease of use is the degree to which an individual believes that using a particular system would be free of physical and mental effort.

According to the study of Albarghouthi (2019), it explores the study of the adoption of ERP models in Figure (2.2). This study found that both organizational factors top management support and user training and individual factors computer self-efficacy and computer anxiety play an important role in the adoption of ERP systems. Under the organizational factors, the findings indicated that both user training and top

management support are key determents of the perceived ease of use and perceive usefulness of ERP systems. Both factors were more strongly related to perceived ease of use than perceived usefulness. Additionally, the factors showed acceptable indirect effects on ERP usage. The study also indicates that users who have adequate ERP training are more likely to find the systems easy to use and more useful.

**Individual Factors** 1.Subjective Norm Perceived 2.Computer Self-Usefulness efficacy 3.Computer Anxiety Behavioral Actual Attitude Intention System to Use Use **Organizational Factors** Perceived 1.User Training Ease of Use 2.Top Management Support

Figure (2.2) Conceptual Framework of Albarghouthi

Source: Albarghouthi (2019)

Under the individual factors, subjective norms had no direct or strong indirect effect on perceived usefulness, intention to use and actual use of ERP systems. Some other interesting findings in the current research were the direct and indirect relationships between the TAM factors. This indicates that the users might perceive the systems as useful if they were easy to use. ERP users who do not perceive the system as easy to use and useful tend to form unfavorable attitudes towards using the system.

According to the study of Abugabah, Ahed Jabor (2010), it explores the impacts of the ERP system on user performance in Figure (2.3). In this study, Perceived Usefulness and Perceived Ease of Use were found to modify the effects of user characteristics on user performance. The study found that the effect of user characteristics

was greater when Perceived Usefulness and Perceived Ease of Use were included in the model. The research confirms that user perceive more impacts when they perceived system as useful and easy to use, which in turn leads to more performance improvements. Moreover, users who use the systems more, experience more impacts on their performance.

Test Technology Fit

Perceived
Usefulness

User

Perceived
Ease of Use

User Characteristics

Figure (2.3) Conceptual Framework of Abugabah and Ahed Jabor

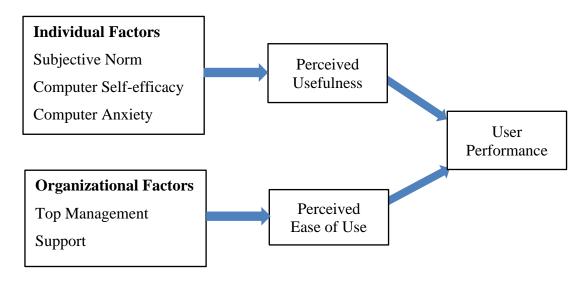
Source: Abugabah, Ahed Jabor (2010)

When a system has exactly the functionality needed to achieve the required actions for the task, should lead to better performance (Anglano, 2008). Similarly, when users have the appropriate skills and knowledge needed to use the system, better performance should result. Furthermore, it was observed that ERP systems provides user with relevant and clear information that helps users understand the correct meaning of the information related to their job. ERP systems delivers what they are supposed to deliver in terms of job and task requirements. However, this finding leads to the need for more research about the ERP system or other factors that might be affecting the benefits of ERP systems from the user's perspectives.

#### 2.6 Conceptual Framework of the Study

In this study, the factors influencing user perceptions are divided into individual factors and organization factors. The individual factors are Subjective Norm, Computer Self-efficacy and Computer Anxiety. The organization factors are User Training and top management. Those five factors are considered as independent variable and User Performance is considered as dependent variable.

Figure (2.4) Conceptual Framework of the Study



Source: Own Complication based on previous studies (2021)

Meanwhile User Performance can be measured in terms of the effect of perceived usefulness and perceived ease of use. And user performance of ERP is measured in terms of accomplishment of their work and positive impact on productivity, efficiency and effectiveness in work and creating new ideas and achieving their job goal compared to previous manual process. The conceptual framework is shown in Figure (2.4).

#### **CHAPTER 3**

## PROFILE OF WIN BROTHERS GROUP OF COMPANIES & ERP IMPLEMENTATION

This chapter describes about the detail profile of Win Brothers Group of Companies, which is especially selected to do this research and the background history of implementing ERP system. This chapter focuses on collected data from employees of Win Brothers Group of companies and also describe the respondent's profiles.

#### 3.1 Background of Win Brothers Group of Companies

Win Brothers Group of Co., Ltd is one of Myanmar's fastest-growing business conglomerates. The business was founded in 1990 by the Win family in Mandalay. The integrated operations of the Win Brothers Group have diversified into strategic areas such as alcoholic beverage products, industrial gas, agriculture, sugar, construction materials, mining and distribution. Win Brothers Group of Companies' sustainability approach is based on a commitment to implement appropriate policies, practices, products and programs to ensure maximum success. With over twenty years of experience in Myanmar's economic landscape, the company is well positioned to drive Myanmar's continuous growth.

The vision of Win Brothers Group of Companies is to be the one of the top performing and an inspiration of Myanmar. The mission of Win Brothers Group of Companies is to deliver optimal results for partners, employees and customers. Core Value is trust, integrity, excellence.

Win Brothers Group of Companies is composed of five companies, which are (1) Mandalay Beverages Enterprise Company Limited (2) SMP Limited (3) Taunggyi Grain Company Limited, (4) New Dawn Logistics Company Limited and (5) Seagram Myanmar Company Limited.

#### (a) Mandalay Beverages Enterprise Company Limited

Mandalay Beverages Enterprise Company Limited founded in 1990 as the distillery industry and is now the biggest producer in Myanmar. Shwe Myin Pyan Distillery is specialized in manufacturing of GNS (Grain Neutral Spirits) and ENA (Extra Neutral Spirits) which is produced from raw materials such as yellow corn, broken rice and molasses by fermentation and distillation processes. DDG, a by-product

of the distillery, is used as livestock feed in Myanmar.

#### (b) SMP Company Limited

The SMP Company started in 2003 and is FSSC certified and a producer of liquid carbon dioxide (LCO2) and dry ice from fermentation. SMP makes CO2 available for beverages, food and industrial products. SMP offers liquid cylinders and containers for smaller CO2 customers in high-pressure gas cylinders, tanks and liquid CO2 of varying sizes. SMP have bulk shipping provides a full range of tank sizes for supply requirements.

#### (c) Taunggyi Grain Company Limited

Taunggyi Grain Co., Ltd founded in 2007 in the Taung Lay Lone Village in southern Shan State. The main operations are contracted farming, corn drying and silo storage facility. Taunggyi Grain Company Limited supplies local B2B and export to regional countries. Taunggyi Grain's products are committed to complying with food safety.

#### (d) New Dawn logistics Company Limited

New Dawn logistics Co Ltd is formed in 2020. New Dawn logistics' main activities are the internal transport through Myanmar with more than 50 first movers and truck boxer. Our New Dawn Logistics committed to comply with Timely transportation, No damage cargo and road safety. New Dawn logistics can service transportation for the whole country in Myanmar. As a company, New Dawn Logistics can provide fuel vehicles, CO2 boxer truck & 22-wheel trucks are being used in transportation in Myanmar.

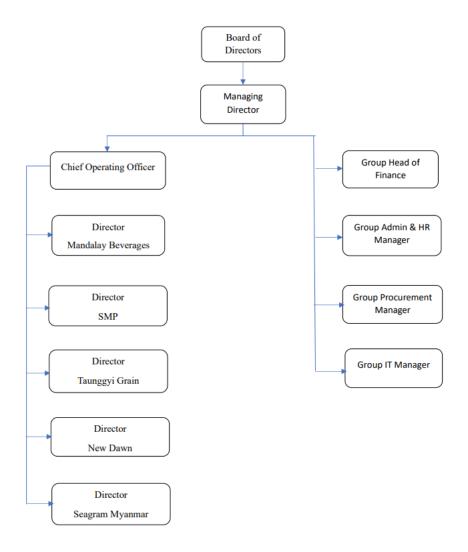
#### (e) Seagram Myanmar Company Limited

Seagram Myanmar was formed in July 2019 as a joint venture partnership among Pernod Ricard, Win Brothers and Yoma Strategic Company and Delta Capital Myanmar. In 2019, the company launched the brands Seagram's High Class, Seagram's Imperial Blue and Seagram's 100 Pipers. Seagram Myanmar Company have 10 sales offices and more than 23 depots. The company is the predecessor to Asia Beverage Company (ABC) since 2010 a Win Brothers 100% entity and original owner of High-Class brand.

#### 3.1.1 Organization of Win Brothers Group

In Win Brothers Group of Companies, there are seven main departments: Human Resources, Administration, Finance and Account, Procurement and IT departments. Some of the departments are handling and managing all services as shared services center from different companies strategically. Win Brothers Group IT department is the entity responsible for the execution and the handling of IT operation for four companies in using management information systems and other IT infrastructure.

#### 3.1.1 Organization chart of the Win Brothers



Reference: Win Brothers Organization Chart (2021)

#### 3.2 Implementation of ERP System at Win Brothers Group of Companies

Operations in Myanmar businesses have continuously changed over recent years. This is due to technological advancements and economic improvement that have empowered and changed the various methods of the business's functionality. This has resulted in the majority of Myanmar businesses becoming focused on practical and realistic factors, such as growth, increased competition between business and the varied needs and requirements of various stakeholders. These factors have led to many businesses in Myanmar investing intensively in technology so as to provide their service with the latest IT system.

It is important for Win Brothers Group of Companies to incorporate the use of ERP systems in order to systematize, manage and assimilate all their day-to-day business operations. IT solutions package are suitable for Win Brothers Group of Companies business operation for all internal, external and communication processes. The implementation of ERP system incorporates the comprehensive functionalities of Win Brothers Group of Companies from the different perspectives of various individuals (such as management, executive and operational staff). This is done to ensure effective management of data, so as to easily retrieve the precise information required to smoother the process.

Win Brothers Group of Companies are different from conventional Myanmar business because they possess dynamic environments and they mainly use technologies for their operation, such as production, order management process, inventory, procurement, finance and accounts, intercompany reporting etc. The focus of traditional ERPs is mainly on basic administrative functions (e.g., operations, marketing, human resources and finance), whereas Win Brothers Group of Companies need unique and integrated systems which can streamline the business process of Win Brothers Group of Companies from procurement to financial.

In summary, Win Brothers Group of Companies have been using SAP By Design ERP Cloud Software. SAP By Design ERP Cloud Software includes the application to apply Financial Management, Sales and Marketing, Supply Chain Management, Manufacturing, warehouse and logistics, Supplier Relationship Management and Standard built-in reports in SAP By Design. And Win Brother Group of Companies have been used SAP Analytics Cloud together with SAP Business By Design to facilitate the requirement of management reporting and consolidation in inter company. SAP Analytics Cloud delivers all the analytics capabilities such as business intelligence (BI),

planning, and predictive analytics etc. The reason of doing this research is Win Brothers Group of Companies management is actively looking into streamline the entire organization and put all the data all in one place, enabling more accurate reporting and more efficient, collaboration-based and data-driven work environment. By understanding the factors of influencing user perception of ERP software and the impact on user performance will enable management to make decision leading to higher achievement of ERP software implementation and business in Win Brothers Group of companies.

#### 3.3 Profile of Respondents

The study sought information on various aspects of the background of respondents, such as age, gender, highest level of education, designation and year of service at Win Brothers Group of Companies. In this study, all employees (85) from different departments have been surveyed. Census method is used in this survey. A total of 85 employees returned their questionnaires. This survey was for general information purpose and was not a direct objective of the study.

**Table (3.1) Demographic Data of the Respondents** 

Sr. No.	Demographic Factors	No. of respondents	Percentage
Total		85	100%
1.	Gender		
	Female	64	75.30
	Male	21	24.70
2.	Age (Year)		
	Under 25	5	5.90
	Between 26 to 30	24	28.20
	Between 31 to 45	52	61.20
	Between 46 to 50	4	4.70
3.	Education level		
	Diploma /Certificate	13	15.30
	Bachelors' degree	55	64.70
	Post graduate degree	4	4.70
	Master degree	13	15.30

4.	Year of Service		
	Below 5 years	25	29.40
	Between 6 to 10 years	38	44.70
	Between 11 to 15 years	17	20.00
	Above 15 years	5	5.90
5.	Level of Designation		
	Senior Management	13	15.30
	Middle Management	33	38.80
	Operational Management	39	45.90

Source: Survey Data (2021)

It was found that female respondents are more than male respondents at Win Brothers Group of Companies. The most dominant age group among employee is 31 to 45 years old with 61 percent and 26 to 30 years old with 28 percent, under 25 years old with 5 percent and 46 to 50 years with 4.7 percent. There are 64 percent are bachelor's degree holder, 15 percent are diploma/certificate holder, 13 percent are master degree holder and 4 percent are post graduate degree holder. By level of designation there are 15 percent from senior management who are using business intelligence report from the system, 38 percent from middle mange who mostly use for business intelligence and transactional reporting and 45 percent from operation staff they process daily transactions from ERP system. In the descriptive section, standard deviation and mean scores are presented based on findings. In the analytical section, analysis on the factors influencing user performance on ERP system is included.

#### **CHAPTER 4**

## ANALYSIS ON FACTORS INFLUENCING USER PERCEPTION OF ERP SOFTWARE AT WIN BROTHERS GROUP OF COMPANIES

This chapter presents the descriptive and analytical research. In the descriptive section, standard deviation and mean scores are presented based on findings. In the analytical section, analysis on the factors influencing user performance on ERP system is included.

In the analysis of influencing factors of user performance on ERP, descriptive survey method is mainly used. In this measure, five-point Likert scale was used to determine how respondents agree or disagree with different items of the survey from one (strongly disagree) to five (strongly agree) to assess the factors that affect to User Performance from employee perspectives. According to classification of Best (1977), the responses are interpreted as follows: The mean values 1.00-1.80 is classified as strongly disagree, 1.81-2.60 is categorized as disagree, and 2.61-3.40 is regarded as neither agree nor disagree, 3.41-4.20 are categorized as agree, 4.21-5.00 is categorized as strongly agree of perception.

### 4.1 Analysis on Factors influencing User Perception of ERP Software in Win Brothers Group of Companies

In this study, the factors influencing User Perception on ERP have been categorized as individual factors and organizational factors. User Perceptions are perceived usefulness of ERP and perceived ease of use of ERP. In order to find out the important of these factors, structured questionnaires are used. The standard deviation, percentage and mean scores of these factors are present based on findings.

#### 4.1.1 Individual Factors

Different people in the organization adopt the new technology with different paces; some adopt sooner and others later. This is due to the differences in individual characteristics, which can be categorized as subjective norms, computer self-efficacy and computer anxiety.

#### **4.1.1.1** Subjective Norms

The first influencing individual factor User Perception on ERP is subjective norms. The respondents were asked by five questions concerning subjective norms. These five questions were structured to measure the belief about whether most people approve or disapprove of using ERP system namely: peer believe in the benefits, management team believes in the benefits, senior management strongly support, use because of senior management and my use of ERP system agrees with my values. The mean result of Subjective Norms is show in Table (4.1).

**Table (4.1) Subjective Norms** 

Sr. No.	Subjective Norms	Mean
1	Peers believe in the benefits	3.86
2	Management team believes the benefits	3.94
3	Senior management strongly support	4.15
4	Use because of senior management	3.41
5	ERP system agrees with values	3.99
	Overall Means	3.87

Source: Survey Data (2021)

According to Table (4.1), the majority of respondents agreed that their senior management strongly support to use ERP system and their senior management knows benefit of ERP system. Employees do not think that they are using ERP because of their management. On the other hand, they are using ERP system which is agreed with their value and their peers believes in the benefit of using ERP. Overall mean is (3.87) and it can be concluded that the employees believed that they are using the ERP software because they system meets with their individual expected benefits, their peers believe in benefits and senior management believes and support of using ERP software.

#### 4.1.1.2 Computer Self-efficacy

The second influencing factor on User Perception on ERP is Computer Self-efficacy. The respondents were asked by six questions concerning with Computer Self-efficacy of using ERP. These questions were structured to measure the belief of their capability of

using ERP system. The mean result of Computer Self-efficacy is show in Table (4.2).

**Table (4.2) Computer Self-efficacy** 

Sr.No.	Computer Self-efficacy	Mean
1	Comfortable with ERP	4.05
2	Confident of using the ERP when nobody around	4.01
3	Confident of using the ERP never used before	4.21
4	Confident of using the ERP if someone show	4.11
5	Confident of using the ERP have time	4.08
6	Complete a job if someone shows how to do	4.08
	Overall Mean	4.09

Source: Survey data (2021)

As result shown in Table (4.2), the mean values indicate that employees who using ERP software in Win Brothers Group are very confident to use ERP even if they have never used it before. And then, they are also comfortable with current ERP system by indicating mean value (4.05). Employees still prefer someone to guide them or support to the system. Overall mean is (4.09) and it can be concluded that the user believed that the ERP system from Win Brothers Group of Companies is computer high-efficacy and the user are confident and comfortable to use ERP system. They can also complete their job if someone shows how to do and they prefer support from someone else. So that management should support to employee for making confident to use ERP system.

#### **4.1.1.3** Computer Anxiety

The third individual influencing factor on User Perception is computer anxiety on using ERP system. The respondents were asked five questions concerning computer anxiety. These questions were designed to measure the fear and apprehension felt by an individual when considering the implications of utilizing computer technology, or when actually using computer technology. The mean result of computer anxiety is show in Table (4.3).

**Table (4.3) Computer Anxiety** 

Sr.No.	Computer Anxiety	Mean
1	Working with computer is nervous	1.80
2	Computer makes uneasy	1.80
3	Computer makes uncomfortable	1.69
4	Computer is scared	1.73
5	Not willing to use computer at work	1.74
	Overall Mean	1.76

Source: Survey data (2021)

According to the Table (4.3), each mean score indicates that employees are strongly disagree to the computer anxiety questions. Employees from Win Brothers Group of Companies are already familiar with the computer and they do not feel uncomfortable and they are proficient in using computer system and they are not afraid to use computer. Overall mean is (1.76) and the results show that employee have no problem to use computer at their work and they do not have computer anxiety.

#### 4.1.2 Organizational Factors

When looking at user perception of ERP software, analyzing and studying users is important. Users are influenced by a variety of organizational factors. Therefore, these factors and their influence on the users' beliefs could be a major determinant of user perception. Organizational Factors consists of top management support and user training.

#### **4.1.2.1 Top Management Support**

The first organizational influencing factor on user perception is top management support. Six questions focused on gathering the data to be collected in terms of top management support to ERP system. The questions were structured to collect their feeling and their point of view to top management when they are using ERP system. The mean result of top management support is show in Table (4.4).

**Table (4.4) Top Management Support** 

Sr.No.	Top Management Support	Mean
1	Management support to use ERP system	4.00
2	Management has high intention to change ERP	4.11
3	Company promoted the system before implementation	4.01
4	Top management supported implementation project	4.14
5	Company provided training courses	4.11
6	Management reward employees who use ERP system	3.29
	Overall Mean	3.94

Source: Survey data (2021)

As the result of Table (4.4), the "top management supported implementation project" have highest mean scores (4.14) and "management reward employees who use ERP system is lowest mean scores (3.29) which presents that user think that their top management strongly support in implementation of ERP system in the organization but management did not reward who use ERP system. It might be mandatory for some employees who are working in operational environment. According to the overall mean, employees agree on top management is supporting them to use ERP system. Top management should think about the reward for employees for successfully implementing the ERP software.

#### 4.1.2.2 User Training

The five questions used to ask the respondents focused to measure the user training. It was focused on the training provided by the company is completer or not, the training is understandable for user and their confidence after training, the trainer skill and support to ERP user when they are training, the training is sufficient or not for using ERP system and assessment of user knowledge after they finished their training. The mean result of user training is show in Table (4.5).

**Table (4.5) User Training** 

Sr.No.	User Training	Mean
1	Training provided was complete	3.79
2	Confidence in system after training	4.01
3	Trainers are knowledgeable and supportive	4.06
4	Training on the operation of the ERP was sufficient	3.91
5	Substantially improved after Training	4.06
	Overall Mean	3.96

Source: Survey data (2021)

As the result of Table (4.5), "Trainers are knowledgeable and supportive" and "Substantially improved after Training" have the highest mean value (4.06). This indicates that users from Win Brothers Group of Companies are substantially improved their knowledge of using ERP system after they finished their training and also their trainer is knowledgeable and aided to them. They also believed that they still need company to provide them sufficient and complete training as a result of lowest mean value (3.79) in "Training provided was complete". The overall mean for user training is (3.96) that described the training are effective for user in understanding of ERP system and they required regular training.

#### **4.1.3** User Perceptions on ERP Software

User perceptions consist of two key components: perceived usefulness and perceived ease of use. Perceived usefulness is referred to as the degree to which a person believes that using a particular technology would enhance his/her job performance. Perceived ease of use is referred to the degree to which a person believes that using a particular technology would be free of effort.

#### **4.1.3.1 Perceived Usefulness**

The seven questions used to ask the respondents focused to measure the perceived usefulness of ERP system. It was focused on the spending time on using ERP

system, improvement in performance, enhancement in effectiveness, increase in productivity, easier to do their job, to access more relevant information and finally ERP system is useful at work. The mean result of Perceived Usefulness is show in Table (4.5).

**Table (4.6) Perceived Usefulness** 

Sr.No.	Perceived Usefulness	Mean
1	Accomplish the tasks quickly	4.00
2	Improved the performance	3.76
3	Enhance the effectiveness in work	3.88
4	Increase productivity in work	3.72
5	Easier to do job	3.89
6	Enable to access more relevant information	4.18
7	ERP is useful in work	4.07
	Overall Mean	3.92

Source: Survey data (2019)

As the result of Table (4.5), "Enable to access more relevant information" is the highest mean value (4.18) and "Increase productivity in work" have lowest mean value (3.72). This indicates that employee from Win Brothers Group of Companies agree that they can access relevant information from ERP software and they agree that ERP increased their productivity and improved their performance. Results show that performance, effectiveness and productivity in the work is also important matter to perceived usefulness of ERP system. The overall mean for Perceived Usefulness is (3.92) that described ERP is useful for their daily work and there is no resistance of employee for using ERP system. It was great opportunities for Win Brothers Group to extend more new innovated ERP system enhancement within the company.

#### 4.1.3.2 Perceived Ease of Use

The seven questions used to ask the respondents focused to measure the Perceived Ease of Use. It was only focused on the level of Perceived Ease of Use which is measured by the learning to use ERP system is easy, it is easy to get ERP to do what they want it to

do, the interaction with ERP is easy and understandable, getting information from ERP is easy, ERP is easy for them to become skillful, user think ERP is easy to use it. The mean result of Perceived Ease of Use is show in Table (4.7).

Table (4.7) Perceived Ease of Use

Sr.No.	Perceived Ease of Use	Mean
1	Learning to use the ERP is easy	3.75
2	Easy to get ERP to do	3.69
3	Interaction with ERP is clear and understandable	3.99
4	Getting the information from ERP is easy	4.05
5	Easy to become skillful at using ERP	3.82
6	ERP is easy to use	3.98
	Overall Mean	3.88

Source: Survey data (2021)

As the result of Table (4.5), "Getting the information from ERP is easy" have the highest mean value (4.05) and "Easy to get ERP to do" have the lowest mean value (3.69). This indicates that employees from Win Brothers Group of Companies are agree and understand that ERP is easy to use for them. They also believed that all of their process is performed easily by using ERP system and they used ERP system in their daily practice. The overall mean for Perceived Ease of Use is (3.88) that described ERP software in the organization is easy to use and adapt and there is no resistance of employee for using ERP software. It was great opportunities for Win Brothers Group to extend more new function in the ERP system within the whole organization.

## 4.1.4 Factors Influencing User Perception on using ERP Software

This section represents the result of analyzing relationship between individual factors towards perceived usefulness and organizational factors towards perceived ease of use.

#### **4.1.4.1 Factors Influencing on Perceived Usefulness**

Three influencing factors of Perceived Usefulness are analyzed by using multiple linear regression method. The output from generating multiple linear regression model is shown in Table (4.6). Dependent variable is Perceived Usefulness and independent variable are subjective norm, computer self-efficacy and computer anxiety.

As shown in Table (4.8), since the value of the adjusted R square is 0.583, it can be interpreted that 58.3 percent of the variation of perceived usefulness can be explained by the subjective norm, computer self-efficacy and computer anxiety. The value of F-test, the overall significance of the model, which is highly significant at 1 percent level, confirms the validity of the specified model. Moreover, the value of Durbin-Watson is 1.612, which lies between the acceptable reference range 1.5 to 2.5.

Table (4.8) Influencing Factors on Perceived Usefulness

Variable	Unstandardized Coefficients		β	t	Sig.
	В	Std. Error			
(Constant)	-0.337	0.638		-0.009	0.993
Subjective Norm	0.723***	0.103	0.787	6.988	0.000
Computer Self-efficacy	0.148	0.212	0.071	0.701	0.485
Computer Anxiety	0.191***	0.050	0.328	3.852	0.000
R Square		(	).583		
Adjusted R Square	0		).567		
Durbin-Watson		1	1.612		
F value		37.	689***		

Source: Survey data (2021)

Notes: \*\*\* = Significant at 1% level, \*\* = Significant at 5% level, \* = Significant at 10% level

The coefficient of the subjective norm and computer anxiety are highly significant at 1 percent level and the coefficient of the computer self-efficacy is not significant. According to the results, two individual factors: subjective norm and computer anxiety have significantly positive effect on perceived usefulness of ERP software. It suggests that employee's belief about whether peers or top management approve or support to the

perception on ERP software is very important. Employee's willingness to use ERP software is depend on their certain manner and motivation to comply with the view of their peers and top management. Computer Anxiety is also important factor. Management should give the exposure to the use of computer and various software in the office. So that employee will not afraid to use new computer technology and software in the future.

According to the value of standard coefficient ( $\beta$ ), subjective norm is the largest contributing factor to create positive perceived usefulness of ERP software in Win Brothers Group of Companies, followed by computer anxiety. It means for successful implementation of ERP software, employee's belief as a result of social and environmental surroundings is more important than employee's computer anxiety or fears on advanced technology.

#### 4.1.4.2 Factors Influencing on Perceived Ease of Use

Three influencing factors of Perceived Ease of Use are analyzed by using multiple linear regression method. The output from generating multiple linear regression model is shown in Table (4.9). Dependent variable is Perceived Ease of Use and independent variable are Top Management Support and User Training.

Table (4.9) Influencing Factors on Perceived Ease of Use

Variable	Unstand Coeffi		β	t	Sig.		
	В	Std. Error					
(Constant)	-0.101	.986		-0.103	0.919		
Top Management Support	0.325**	.131	0.248	2.478	0.015		
User Training	0.714***	.196	0.364	3.641	0.000		
R Square	0.183						
Adjusted R Square		0.163					
Durbin-Watson		1.036					
F value	9.199**						

Source: Survey data (2021)

Notes: \*\*\* = Significant at 1% level, \*\* = Significant at 5% level, \* = Significant at 10% level

As shown in Table (4.9), since the value of the adjusted R square is 0.163, it can be interpreted that 16.3 percent of the variation of perceived ease of use can be explained by the top management support and user training. The value of F-test, the overall significance of the model, which is highly significant at 1 percent level, confirms the validity of the specified model. Moreover, the value of Durbin-Watson is 1.036, which is positive auto correlation between organizational factors and perceived ease of use.

The coefficient of the user training is highly significant at 1 percent level and the coefficient of the top management support is significant at 5 percent level. According to the results, user training has significantly positive effect on perceived ease of use of ERP software and then follow by top management support. It suggests that user training is very important for employees. Management should arrange regular training to the use of computer and various software in the office. So that employee will not afraid to use new computer technology and software in the future.

According to the value of standard coefficient ( $\beta$ ), user training is the largest contributing factor to create positive perceived ease of use of ERP software in Win Brothers Group of Companies, followed by top management support. It means for successful implementation of ERP software; user training can truly help the company and ensure maximum efficiency right from the start.

# 4.2 Analysis on Influencing Perceptions on User Performance in ERP Software in Win Brothers Group of Companies

In this study, structured questionnaires are used to find out on user performance at Win Brothers Group. Linear regression model is used to analyze the factors influencing user performance on ERP system at Win Brothers Group.

#### **4.2.1** User Performance

The seven questions used to ask the respondents focused to measure the User Performance on ERP. It was focused on the User Performance who are using ERP application which is measured by the accomplishment their work quickly because of ERP, positive impact on productivity, efficiency at work, enhance effectiveness in job, create new idea in job and achieving their job goals. The mean result of User Performance is show in Table (4.10).

Table (4.10) User Performance

Sr.No.	User Performance	Mean
1	Accomplish the work quickly	4.32
2	Positive impact productivity	4.09
3	Improves efficiency in work	4.27
4	Enhances my effectiveness in job	4.12
5	Create new ideas in job	4.14
6	Helps to achieve job goals	3.91
	Overall Mean	4.14

Source: Survey data (2021)

As the result of Table (4.10), "Accomplish the work quickly" have the highest mean value (4.32) and "Helps to achieve job goals" have the lowest mean value (3.91). This indicates that employees from Win Brothers Group of Companies are agree they can finish their task quickly by using ERP software. They also believed that ERP system have positive impact on their productivity and effectiveness in their job. The overall mean for user performance is (4.14) that described employees agree that ERP software have positive impact on their job performance. It can be concluded that ERP implementation in Win Brothers Group have positive impact on employee performance.

#### **4.2.2** Influencing Perception on User Performance

Three influencing factors of User Performance are analyzed by using multiple linear regression method. The output from generating multiple linear regression model is shown in Table (4.11). Dependent variable is User Performance and independent variable are perceived usefulness and perceived ease of use.

As shown in Table (4.11), since the value of the adjusted R square is 0.402, it can be interpreted that 40.2 percent of the variation of user performance can be explained by perceived usefulness and perceived ease of use. The value of F-test, the overall significance of the model, which is highly significant at 1 percent level, confirms the validity of the specified model. Moreover, the value of Durbin-Watson is 2.146, which is positive auto

correlation between user perceptions and user performance.

**Table (4.11) Influencing Factors on User Performance** 

Variable	Unstandardized Coefficients		β	t	Sig.		
	В	Std. Error					
(Constant)	1.521	0.376		4.051	0.000		
Perceived Usefulness	0.374***	0.086	0.451	4.346	0.000		
Perceived Ease of Use	0.282**	0.109	0.268	2.580	0.012		
R Square			0.416	,			
Adjusted R Square			0.402				
Durbin-Watson	2.146						
F value 29.			177***				

Source: Survey data (2021)

Notes: \*\*\* = Significant at 1% level, \*\* = Significant at 5% level, \* = Significant at 10% level

The coefficient of the perceived usefulness is highly significant at 1 percent level and the coefficient of the perceived ease of use is significant at 5 percent level. According to the results, user perceptions have significantly positive and direct effect on user performance from Win Brothers Group of Companies. It indicates that the increase in user perceptions lead to increase in user performance. If employees have positive attitude on ERP software which is useful and easy to use at their work, it will affect to their job performance. ERP software can directly and positively support to fulfill their job goals and they can do their work effectively.

According to the value of standard coefficient ( $\beta$ ), perceived usefulness is a larger contributing factor to increase user performance in Win Brothers Group of Companies, followed by perceived ease of use. It can be said that usefulness is very important when implementing the software for the company. They should pay attention to perceived usefulness by enhancing the efficiency and productivity of the system so that ERP users can easily realize the benefits that stem from using it. Moreover, top management and implementation team of ERP software need to consider about the degree of difficulty and ease of use for employees when implementing ERP software. ERP users who do not perceived the software as easy to use and useful tend to form unfavorable attitudes towards using the software.

#### **CHAPTER 5**

## **CONCLUSION**

This chapter presents the finding and discussion from analysis, suggestions and recommendations and need for further research. It explores individual and organizational factors on User Perception of ERP software and user performance at Win Brothers Group of Companies. Based on the findings, this study suggests and makes recommendation in order to get more success.

### 5.1 Findings and Discussions

While ERP implementations allow organizations to implement competitive strategies, not all projects have been successful, regardless of the significant investments that have been made. Since the early ERP project implementations in Win Brothers Group of Companies, there has been an increased experience and capability. However, ERP systems have proven to be overwhelming in many organizations. In addition, because of software and technology are changing so quickly with time, new risks and issues are presented. Furthermore, organizational learning leads to different perspectives on what critical success factors might be and where management emphasis needs to lie.

This study finds out the user perception of ERP software and its effect on user performance by surveying 85 ERP users from Win Brothers Group of Companies. This study indicates that both individual factors and organizational factors play an important role in the user perceptions of ERP software in Win Brother Group. Perceived usefulness is a larger contributing perception to increase user performance in Win Brothers Group of Companies, followed by perceived ease of use.

For the first objective, the study analyzes the individual factors and organizational factors affecting to perceived usefulness and perceived ease of use. Regarding to individual factors, computer self-efficacy had no direct effect on perceived usefulness of ERP system. Subjective norms and computer anxiety still remain predominant factors that can affect to perceived usefulness of ERP software. This result indicated that when peers and management believed in the benefit of using ERP software, employees are more like to use ERP software. ERP users with less computer anxiety may use the software more frequently. It is also found out that ERP users from Win Brothers Group have less computer anxiety and they are confident to use ERP software. Regarding to the organizational factors, user training is the largest

contributing factor to create positive perceived ease of use of ERP software in Win Brothers Group of Companies, followed by top management support.

Overall, it can be concluded that ERP users from Win Brothers Group of companies have more confident in using ERP system after they got training with skillful ERP software trainer. They still need top management support to encourage using ERP system by rewarding ERP users instead of making by force by management or mandatory usage of software. Management or decision makers should arrange regular training for ERP users.

For the second objective, the study examines the influencing perception on user performance on using ERP software. The perceived usefulness and perceived ease of use have the positive significant relationship with the user performance. Hence if organization increases perceived usefulness and perceived ease of use on ERP, the user performance of organization will be increased. The study found out that perceived usefulness is the most significant influencing factor affecting User Performance at Win Brothers Group of Companies. The most of employees believed that ERP system is useful for their daily operation and their productivity and efficiency at work are improved by using it. The employee felt that ERP system help them to create new ideas in work and achieve their job goal. Perceived ease of use is weak compare to perceived usefulness. The management or decision makers from Win Brothers Group of Companies should think about top management support to employees and the effectiveness of the user training. Top management should promote the ERP software in the organization and provide training to employees to familiar with ERP software.

## 5.2 Suggestions and Recommendations

According to the finding results, perceived usefulness and perceived ease of use of ERP system is the positive significant relationship with the user performance. Hence Win Brothers Group of Companies should emphasize to support employees to use ERP system and provide trainings to them because it makes employees more confident to interact with ERP system.

As per finding results of influencing factors on Perceived Usefulness of ERP, the findings are in line with previous studies which found that perceived usefulness was the most important determinant of ERP usage. The other factors having a statistically significant effect on perceived ease of use were top management support and user training. The management of Win Brothers Group of Companies should emphasize how to improve the perceived usefulness and perceived ease of use for their employees.

Management needs to understand employee's need and their perception on relative advantage to develop on user performance. It should be focused on the most important factors and system for the end. Management should implement ERP system that are usefulness and directly impact on individual and organizational performance.

Finding results show that management should emphasize for giving rewards who are champion or expert in using ERP system. The management should monitor carefully on employees' performance and select without personal feeling. And also, management should monitor the feedback from employee to analyze the employee perception on supporting. Managers need to provide a facilitated training where employees are encouraged to use new system by clarifying expectations and possible impact on employee job description and workload.

Conducting training with skillful trainer for employees in organization is good but it is not enough to improve the employee ERP system knowledge and skills. Manager need to pay special attention to provide more specific training and support during implementation and promote to use the systems. It will help to improve employee performance and productivity effectively.

#### 5.3 Needs for Further Research

This study focuses and emphasizes only on four influencing factors on User Performance of using ERP system. For future studies, it is suggested that to focus on the other factors affecting to ERP such as such as system quality, system adoption and people factors and more investigation about the governing factors such as budget and implementation.

This study has its limitations. In this research, it was investigated the factors influencing on User Perception of ERP in an organization but it only focused on Win Brothers Group of Companies. Therefore, the further study can also examine on other organization and others factors affecting to system user performance

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#### **APPENDIX I**

## **QUESTIONNAIRE SURVEY**

Research study on Factors Influencing User Perception of ERP Software in Win Brothers Group of Companies

## Dear Sir/Madam,

The purpose of this questionnaire is to collect user views on factors influencing User Preference of ERP Software in Win Brothers Group of Companies as part of my academic research study for the award of MBA at YIE. I appreciate your valued time in responding to the questions and assure you of confidentiality and privacy.

#### **Section A: General Information**

1.	Gender	
	☐ Male	☐ Female
2.	What is your age?	
	☐ Under 25 ☐ 26-30	$\square$ 31-45 $\square$ 46-50 $\square$ 51 and older
3.	What is your highest education	on level? (Tick as applicable)
	☐ High School ☐ D	Diploma / Certificate
	☐ Postgraduate degree	☐ Master degree
4.	Years of service/working peri	iod in this company? (Tick where applicable)
	☐ Below 5 years	☐ 6-10 years
	□ 11-15 years	☐ Above 15 years
5.	Please state your designation	level.
	☐ Senior Management	☐ Middle Management
	☐ Operational Management	

## APPENDIX I

Circle the Most suitable number to your opinion from the following scale.

1= Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

## **Section B: Individual Factors**

## 1. Subjective Norms

No.	Items	Scale				
1	My peers believe in the benefits of the ERP System	1	2	3	4	5
2	My management team believes in the benefits of the ERP System	1	2	3	4	5
3	Senior management strongly support my using the ERP system	1	2	3	4	5
4	I would like very much to use the ERP system because senior management thinks I should use it	1	2	3	4	5
5	My use of ERP system at work agrees with my values	1	2	3	4	5

# 2. Computer Self-efficacy

No.	Items		Scale			
1	I feel comfortable with ERP	1	2	3	4	5
2	I am confident of using the ERP even if there is no one around to show me how to do it	1	2	3	4	5
3	I am confident of using the ERP even if I have never used such a system before	1	2	3	4	5
4	I am confident of using the ERP as long as someone shows me how to do it	1	2	3	4	5
5	I am confident of using the ERP as long as I have a lot of time to complete the job for which the software is provided	1	2	3	4	5
6	I could complete a job using the ERP system if someone shows me how to do it first	1	2	3	4	5

# 3. Computer Anxiety

No.	Items	Scale				
1	Working with a computer makes me nervous	1	2	3	4	5
2	Computers make me feel uneasy	1	2	3	4	5
3	Computers make me feel uncomfortable	1	2	3	4	5
4	Computers scare me	1	2	3	4	5
5	I am not willing to use computer at work	1	2	3	4	5

## **Section C: Organizational Factors**

# 1. Top Management Support

No.	Items	Scale				
1	I felt that our management support to use ERP system	1	2	3	4	5
2	I felt that they were having highly intention to change	1	2	3	4	5
3	The company promoted the system before implementation	1	2	3	4	5
4	Our top management supported ERP implementation project well	1	2	3	4	5
5	The company provided training courses	1	2	3	4	5
6	Management reward employees who use ERP system to solve their problems	1	2	3	4	5

# 2. User Training

No.	Items	Scale				
1	The training provided to me was complete	1	2	3	4	5
2	The training gave me confidence in the system	1	2	3	4	5
3	The trainers were knowledgeable and aided me in my understanding of the system	1	2	3	4	5
4	The training on the operation of the ERP was sufficient	1	2	3	4	5
5	Overall, my level of understanding was substantially improved after going through the training program	1	2	3	4	5

# Section D: User Perceptions on ERP Software Perceived Usefulness

No.	Items	Scale				
1	Using the ERP system would allow me to accomplish my tasks more quickly	1	2	3	4	5
2	Using the ERP would improve my performance	1	2	3	4	5
3	Using the ERP would enhance my effectiveness in the work	1	2	3	4	5
4	Using the ERP would increase my productivity in the work	1	2	3	4	5
5	Using the ERP would make it easier to do my job	1	2	3	4	5
6	Using the ERP system enables me to access more relevant information	1	2	3	4	5
7	Overall, I find ERP useful in my work	1	2	3	4	5

## **Perceived Ease of Use**

No.	Items	Scale				
1	Learning to use the ERP is easy for me	1	2	3	4	5
2	I find it easy to get the ERP to do what I want it to do	2	3	4	5	
3	My interaction with ERP is clear and understandable	1	2	3	4	5
4	Getting the information from ERP is easy	1	2	3	4	5
5	It is easy for me to become skillful at using ERP	1	2	3	4	5
6	Overall, I find ERP easy to use	1	2	3	4	5

## **Section E: User Performance**

No.	Items	Scale				
1	I can accomplish my work quickly because of ERP system	1	2	3	4	5
2	ERP system has a positive impact on my productivity	1	2	3	4	5
3	ERP system improves my efficiency in my job	1	2	3	4	5
4	ERP system enhances my effectiveness in my job	1	2	3	4	5
5	ERP system helps me to create new ideas in my job	1	2	3	4	5
6	Overall ERP system helps me to achieve my job goals	1	2	3	4	5

## **APPENDIX II-1**

## Regression

Model Summary<sup>b</sup>

			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	Durbin-Watson
1	.763ª	.583	.567	.35257	1.612

- a. Predictors: (Constant), Computer Self-efficacy, Computer Anxiety, Subjective Norm
- b. Dependent Variable: Perceived Usefulness

#### $\textbf{ANOVA}^{\textbf{a}}$

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.054	3	4.685	37.689	.000 <sup>b</sup>
	Residual	10.069	81	.124		
	Total	24.123	84			

- a. Dependent Variable: Perceived Usefulness
- b. Predictors: (Constant), Computer Self-efficacy, Computer Anxiety, Subjective Norms

#### Coefficients<sup>a</sup>

		Unstandardized  Coefficients		Standardized Coefficients			Collinearity	Statistics
Model		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	006	.638		009	.993		
	SN	.723	.103	.787	6.988	.000	.407	2.460
	CA	.191	.050	.328	3.852	.000	.712	1.404
	CSE	.148	.212	.071	.701	.485	.497	2.011

a. Dependent Variable: Perceived Usefulness

## **APPENDIX II-2**

## Regression

Model Summary<sup>b</sup>

			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	Durbin-Watson
1	.428ª	.183	.163	.38575	1.036

- a. Predictors: (Constant), User Training, Top Management Support
- b. Dependent Variable: Perceived Ease of Use

**ANOVA**<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.738	2	1.369	9.199	.000 <sup>b</sup>
	Residual	12.202	82	.149		
	Total	14.939	84			

- a. Dependent Variable: Perceived Ease of Use
- b. Predictors: (Constant), User Training, Top Management Support

Coefficients<sup>a</sup>

	Comocina									
		Unstand Coeffi	lardized cients	Standardized Coefficients			Collinearity	Statistics		
Mode	el	В	Std. Error	Beta	t	Sig.	Tolerance	VIF		
1	(Constant)	101	.986		103	.919				
	TMS	.325	.131	.248	2.478	.015	.997	1.004		
	UT	.714	.196	.364	3.641	.000	.997	1.004		

a. Dependent Variable: Perceived Ease of Use

## **APPENDIX II-3**

## Regression

Model Summary<sup>b</sup>

			Model Gallinary		
			Adjusted R	Std. Error of the	
Model	R	R Square	Square	Estimate	Durbin-Watson
1	.645ª	.416	.402	.34355	2.146

a. Predictors: (Constant), PU, PEU

b. Dependent Variable: UP

**ANOVA**<sup>a</sup>

Mode	el	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6.887	2	3.444	29.177	.000 <sup>b</sup>
	Residual	9.678	82	.118		
	Total	16.565	84			

a. Dependent Variable: User Performance

b. Predictors: (Constant), Perceived Usefulness, Perceived Ease of Use

Coefficientsa

		Unstandardized Coefficients		Standardize d Coefficients			Collinearity	Statistics
Mode	el	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	1.521	.376		4.051	.000		1
	PEU	.282	.109	.268	2.580	.012	.661	1.512
	PU	.374	.086	.451	4.346	.000	.661	1.512

a. Dependent Variable: User Performance