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CUSTOMER SATISFACTION AND CONTINUANCE USE OF E-BILLING SERVICE

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CUSTOMER SATISFACTION AND CONTINUANCE USE OF E-BILLING SERVICE

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ABSTRACT

The primary objective of this study is to examine the various elements that have an impact on customer satisfaction and the continued usage of e-electric billing systems. The primary aims of this study are to investigate the many elements that influence customer happiness with e-electric billing payment services and to analyze the impact of customer satisfaction on the continued usage of these services. Both descriptive and quantitative research methodologies are employed. Both primary and secondary data are utilized in this study. A sample size of 377 clients utilizing the e-electric billing system was selected through the application of the simple random sampling method. The technique of multiple linear regression is utilized for the purpose of analyzing data. The study incorporates several criteria, namely e-service quality, service cost, perceived risk, and convenience of use. The research conducted revealed that consumer satisfaction is significantly influenced by three factors: e-service quality, perceived risk, and convenience of use. Among the key factors, ease of use has the greatest influence on customer satisfaction. Additionally, research has indicated that customer satisfaction has a favorable impact on the sustained utilization of e-electric billing systems. Based on the findings, it is recommended that e-billing service providers should incorporate support for prominent local tribal languages. Subsequently, users will experience enhanced ease of utilization. In the event of atypical system user behaviour, financial institutions ought to promptly notify users through security inquiries or the use of a One Time Password (OTP) mechanism. In conclusion, it is imperative for service providers to ensure the availability of a billing system that is accessible at all times, operating 24/7. Additionally, it is essential for them to offer a range of customer care channels, such as call centers, Viber, and message services, in order to cater to the diverse needs of their clientele.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER 1
INTRODUCTION

The advent of the digital revolution has facilitated the emergence and development of electronic payment systems. The advent of many technological advancements, such as e-banking, e-registration, e-shopping, e-payment, e-learning, e-library, and others, has given rise to a significant revolution. In recent years, there has been a notable surge in the adoption of e-payment systems, mostly attributed to the heightened utilization of internet-based financial services and online shopping platforms. E-payment refers to a system employed for the electronic or digital transfer of funds between two entities, such as a financial institution, corporation, governmental body, or individual client (Tan, 2004).

Electronic bill payment refers to a payment procedure wherein a consumer provides instructions to a financial institution for the electronic transfer of funds. E-bill services, often known as electronic bills, have revolutionized the process of bill payment by replacing the old method of cash payment at designated locations. This transition has resulted in reduced prices, time, and energy expenditure for customers. The implementation of electronic billing systems has facilitated user accessibility, as evidenced by the recent introduction of various applications and websites. These technological advancements aim to enhance convenience and expand the customer base by enabling users to utilize electronic billing services at their convenience and from any location.

The utilization of online banking services for bill payments facilitates time-saving opportunities for individuals, as it allows them to conveniently manage their financial transactions from the comfort of their homes or offices. Hence, individuals have the ability to circumvent lineups when making bill payments. In Myanmar, a significant number of residents opt to settle their power bills by providing gratuities to workers or neighbors. Occasionally, disputes may emerge. The utilization of electronic payment methods for bill settlement offers customers various advantages, including cost-effectiveness, expediency, and enhanced convenience, when compared to the traditional practice of writing, mailing, and reconciling paper checks.

Electronic bill payments offer several benefits for banks, including cost reduction in processing expenses and a decrease in paperwork, which in turn leads to enhanced client loyalty, among other perks. The efficacy of electronic payment systems is contingent upon the manner in which consumers perceive its security and privacy dimensions. The effective management of these aspects will subsequently influence the level of market confidence in the system. The impressions of customers are influenced by a multitude of elements, such as the price and quality of the service provided (Parasuraman et al., 2005).

The price of a product or service is a determinant that has an impact on the level of client satisfaction. The term "price" refers to the monetary value required for the exchange of goods and services. Furthermore, customers typically assess the potential risks associated with the utilization or acquisition of specific items or services. According to Peter and Ryan (1976), the concept of perceived risk can be conceptualized as the anticipated losses or unfavorable utility resulting from a purchase. The consideration of ease of use is a significant issue for clients when they decide to implement a new system. The concept of perceived ease of use refers to an individual's subjective assessment of the anticipated level of simplicity and little effort required to operate a specific technology (Kian et al., 2017).

In the past, customers would consider the level of service quality provided by e-billing systems when making decisions about which service providers to choose. Service quality can be conceptualized as an evaluative metric that assesses the extent to which a particular organization meets or exceeds customer expectations in the delivery of its services. As a result of the worldwide outbreak of COVID-19, a number of precautionary measures were enforced. Ensuring sustained utilization of the e-billing system post-pandemic is of paramount importance.

The concept of continuous utilization of information systems pertains to an individual's inclination to persistently employ or reutilize these systems subsequent to their initial use or acceptance. The phenomenon of consumers exhibiting continued usage of an information system bears resemblance to the behavior of repeatedly purchasing a product or service. The importance of customer satisfaction arises when a new system is used continuously. client satisfaction refers to the evaluative judgment made by a client regarding the perceived value derived from utilizing the E-electric billing service (Woodruff & Gardial, 1996).

The majority of individuals in Myanmar have shown a strong interest in utilizing the E-electric billing service. In Myanmar, various banking institutions have developed programs and mobile wallets such as OK Dollar and Wave Money to provide consumers with convenient billing services. The billing statements encompass various expenses such as meter charges, water fees, educational costs, internet charges, insurance premiums, and phone bill top-ups, among others. This study aims to examine the factors influencing the continued usage of the E-electric billing service in Myanmar, with the objective of promoting its adoption and utilization.

1.1 Rationale of the Study

Electronic payment systems are not merely a luxury, but rather a necessity for a nation to effectively integrate into the worldwide financial network, engage in market competition, and harness the benefits of globalization. Electronic payment systems enable individuals to conduct financial transactions by electronically transferring funds. These systems facilitate the seamless exchange of payments between parties, eliminating the need for physical currency or traditional paper-based methods. The prevalence of e-payment systems has significantly increased due to the emergence of online commerce. The primary aims of electronic payment system technology are facilitating prompt and efficient fund transfers, as well as empowering users to engage in cashless transactions. The e-billing system can be classified as a form of electronic payment system.

Myanmar is a developing nation that experiences significant impact from the transition of prevailing trends, as traditional physical transactions give way to digital transactions. The utilization of electronic billing, also known as e-billing, has become prevalent across several industries, encompassing financial service providers, telecommunication firms, and utilities.

Digital transactions are considered to be more secure compared to cash transactions due to the absence of potential threats such as theft or physical monetary loss. Digital transactions can be subject to traceability and monitoring, thereby aiding in the prevention of fraudulent activity. Consequently, authorities advocate for the promotion of electronic payment methods. The implementation of a cashless system in

society has the potential to mitigate the risk of disease transmission, such as the ongoing Covid-19 pandemic.

According to Baker (2020), customers prioritize the payment of their electric bills as the highest priority, followed by water, natural gas, internet, and mobile phone bills. Historically, individuals in Myanmar were required to physically visit the appropriate administrative office in order to settle their utility bills, a process that often entailed enduring extended periods of waiting in queues. Due to the ongoing Covid-19 pandemic and the accompanying lengthy queues observed at electric utility offices for payment processing, there has been a notable surge in public enthusiasm towards the use of electronic billing systems. The utilization of e-billing services has the ability to mitigate the risk of viral infections and streamline the process of waiting at physical electric offices, thereby saving valuable time. The expeditious settlement of utility bill payments can be facilitated through the utilization of QR Code scanning, hence obviating the necessity for clients to manually input any information.

Customer impressions are influenced by a multitude of factors, which encompass elements such as the price and quality of the service provided. However, individuals occasionally express dissatisfaction with the electric e-billing service due to experiencing power outages from the YESC (Yardley Electric Supply Company) as a result of non-payment, although having already settled their bills. The potential risks associated with this situation arise from a discrepancy between the service quality provided and the consumers' expectations. In the event that customers are dissatisfied with the services provided, they are likely to discontinue their utilization of those services and refrain from endorsing the associated products or services to others. In order to maintain competitiveness within the market, companies must possess a comprehensive understanding of the essential ideas of service quality and customer happiness. In the event that clients are dissatisfied with the quality of service, they are likely to discontinue its utilization. Hence, it is imperative to do an analysis of the service quality offered by e-billing service providers.

The measurement and optimization of customer satisfaction play a crucial role in the establishment and sustenance of enduring customer relationships (Birgelen et al., 2006). Customer satisfaction refers to the comprehensive assessment made by customers regarding the quality of services and products, which plays a significant role in customer retention across many industries (Gustafson et al., 2005). Nevertheless,

there are individuals who opt out of utilizing the electronic invoicing system due to their preference for physical paper receipts. Furthermore, several banking programs are incapable of facilitating bill payments for accounts that are in arrears. The e-billing technology allows for the processing of one meter bill at a time. Therefore, clients are required to bear the expenses associated with each bill payment, even when they have the option to pay for multiple meter bills at the electric office.

In order to adhere to Covid-19 regulations and further the development of a cashless society, it is imperative that individuals persist in utilizing the electronic billing system. Digital transactions offer enhanced convenience for both customers and businesses, while the adoption of a cashless system has the potential to significantly reduce various illegal activities. Numerous service providers, including financial institutions such as banks, extend electronic billing services to customers, thereby presenting a wide array of options for the payment of utility bills. Nevertheless, there exists a subset of individuals who have discontinued their utilization of the e-electric billing system. Determining the parameters that influence customer satisfaction and the sustained utilization of e-electric billing payment systems is of utmost importance. Hence, this research examines the various aspects that exert influence on customer satisfaction and the continued usage of e-electric billing payment services.

1.2 Objective of the Study

The main objectives of this study are:

1. To examine the influencing factors on customer satisfaction towards e-electric billing payment services
2. To analyze the effect of customer satisfaction on continuance use of e-electric billing payment services

1.3 Scope and Method of the Study

The scope of this study is limited to examining the elements that influence customer satisfaction and the continued usage of e-electric billing systems.

Both descriptive and quantitative research methodologies are utilized. Both primary and secondary data are utilized in the research process. The sample size for the

study was determined using Cochran's (1977) sampling formula for an unknown population. The computation was conducted with a 95% confidence interval, resulting in a sample size of 385 e-electric billing subscribers. Out of the total sample, a total of 377 participants provided their responses. A structured questionnaire on a 5-point Likert scale is employed to gather primary data. The Google Form platform is utilized for the purpose of gathering survey data through an online medium. Secondary data refers to a collection of information resources that have been previously researched and documented. These resources may include research papers, electronic services provided by banks, textbooks, websites, and other relevant sources of information obtained from banks.

1.4 Organization of the Study

This research has five distinct chapters. Chapter one provides an overview of the study, encompassing the rationale, objectives, scope, methodology, and organization of the article. Chapter two encompasses the theoretical underpinnings of service quality, marketing mix, prior research, and the conceptual framework employed in this study. Chapter three of the study introduces the topic of E-electric Billing Services in Myanmar. In Chapter four, an analysis is presented about the various elements that influence customer satisfaction and the continued usage of e-electric billing services. Chapter five of the document provides a comprehensive account of the research findings, subsequent discussions, proposed proposals, recommendations, and underscores the imperative for further investigation.

CHAPTER 2
LITERATURE REVIEW

This chapter introduces several relevant ideas, including the electronic service quality model, the service marketing mix (7Ps), the theory of planned behavior, and the expectation confirmation model. Furthermore, this study also considers several relevant aspects, including E-service quality, service cost, perceived risk, and convenience of use. The subsequent section of the paper provides an overview of the prior research conducted in the field, as well as the conceptual framework around which this study is built.

2.1 Customer Satisfaction

Customer satisfaction is a fundamental element of business methodology that plays a crucial role in assessing service performance. Customer satisfaction can be defined as the assessment made by customers regarding a product or service, specifically in terms of how well it meets their requirements and expectations (Alan et al., 2012).According to Bitner (1990), the effectiveness of a service is directly linked to its ability to promptly and directly influence customer satisfaction. Therefore, it is crucial to encourage staff members to provide the appropriate service to the intended recipients within a reasonable timeframe, while demonstrating exemplary behavior (Bitner, 1990).

Customer satisfaction refers to the emotional response experienced by individuals while evaluating the performance outcomes of a product, as compared to their initial expectations (Kotler, 2019). The measurement or criterion for assessing Customer Satisfaction is determined by whether the performance falls below, meets, or exceeds the expectations of customers. If the performance is below expectations, customers are dissatisfied. If the performance meets expectations, customers are satisfied. If the performance exceeds expectations, customers are highly satisfied or happy (Kotler, 2019).Customer satisfaction is a subjective evaluation that is determined by the level of experience acquired. Satisfaction refers to the evaluation of the attributes or benefits associated with a particular product or service, including the product itself, which contributes to the degree of consumer gratification in terms of fulfilling their

consumption requirements. Customer satisfaction can be assessed and measured by considering various dimensions or indicators, such as quality, service, and value. According to Sugeng (2016), a crucial factor in cultivating client loyalty is the provision of substantial customer value. Customer satisfaction refers to the reaction of customers when evaluating the perceived disparities between their initial expectations prior to purchasing a product (or other performance standards) and the actual performance of the product as experienced after using or consuming it. According to Tjiptono (2019), Extensive research has been conducted on the topic of customer satisfaction by past scholars, as evidenced by the study conducted by Afriliana et al. in 2018.

2.2 Related Theories

This section presents the related theories of the study. There are four main theories applied in this study. Those theories include Electronic Service Quality (E-S-QUAL), Service Marketing Mix (7Ps), The Theory of Planned Behavior, and the Expectation Confirmation Model (ECM).

2.2.1 Electronic Service Quality Model (E-S-QUAL)

According to Parasuraman et al. (2005), e-service quality refers to the utilization of a website to enhance consumer engagement in various activities such as shopping, purchasing, and the distribution of products and services. This approach aims to improve the effectiveness and efficiency of these processes. In accordance with Amin's (2016) research, the concept of e-service quality pertains to the perception of customers regarding the quality of services provided through websites or online platforms, distinguishing it from the conventional service quality.

According to the definition provided by Colby and Parasuraman (2003), e-services refer to services that are offered over an electronic medium, typically the internet, and involve transactions that are initiated and predominantly controlled by the client. E-services exhibit a distinct contrast to conventional services as they involve client interactions with organizations primarily through web-based platforms, relying predominantly on visual and auditory stimuli. In contrast, traditional services engage customers through a multi-sensory experience encompassing all senses (Rowley, 2006). The perception of service quality in online environments varies from that in traditional settings due to divergent attitudes towards technology, resulting in distinct patterns of technology acceptance and usage (Parasuraman et al., 2005).

The present study is based on E-S-QUAL, a framework developed by Parasuraman et al. (2005). This framework offers a more comprehensive approach as it enables the measurement of both pre- and post-e-service quality characteristics. Additionally, the E-S-QUAL dimensions were derived from the analysis of data collected from knowledgeable respondents who possessed significant experience in the realm of online purchasing.

According to Kim et al. (2006), the E-S-QUAL framework offers a more comprehensive and accurate depiction of e-service quality. The E-S-QUAL model encompasses four distinct dimensions. The four key factors under consideration are efficiency, fulfillment, system availability, and privacy.

Efficiency refers to the level of convenience and swiftness in terms of accessing and utilizing the website. Efficiency holds significant importance in the realm of e-commerce because to the widely acknowledged factors of convenience and time-saving, which are commonly seen as the primary motivations for engaging in online shopping (Ranganathan & Ganapathy, 2002).

Fulfillment pertains to the degree to which the website's commitments about the delivery of orders and the availability of items are upheld. The assessment of an online shop's quality is heavily influenced by the degree of fulfillment it provides. This is because the fulfillment of service promises and the accurate execution of orders are integral components of service quality that directly impact consumer happiness or discontent (Yang & Fang, 2004).

System availability refers to the accurate and reliable operation of the website's technological components. When consumers engage in online shopping or browsing activities, encountering functional issues such as non-responsive buttons or broken links can result in customer dissatisfaction and prompt them to leave the website. Consequently, the store forfeits the chance to augment client loyalty (Wachter, 2002).

Privacy refers to the extent to which a website ensures the safety and security of consumer information. A significant portion of the population is hesitant to engage in online purchasing due to concerns around the potential misuse of their personal information. There is an increasing recognition among online sellers regarding the significance of ensuring consumer privacy (Ranganathan & Ganapathy, 2002). The impact of privacy on several aspects of consumer behavior, such as purchase intention, customer satisfaction, and overall website quality, has been extensively demonstrated in prior research (Yoo & Donthu, 2001).

2.2.2 Pricing Strategy

According to Kotler and Armstrong (2008), price refers to the monetary value assigned to a commodity or service. In a broader context, price refers to the aggregate of all the sacrifices made by a consumer in exchange for the advantages derived from the possession or utilization of a particular product or service. According to Pride (1991), the concept of pricing can be defined as the valuation assigned to a particular item or service throughout the process of exchange. The strategic implementation of pricing strategies can yield both immediate and sustained competitive benefits through the enhancement of profitability and customer satisfaction.

The determination of prices plays a crucial role in the formulation of the marketing mix. The negative impact of an improperly adjusted service price might result in decreased sales and ultimately contribute to the failure of the product. Cetina and Mihail (2008) have identified six distinct pricing techniques within the banking industry. The following items are included: The cost plus technique involves the bank's calculation of the production costs associated with providing a service, followed by the addition of a predetermined profit margin. The practice of setting high prices for skimming is commonly observed in the context of distinctive or high-end products. The pursuit of innovative and high-quality services is often associated with leveraging product introductions to optimize profitability. This includes adopting a competitive pricing strategy, which involves considering the pricing strategies employed by other market competitors.

Furthermore, the determination of market-dependent prices is contingent upon the prevailing price of a comparable product that is already present in the market. The value-based pricing strategy is predicated on assessing the customer's perception of the product's value, specifically addressing the inquiry of "What amount would a customer be willing to remunerate for this product?" Penetration pricing refers to the strategic approach employed by a bank, wherein it establishes comparatively lower prices in order to secure a competitive advantage, infiltrate the market, and subsequently augment its market share.

2.2.3 Theory of Planned Behavior

According to Ajzen (1991), the Theory of Planned Behavior (TPB) posits that behavioral intentions, which are influenced by an individual's attitude towards a

behavior, subjective norms surrounding the behavior, and perceived control over the behavior, play a significant role in predicting planned behaviors. Ajzen's theory has been widely employed in the prediction of various behaviors (Martin et al., 2010).

The Theory of Planned conduct (TPB) is a widely utilized conceptual framework that has been extensively employed to analyze many types of intended conduct. Moreover, the aforementioned hypothesis has been utilized in the field of technology adoption study. The determination of behavioral intention, as proposed by Ajzen (1991), is based on three key factors: attitude, subjective standards, and perceived behavioral control, as outlined in the Theory of Planned Behavior (TPB).

2.2.4 Expectation Confirmation Model (ECM)

The Expectation-Confirmation Model of IT Continuance, as developed by Bhattacherjee (2001), draws its theoretical foundations from the Theory of Planned Behavior and the Technology Acceptance Theory (Ajzen & Fishbein, 1980). These two ideas primarily center on the motives that drive consumers to initially adopt a new technology, as opposed to the factors that influence their ongoing usage of this technology. The Extended Continuance Model (ECM) examines the relationship between an individual's pre- and post-adoption perceptions and their perceptions of perceived usefulness, contentment, and continuance intention (Bhattacherjee, 2001).

The Expectation-Confirmation Model has been later employed in numerous research examining the intention to continue using information technology and consumers' decisions to make repeat purchases. The present research examines the factors that influence an individual's intention to continue using information technology (IT). Specifically, three variables are considered: the degree to which the user's expectations are confirmed, the post-adoption expectations in terms of perceived usefulness, and the user's level of pleasure. Bhattacherjee (year) examined the alignment between individuals' ongoing decisions to use information technology (IT) and consumers' intentions to make repeat purchases. In the context of the IT literature, Bhattacherjee proposed the application of the ECM (Elaboration Continuance Model) to elucidate the concept of customers' intention to continue using a particular product or service.

The Electronic Customer Management (ECM) has been extensively employed in the examination of postadoption behavior within several online purchasing service contexts, as documented by Limayem and Cheung (2008). In their study, Liao et al.

(2009) formulated an integrated model that aimed to forecast and elucidate an individual's sustained utilization of information technology (IT) within the realm of online buying services. This model was produced by using the notion of the Expectation-Confirmation Model (ECM). The researchers proposed that the customer's intention to continue using an e-service is primarily influenced by their level of satisfaction, and is also influenced by their perception of the service's utility.

2.3 Influencing Factors

There are many factors that could influence on the customer satisfaction. By identifying those influencing factors businesses can make strategic plans to attractive more customers and find the way to satisfy the customers.

(a) E-Service Quality

E-service quality refers to the utilization of a website to enhance consumer engagement in various activities like as shopping, purchasing, and the distribution of products and services. This approach aims to improve the effectiveness and efficiency of these processes (Parasuraman, Zeithaml, & Malhotra, 2005). According to Amin (2016), the concept of E-Service quality pertains to the perception of customers regarding the quality of services provided through websites or online platforms, which differs from the conventional service quality. According to Tjiptono and Chandra (2019), the concept of e-service quality entails a comprehensive evaluation of service quality in relation to website-based service delivery, with the aim of enhancing the quality of electronic services within an organization. Based on the aforementioned explanations provided by the experts, it can be inferred that e-service quality pertains to the evaluation of the quality of services delivered by electronic means, specifically over the internet, encompassing aspects such as online transactions and the provision of products or services.

Parasuraman et al. (2005) established a framework with seven distinct variables for evaluating consumer perception of e-service quality. Efficiency refers to the level of convenience and swiftness experienced by users when accessing and utilizing a website. Reliability refers to the state of technical functionality exhibited by a website, namely its ability to operate in accordance with its intended purpose. Fulfillment pertains to the degree to which the website effectively delivers on its commitment to delivery and ensuring the availability of items. Privacy ensures the safeguarding of

users' personal data as promised by the website's security measures. Responsiveness pertains to the capacity of an institution to deliver prompt and high-quality service within a given timeframe. The concept of compensation refers to the degree to which the website provides reparation or restitution to its clients in response to a problem or issue. Contact refers to the provision of support and assistance through telephonic or online means by staff members.The prevalence of e-service practices has witnessed a significant rise since the turn of the millennium.

The emergence of the notion of "e-service" can be attributed to the proliferation of the internet and its utilization in the realm of business. According to Fassnacht and Koese (2006), digital services refer to the provision of services through information and communication technologies, wherein the consumer's interaction is limited to the user interface. The provision of these digital services presents advantages for both businesses and consumers. According to La and Kandampully (2002), the utilization of technology facilitates the implementation of a uniform service delivery system, leading to decreased labor expenses, expanded delivery alternatives, and enhanced productivity and convenience for both employees and clients. Nevertheless, the integration of technology can also give rise to apprehensions regarding privacy, secrecy, and the reception of unwelcome communications (Bitner et al., 2000). Several research have conducted analyses on the determinants of utilizing a self-service technology (SST). One example of influential constructs that shape an individual's attitude towards a technology is the significance of simplicity of use and utility (Davis, 1989).

Curran and Meuter (2005) put out a theoretical framework consisting of four antecedents that influence attitudes: ease of use, usefulness, risk, and desire for interaction. Dabholkar (1996) also identified control and waiting time as significant factors influencing the adoption of self-service technologies (SSTs). In a more recent study conducted by Belanche, Casaló, and Flavián (2011), it was posited that the utilization of online services is contingent upon factors such as the perceived utility, attitude towards usage, and perceived control. When making a decision on the utilization of a self-service technology (SST), consumers will evaluate the many benefits and drawbacks associated with its usage. The internet has emerged as a prominent form of synchronous and asynchronous communication, sometimes referred to as a primary type of Socially Shared Text (SST).

(b) Service Cost

According to Kotler and Armstrong (2014), the price-ceiling for a company's goods or services is determined by the perception of their value, whereas the price-floor is determined by the cost associated with producing them. The fundamental purpose for the majority of organizations when determining prices is to recoup input expenses and then generate a profit. Consequently, consumers are obligated to remunerate the predetermined price as compensation for the overall advantages derived from the purchased goods or services, so enabling the seller to recuperate input expenses and generate a profit (Kramer, 2011). In order for customers to perceive services as providing good value for money, it is imperative that they encounter a high level of quality in the service obtained. The perceived value has been defined as the disparity between the overall benefits and costs associated with a particular service (Kotler et al., 2012).

The concept of total benefit has been previously defined by Lee and Cunningham (2001) to encompass three dimensions. Firstly, economic benefit refers to the advantage gained from paying a lower price compared to alternative options. Secondly, functional benefit pertains to the satisfaction derived from the service's effective performance in meeting the desired need. Lastly, psychological benefit refers to the positive emotional experience and sense of contentment that follows a service encounter.In their study, Bolton and Drew (1991) identified four distinct dimensions of total cost. These dimensions encompass economic or monetary cost, time cost, human energy cost, and psychological cost. Economic or monetary cost refers to the price paid for acquiring, using, maintaining, and disposing of goods or services.

Time cost pertains to the duration of time spent on activities such as searching, evaluating, and acquiring the product or service. Human energy cost encompasses the effort exerted by individuals in the process of acquiring and utilizing the product or service. Lastly, psychological cost relates to the customer's perception of risk or uncertainty, stemming from the possibility that the service outcome may fall short of expectations and result in dissatisfaction. Akin and Platt (2013) have extended the concept of economic cost by incorporating the expenses associated with searching for and assessing other options prior to making a purchasing choice. The customers' sense of value for the goods or services utilized is positively correlated with the perceived total benefits outweighing the perceived total expenses.

(c) Perceived Risk

According to Qalati et al. (2021), perceived risk can be understood as the evaluation or perception made by customers regarding potential bad outcomes, consequences, or uncertain outcomes that may arise from their purchase of products or services, or engagement in transactions. Furthermore, Tho et al. (2017) provided a definition of perceived risk as the belief regarding the potential adverse or uncertain outcomes arising from an online service transaction. The authors characterized the perceived risk as the potential for either a positive or negative outcome, without taking into account factors such as positioning, advertising, brand image, and value added in the relationship between the trustor and the trustee.

According to Wu et al. (2011), perceived risk can be understood as a subjective form of loss that arises when consumers engage in the purchase of a product or service. This risk is characterized by the inability of customers to fully evaluate the potential benefits and drawbacks of their purchase decision, as well as the uncertain or questionable outcomes that may result from such an assessment. Furthermore, due to the inherent uncertainty of their psychological states, customers are unable to accurately anticipate the outcomes of their purchasing choices (Ashraf et al., 2018).

The level of customer happiness is influenced by the perceived risk, leading to ambiguity among customers. According to Zhong and Moon (2020), individuals may experience a lack of satisfaction prior to making a purchase of a product or service. The authors suggest that perceived risk encompasses various dimensions, such as financial, performance, social, psychological, physical, and time-related concerns.Financial risk pertains to the potential monetary loss incurred following a purchase, with payment security serving as a crucial determinant in the decision-making process of engaging in e-commerce transactions.

Ahmadinejad et al. (2014) categorized the perceived danger among customers into five distinct groups. 1) Financial risk refers to the potential for monetary loss or excessive expenditure incurred in the acquisition of goods or services. 2) Performance risk arises when the acquired items or services fail to meet the anticipated standards of quality. Social risk refers to the potential negative impact on a customer's image and status that may arise from the acquisition of a product or service. This risk entails the possibility that the acquired product or service could harm the customer's image and

social standing. 4) Physical risk refers to the potential harm or health issues that may arise as a consequence of purchasing or utilizing a particular product or service. 5) Psychological risk pertains to the customer's attitudes and emotions that may be influenced following the acquisition of products or services.

Perceived risk is a commonly employed measure in academic research to forecast purchasing behavior within the realm of e-commerce (Akiyama et al., 2021). The incorporation of this element has emerged as an essential component in various research endeavors, particularly those focused on the field of electronic commerce. Studies on computer security and fraud have revealed that online customers commonly encounter several hazards, including malware viruses, service cancellations, data loss, data transfers, and poor system configuration.

(d) Ease of Use

In a general sense, the concept of ease of use pertains to the degree to which comprehending, acquiring proficiency in, and utilizing a particular system or technology is devoid of both physical and cognitive exertion (Davis, 1989). The concept of ease of use can also be seen as the consumer's subjective evaluation of a product, particularly in terms of its learnability, usability, and ability to alleviate cognitive load and enhance satisfaction. The simplicity of use of a mobile application, encompassing the clarity of functionalities and ease of navigation, is considered a crucial quality feature (Grossman et al., 2018). This attribute is vital for the survival and successful operation of e-commerce retailing. This characteristic pertains to the patterns of consumer behavior in online buying.

If a mobile application fails to effectively deliver its primary business content or address consumer inquiries, it may result in user attrition due to the challenges encountered in locating desired information. Furthermore, if the human-computer interface of a mobile app is not sufficiently user-friendly, users are likely to divert their focus towards alternative applications. Therefore, it is imperative to assess the usability of mobile applications in the context of e-commerce retail. The measurement of mobile app usability serves as both an intuitive indicator for customers and a crucial point of reference for designers aiming to enhance device design (Tandon et al., 2016).

2.4 Continuous Intention

The dependent variable of the proposed model is continuance intention (CI), which pertains to users' intention to continue utilizing m-government, as defined by Bhattacherjee (2001). According to Bhattacherjee (2001), satisfaction is the primary factor influencing continuance intention, which afterwards serves as the principal measure of m-government success. Enhancing comprehension of continuous intention has the potential to enhance the probability of attaining sustainable development. Continuance intention refers to the user's inclination to persist in using a particular technology over an extended period of time, with the aim of ensuring that the technology represents an improvement over its predecessor (Santhanamery & Ramayah, 2013).

According to Kim et al. (2011), there has been a lack of emphasis on the concept of IS continuity in the field of Information Systems (IS) research, compared to the attention given to IS acceptance and adoption. Furthermore, the majority of research on IS continuance has been focused on the first stages of IS acceptance and adoption. Continuance behavior refers to the ongoing perspective of individuals who have adopted information systems, with the decision to continue usage strongly aligned with their initial decision to adopt (Lin, 2012). The long-term viability of an information system (IS) is contingent upon its sustained utilization, rather than solely relying on its initial adoption by the user.

The concept of continuance intention refers to the extent to which an individual who is presently utilizing a mobile phone for the purpose of purchasing products or services has formed deliberate intentions to persist in using it in the forthcoming period (Setterstrom et al., 2013). The determination of consumers' intentions to continue using a product or service is influenced by their level of satisfaction with previous usage experiences. This relationship has been supported by earlier research conducted by Chen et al. (2012).

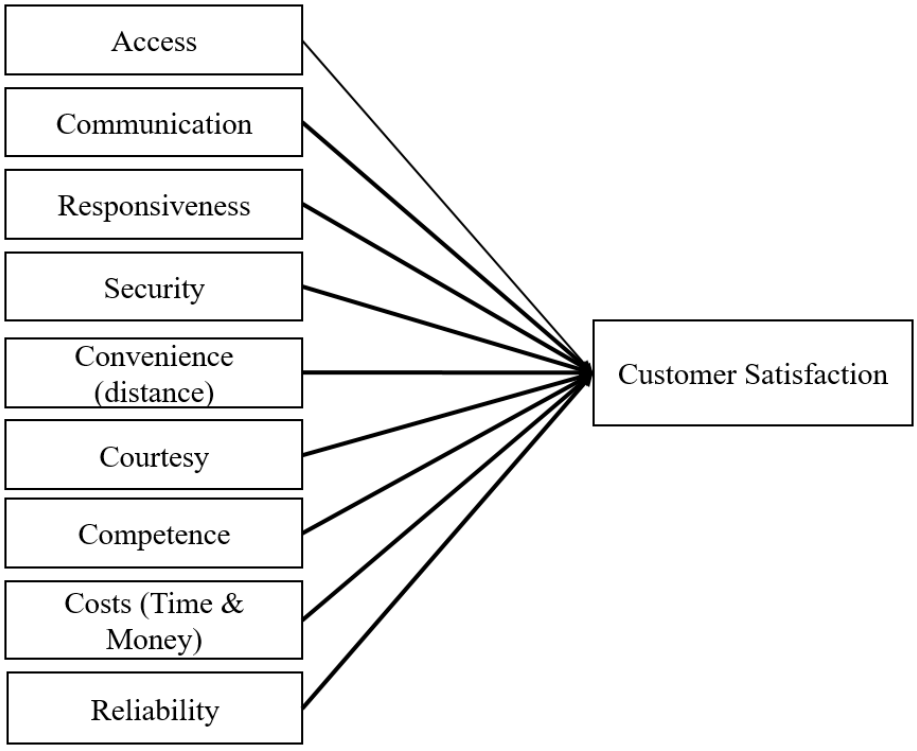
2.5 Previous Studies

Prior research offers valuable insights into recent findings, as well as the complexities and obstacles experienced during the study process. This study examines five prior studies pertaining to the relationship between customer satisfaction and the intention to continue using a product or service.

In a study conducted by Stanley (2015), an assessment was made on the level of customer satisfaction about the conventional billing method for electricity in Tanzania, specifically focusing on the TANESCO Ilala region. The study employed a questionnaire as the primary instrument for data collection, gathering responses from a total of 242 participants. The collected data was subjected to descriptive analysis using the Statistical Package for the Social Sciences (SPSS) software. The researcher employed the Disconfirmation Theory and the Service Quality Theory (SERVQUAL) in his study.

Stanley conducted an analysis to examine the impact of many independent variables on customer satisfaction. These variables include access, communication, responsiveness, security, convenience, courtesy, competence, costs, and reliability. The researcher presents the conceptual structure of the study in Figure 2.1.

Figure (2.1) Conceptual Framework of Customer Satisfaction on Electricity Conventional Billing System



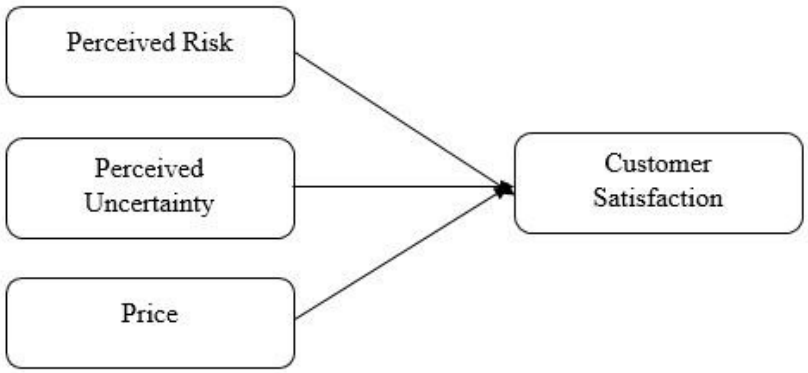
Source: Stanley, 2015

According to the findings of the study, it was determined that the responsibility of reading electric meters was assigned to the employees of TANESCO. Additionally, it was discovered that certain instances existed where electric meters were not read

with complete accuracy, despite the majority of consumers expressing satisfaction with the findings of meter reading. Additionally, the research revealed that a majority of customers did not exhibit lower levels of electricity usage. It has been observed that many customers express dissatisfaction with the services provided by TANESCO, despite their consistent payment of bills. Moreover, it has been determined that the primary obstacles of the traditional billing system are the extensive travel required to reach energy pay stations and the significant amount of time clients spend in paying their electric bills.

Rao (2021) has presented a conceptual framework in this study, which outlines the antecedents and effects of online consumer happiness. The empirical evidence provided in the study supports the validity of this model. During the period of Smart Lockdown imposed in response to the COVID-19 pandemic, a total of 800 respondents were surveyed to examine the disparities between perceived and actual, as well as direct and indirect e-commerce platforms. Confirmatory factor analysis (CFA) was employed to assess the validity of the dataset. The researchers employed the structural equation modeling technique in order to evaluate and validate the hypothesis. The researcher presents the conceptual framework of his investigation in Figure 2.2.

Figure (2.2) Conceptual Framework of Online Consumer Satisfaction

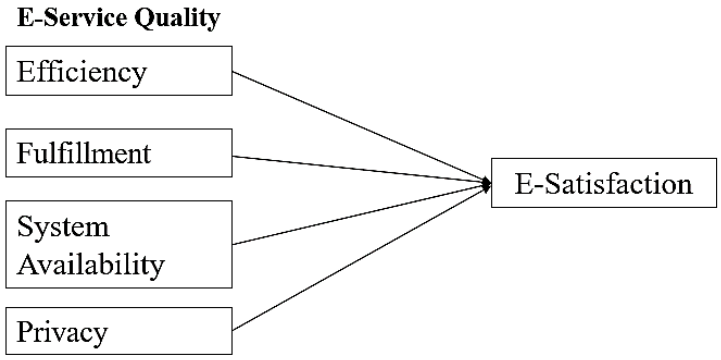


Source: Rao, 2021

Based on the data presented in Figure 2.2, it can be observed that there are three distinct independent variables, namely perceived risk, perceived uncertainty, and price. In a study conducted by Rao (2021), an analysis was performed on the variables that have the potential to influence consumer satisfaction. The results of the study revealed that all variables exert a significant influence on customer satisfaction in the context of online retail establishments.

The investigation conducted by Mujinga (2020) focused on examining customers' views of electronic service quality in South Africa. This study presents the results derived from an analysis of quantitative data collected from a sample of 184 individuals who are clients of online banking services. The data was assessed using the ES-QUAL measurement scale. The conceptual framework of Mujinga (2020) is depicted in Figure 2.3.

Figure (2.3) Conceptual Framework of Electronic Service Quality

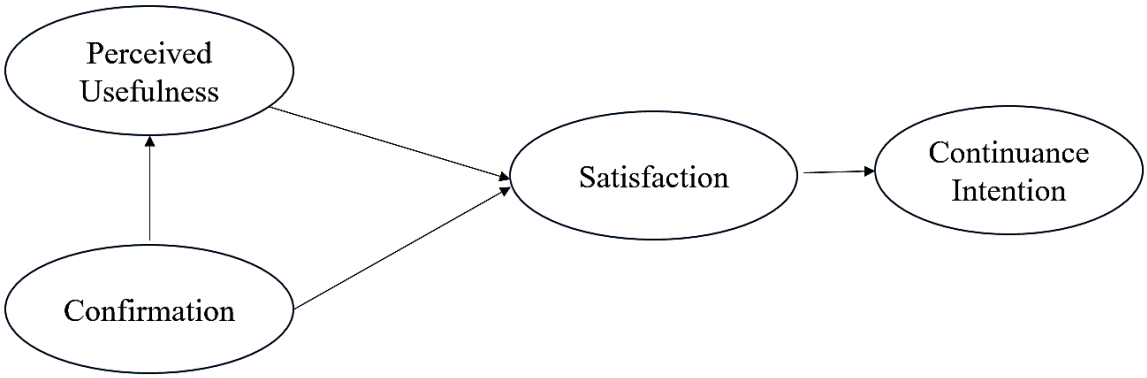


Source: Mujinga (2020)

The findings indicated that the service quality provided by banks aligns with the expectations of customers. According to the findings of Mujinga (2020), all aspects of service quality have an impact on the e-satisfaction of customers in the context of online banking. However, it was observed that efficiency emerged as the most relevant element among these dimensions.

In his study, Bhattacherjee (2001) investigated the impact of cognitive beliefs and affect on individuals' intention to continue using information systems (IS). The theory of expectation confirmation is derived from the existing body of consumer behavior literature and combined with theoretical and empirical insights from previous research on information systems (IS) usage. This integration serves as the foundation for developing a model of IS continuity. The study sample comprised 1,000 online customers who were picked randomly by OBD from its customer base, which consisted of more than 1 million people. The conceptual framework proposed by Bhattacherjee (2001) is visually depicted in Figure 2.4.

Figure (2.4) Conceptual Framework of Intention to Continue Using Information Systems (IS)

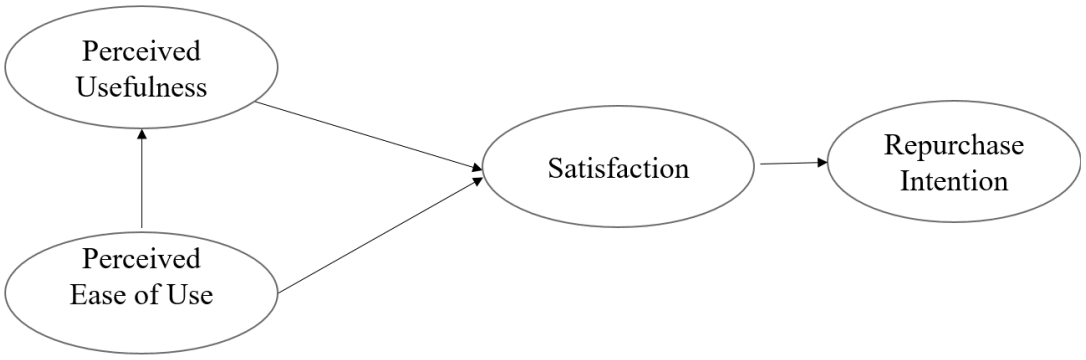


Source: Bhattacherjee (2001)

According to Bhattacherjee (2001), the determination of users' desire to continue using an information system (IS) is influenced by their satisfaction with the usage of the IS and their perception of the usefulness of continuous IS use. The satisfaction of users is, in turn, determined by their confirmation of expectations derived from previous information system (IS) usage and their perception of the usefulness of the system. The apparent value of a post-acceptance stage is influenced by the involvement of Ron Weber, who served as the senior editor responsible for admitting the manuscript. The level of confirmation exhibited by users.

In their study, Jayantari et al. (2021) conducted an analysis on the impact of perceived usefulness, perceived simplicity of use, and consumer satisfaction on repurchase intention of digital wallet service, specifically focusing on e-wallets. The study employed a purposive sampling strategy to select a sample size of 120 respondents. The conceptual framework proposed by Jayantari et al. (2021) is visually depicted in Figure 2.5.

Figure (2.5) Conceptual Framework of Consumer Satisfaction on Repurchase Intention



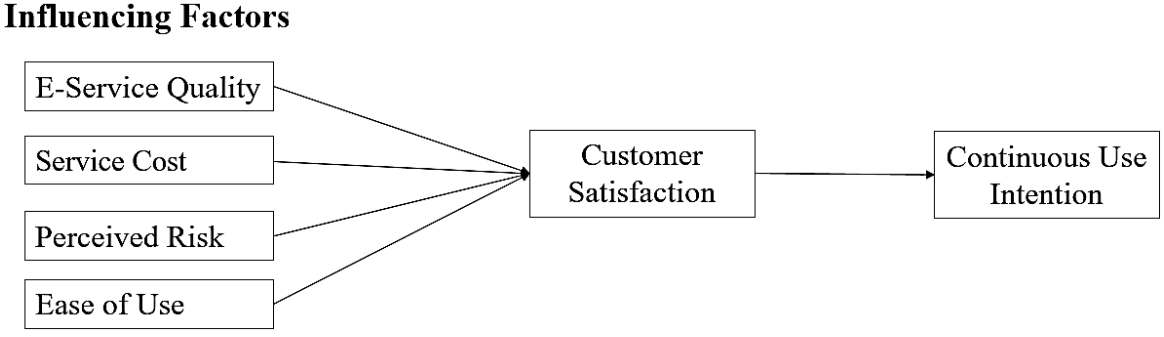
Source: Jayantari et al. (2021)

Jayantari et al. (2021) found that perceived usefulness, perceived ease of use and satisfaction have a positive and significant effect on intention to repurchase. In addition, the role of satisfaction also partially mediates the effect of perceived usefulness and perceived ease of use on intention to repurchase. So it can be said that perceived usefulness and perceived ease of use increase the creation of satisfaction which affects the intention to repurchase.

2.6 Conceptual Framework of the Study

This section presents the conceptual framework of the study by referring theoretical background and conceptual framework of the study. The conceptual framework of the study is presented in Figure (2.6).

Figure (2.6) Conceptual Framework of the Study



Source: Own Compilation, 2023

Based on the data presented in Figure 2.6, it can be observed that there are four distinct aspects that exert influence, namely e-service quality, service cost, perceived risk, and convenience of use. The concept of e-service quality has been derived from the research conducted by Mujinga (2020). The importance of electronic service quality in the context of online billing systems has grown significantly, as users increasingly prioritize the need for dependable and expeditious service. The study conducted by Rao (2021) provides the basis for the adaptation of service cost (price) and perceived risk in this research. If individuals perceive the cost to be excessive, they are less likely to utilize said service. Conversely, if the price is deemed acceptable, they will experience a sense of contentment. Customers also express anxiety regarding the element of risk. The individual expresses concern regarding the security crediting of their power bill payment.

The variable of ease of use was derived from the study conducted by Jayantari et al. (2021). Individuals may exhibit hesitancy when it comes to adopting novel products or services. If individuals find a task to be excessively challenging, they are less likely to engage with it and will consequently experience a lack of contentment. Therefore, it is plausible that these four independent variables may exert influence on customer satisfaction with regards to the e-electric bill system. This study investigates the impact of several independent variables on customer satisfaction, which serves as the dependent variable. Lastly, the study also examines the impact of customer satisfaction as the independent variable on continuous intention, which serves as the dependent variable.

The followings are working definition of the variables upon which the research questions are prepared.

(i) E-service quality refers the online service quality of e-electrical payment system when customers use it to pay their electric bills.

(ii) Service cost refers the service fees or charges for e-electric bill payment.

(iii) Perceived risk refers the risks (financial or non-financial) associated with e-electric bill payment.

(iv) Ease of use refers how easily customers can pay electric bill with online payment system

CHAPTER 3
E-ELECTRIC BILLING SERVICES IN MYANMAR

In this chapter, electric billing services in Myanmar is described. Then, rate of electricity consumption and e-electric billing services currently available are presented. Finally, it also presents mobile applications available for e-electric bill.

3.1 Overview of Myanmar Power Sector

Myanmar, boasting a substantial area, holds the distinction of being the largest country in mainland Southeast Asia. Its population stands at roughly 53 million individuals. Moreover, Myanmar's strategic positioning between China and India, the two most populated nations globally, further enhances its geopolitical significance. Additional neighboring countries include Bangladesh, Laos, and Thailand. Myanmar possesses substantial natural resource endowments, encompassing oil and gas reserves, mineral deposits, and valuable gemstones. Additionally, it possesses a substantial amount of cultivable land.

Despite its potential, Myanmar is considered one of the least developed nations in Southeast Asia, as seen by its relatively low gross domestic income per capita of slightly over US$1000. Myanmar exhibits the lowest per capita energy consumption in the electricity sector, estimated at approximately 200 kWh. This figure is more than tenfold lower than the global average. The current electrification rate stands at approximately 40%, indicating that a significant portion of the population, amounting to 60%, lacks access to electricity provided by the power grid. Simultaneously, the power sector has experienced financial losses exceeding US$300 million. According to Aung (2019), the efficiency of the electricity grid is suboptimal, with energy losses exceeding 20% during the processes of transmission and distribution.

The utilization of online payment systems for electricity usage effectively mitigates the need for consumers to endure lengthy queues. The government of Myanmar has implemented a system that allows the general population to conveniently

settle their electricity bills through mobile banking applications. Individuals currently have the ability to conveniently settle their electricity bills through online platforms, utilizing mobile applications, without the need to physically visit payment centers, all from the convenience of their residences or workplaces.

An agreement was entered into between banks and the Ministry of Electricity and Energy, enabling customers in the cities of Yangon, Mandalay, and Naypyidaw to conveniently settle their electricity bills through mobile banking services. The option to pay electricity bills is currently accessible to all 52 townships in Yangon, 6 townships in the Mandalay Regions, and 5 townships in Naypyitaw. Currently, the online payment option is not applicable for settling outstanding debts. Financial institutions are currently engaged in the development of a service that facilitates the payment of late bills.

The delivery of electric bills occurs on a monthly basis, typically either on the ground floor of the building or within one of the apartments, with a preference for the landowner's unit. This delivery takes place one week prior to the deadline for payment. In the post-paid system, the electricity bill includes monthly charges. The document includes details regarding the monthly charges and monthly maintenance fee.

Individuals have the option to visit the appropriate energy offices in their respective townships in order to conduct an examination of their billing statements, with the purpose of identifying potential instances of excessive costs. This can be accomplished by presenting the receipt, as the meters may be read either manually by staff members or automatically by machines, hence introducing the possibility of varying degrees of inaccuracy. Individuals have the option to make payments at EPC offices, but at the cost of enduring lengthy waits. In contemporary times, in the event of a payment failure, the Electric Power Company (EPC) tends to exercise a waiting period beyond one month prior to discontinuing the supply of electricity.

The Ministry of Electric Power has implemented the Advanced Metering Infrastructure (AMI) system to efficiently monitor the power units consumed by electricity consumers. This system integrates meter equipment capable of reading meter bills with online and information management systems, enabling fast access to this data.

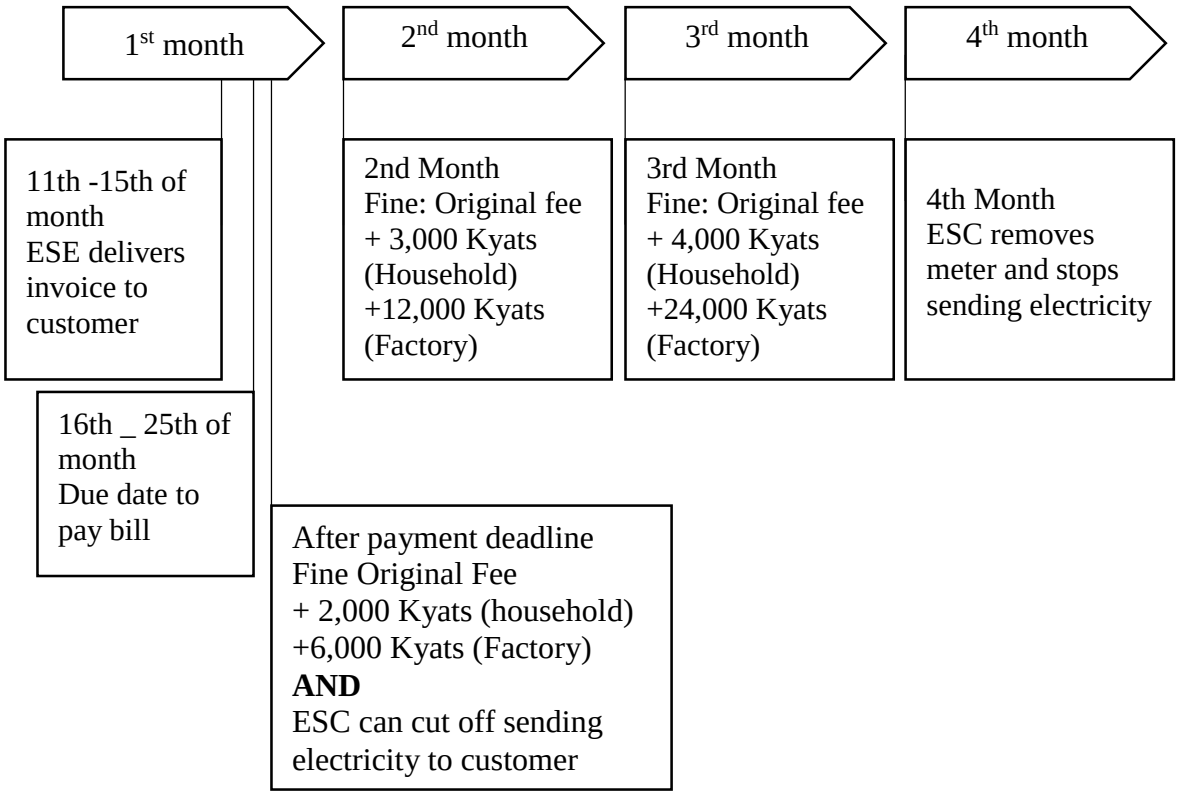
The installation of AMI system-based digital meters has been implemented in the majority of townships in Yangon, with a completion rate of 98.66 percent. The remaining 900 meter boxes will be subject to modification by the authorities. Historically, there was a restriction in place that limited the provision of a single service

wire for each individual residence, resulting in the proliferation of intricate cable arrangements on lamp poles. Currently, power poles exhibit a visually organized and orderly appearance due to the utilization of a single, bigger service wire. Based on the findings of the Ministry of Electric Power, it has been observed that the implementation of the Advanced Metering Infrastructure (AMI) system in 29 townships within the Yangon Region has resulted in a notable reduction of power loss by approximately nine percent. In the aforementioned townships, the rate of electricity loss was formerly recorded at approximately 14 to 15 percent, however presently, the loss of electricity has been reduced to approximately six percent.

The Advanced Metering Infrastructure (AMI) system effectively mitigates non-technical losses, expedites meter readings from the control server within a brief timeframe, facilitates the streamlined generation of billing statements and charges through the utilization of barcodes, enables online bill payment, and empowers consumers to conveniently monitor their usage via mobile phone access. The implementation of the YESC system (2023) is being widely adopted by numerous townships in Yangon due to its superiority over the traditional staff-assisted reading approach.

Typically, customers are issued an invoice within the timeframe of the 11th to 15th day of each month, and are expected to remit payment by the 16th to 25th day of the month, based on the date of receipt. The schedule for Payment and Fines on late payment is depicted in Figure 3.1.

Figure (3.1) Schedule for Payment and Fines on Late Payment



Source: Yangon Electricity Supply Cooperation, 2023

As shown in Figure (3.1), if the payment is delinquent, then Electric Supply Corporation (ESC) has the authority to stop providing electricity to the user. If, after 4 months, the user still has not made the required payment, then ESC will cancel the electricity supply contract and physically remove the electricity meter from the user who has not paid (Yangon Electricity Supply Cooperation, 2023).

3.2 Rate of Electricity Consumption

The electricity bill comes with monthly charges in post-paid system. It contains the amount of monthly charges and monthly maintenance fee. Table (3.1) presents the rate for electricity power consumption based on units and type of consumers.

Rate for Electricity Power Consumption based on consumption units and type of consumer. Under the new rates, residential households and religious buildings will continue to pay at the previous rate at 35 Kyats, but only for up to 30 units. Consumers will be charged 50 Kyats for 31-50 unit, 70 Kyats for 51-75 unit, 90 Kyats for 76-100 unit, 110 Kyats for 101-150, 120 Kyats for 151-200, and 125 Kyats for over 200.

Table (3.1) Rate for Electricity Power Consumption

Sr. No.	Type of Consumer	Rate	
		Units	Kyats Per Unit
1.	Residents/ Religious	1-30	35
		31-50	50
		51-75	70
		76-100	90
		101-150	110
		151-200	120
		201 and Above	125
2.	Factory/ Business	1-500	125
		501-5,000	135
		5,001-10,000	145
		10,001-20,000	155
		20,001-50,000	165
		50,001-100,000	175
		Over 100,000	180

Source: *Yangon Electricity Supply Cooperation*, 2023

As shown in Table (3.1), for business consumers including companies, factories, government buildings, embassies, and international organizations, they will have to pay 125 Kyats per unit up to 500 units, increasing by 10 Kyats until 50,001-100,000 units. 180 Kyats per unit will be charged for over 100,000 units.

3.3 Mobile Applications for E-Electric Bill

Online utility bill system becomes popular in Myanmar because of Covid-19 pandemic and long queues at the electric office. People can now pay the *electricity bill* online.

3.3.1 Service Quality

Customers have the option to make payments for their utility bills through the use of mobile banking services. Customers have the ability to make payment for their electric bill within a time frame ranging from one to five minutes, provided that the connection is stable. The payment for the electricity bill must be made a minimum of

two days prior to the designated due date. Individuals have the ability to utilize the billing system even in the absence of mobile signal, since they may still establish a connection to the mobile payment system over Wifi. Furthermore, it is not necessary for users to utilize a Virtual Private Network (VPN) in order to make secure payments for their electricity bills.

Presently, within the banking sector of Myanmar, there exist a total of 31 banks. Among these, a subset of 8 private banks, namely Kanbawza, Ayeyarwaddy, Asia Green Development, United Amara, Shwe Rural and Urban Development, Myanmar Citizen, Ayarwaddy Farmer Development, and First Private, have implemented mobile payment services. This information is in accordance with the Central Bank of Myanmar's report for the year 2023.

3.3.2 Service Cost, and Security Features of E-Electric Bill Services

In this study, six mobile pay applications are focused for meter bill payment. Table (3.2) presents the electric bill payment services of mobile banking application in Myanmar.

Table (3.2) Electric Bill Payment Services of Mobile Banking System

Sr. No.	Description	Mobile Banking System					
		K Pay	CB Pay	AYA Pay	ONE Pay	UAB Pay	A+ Pay
1	2 Factor Authentication	✓	-	✓	-	✓	-
3	Oversea Support	-	✓	✓	-	✓	-
4	Record of the previous data (Meter no.)	✓	-	✓	✓	-	-
5	Password required for Meter Bill Transaction	✓	-	✓	✓	✓	✓
7	Usage Limit for Meter Bill	✓	-	-	-	✓	-

Source: Banks, 2023

According to the data presented in Table 3.2, K Pay, AYA Pay, and UAB Pay have used a two-factor authentication mechanism for enhancing security. Out of the six mobile banking systems examined, CB Pay, AYA Pay, and UAB are distinguished by their provision of service availability overseas. On the other hand, K Pay, AYA Pay, and One Pay stand out for their capacity to save previously paid meter numbers for

customer convenience. With the exception of CB Pay, nearly all mobile banking applications necessitate the reentry of a password. To address security concerns, mobile payment systems implement a two-factor authentication approach and necessitate the input of a password during bill payment transactions. With the exception of Kpay and A+ pay, there are no specific limits on the amount that can be paid for meter bills.

There is a segment of the population that refrains from utilizing electronic billing systems due to the limited availability of services for individuals with outstanding payment obligations. Conversely, certain individuals persist in use e-electric due to the absence of a requirement to reenter the meter bill number.

3.3.3 Ease of Use

The majority of mobile payment platforms provide support for a minimum of two languages, namely Myanmar and English. However, KPay distinguishes itself by offering support for three languages, including Myanmar, English, and Chinese. The system provides clear and concise guidance through a series of sequential steps, facilitated by a user interface that is designed to be easily comprehensible. Mobile applications provide users with the ability to view their meter bills and offer guidance on the necessary information that needs to be inputted. Furthermore, patrons have the option to contact the customer care department in the event that they possess any inquiries regarding the e-billing program.

3.3.4 Service Cost

Regarding the charges, a single entity charges a fee of 300 MMK for one meter bill, whilst other entities only charge 100 MMK for the same. Certain mobile payment systems have the capability to be utilized by customers even when they are located outside of their home country. The E-electric billing system offers a cost-effective alternative to physically visiting the electric office for billing purposes. However, it is not feasible to utilize it for multiple bills, necessitating customers to repeat the process multiple times if they wish to pay for multiple meter bills.

3.3.5 Risk of Using E-Electric Billing Services

Utilizing online bill payment services can offer significant advantages in financial management; nonetheless, it is imperative to prioritize safety measures. Electronic payments offer a range of advantages, including convenience, speed, and enhanced security. However, it is important to acknowledge that they are not without

their share of potential hazards. These risks encompass fraudulent activities, cyber-attacks, challenges related to compliance, and operational deficiencies. The challenges associated with resolving conflicts in the presence of sensitive matters. In certain instances, despite customers making online payments towards their meter account, the electric office may nevertheless disconnect the service due to outstanding payment. Financial institutions and electric utility companies currently lack a real-time payment system. Only A+ Pay has the capability to promptly deposit funds into the bank account of the electric office. Therefore, certain clients perceive e-electric services as lacking reliability. Furthermore, existing services lack the capability to execute planned automatic bill payments, resulting in occasional instances where clients fail to make timely payments for their electricity bills. At now, the utilization of online billing systems for the settlement of outstanding electric bills is not feasible.

CHAPTER 4
ANALYSIS OF FACTORS INFLUENCING CUSTOMER SATISFACTION AND CONTINUANCE USE OF E-ELECTRIC BILLING SERVICE

This chapter presents the research design, followed by reliability test. In addition, it presents the customer survey data for influencing factors. Then, it includes the regression analysis for the relationship between influencing factors and customer satisfaction. Finally, it describes the effect of customer satisfaction on continuance use intention of e-electric billing system.

4.1 Research Design

This study focuses the influencing factors on customer satisfaction and continuance use of e-electric billing system. Both primary and secondary data are used. As population is unknown, Cochran (1977) formula is applied to get the sample size. According to the 95% confidence level, 385 sample size is got. Cochran formula is shown as the following:

$$n = \frac{z^2 pq}{e^2}$$

$$n = \frac{(1.96)^2(0.5)(0.5)}{(0.05)^2} = 385$$

n = sample size

p = the population proportions

e = acceptable sampling error ($e = 0.05$)

z = z value at reliability level or significance level

$q = 1 - p$

Out of a total of 385 users of e-electric billing, 377 individuals participated in the completion of the questionnaire. Descriptive statistics and quantitative research approaches are utilized in this study. This study incorporates both primary and secondary data sources. A structured questionnaire on a 5-point Likert scale is utilized as a means to gather primary data. The Google Form platform is utilized for the purpose of gathering online surveys. The data gathering phase was conducted throughout the month of June in the year 2023. Regression analysis is a statistical technique employed to determine the statistical significance of the relationship between independent variables and a dependent variable. Secondary data refers to a collection of information resources that have been previously generated and are utilized for research purposes.

These resources may include research papers, electronic services provided by banks, textbooks, websites, and other relevant sources of information obtained from banks.

4.2 Reliability Test

Research reliability refers to the extent to which a research approach yields outcomes that are reliable and consistent. In the realm of academic inquiry, the concept of dependability pertains to the extent to which the findings of a particular study may be reproduced or recreated under same circumstances. Cronbach (1951) provided a range of alpha values that were categorized as excellent (0.93–0.94), strong (0.91–0.93), reliable (0.84–0.90), robust (0.81), fairly high (0.76–0.95), high (0.73–0.95), good (0.71–0.91), relatively high (0.70–0.77), slightly low (0.68), reasonable (0.67–0.87), adequate (0.64–0.85), moderate (0.61–0.65), satisfactory (0.58–0.97), acceptable (0.45–0.98), sufficient (0.45–0.96), not satisfactory (0.4–0.55), and low (0.11). The findings of the reliability assessment using Cronbach's Alpha are displayed in Table 4.1.

Table (4.1) Reliability Test

Sr. No.	Variable	No. of Items	Cronbach's Alpha
1	E-service Quality	7	.878
2	Service Cost	5	.805
3	Perceived Risk	5	.869
4	Ease of Use	8	.835
5	Customer satisfaction	7	.884
6	Continuance Use Intention	7	.832

Source: Survey Data, 2023

According to Table (4.1), Cronbach's Alpha values for all variables show that all the scores are greater than 0.7. Therefore, it is said to have good reliability and the findings are valid for this study.

4.3 Demographic Data of the Respondents

In this study demographic data of the respondents are identified to find out the major customer segments of the e-electric billing users. Demographic data include gender, age, education level, job, and monthly income. As the primary data, structured questionnaire with 5-point likert scale is collected from 377 customers. This section presents the profile of those respondents Table (4.2) presents the demographic data of the respondents.

Table (4.2) Demographic Data of the Respondents

Sr. No.	Item	Category	No. of Respondents	Percent
	Total		**377**	**100**
1	Gender	Male	102	27.1
		Female	275	72.9
2	Age	≤ 25 years	7	1.9
		26 ~ 35 years	139	36.9
		36 ~ 45 years	156	41.4
		Over 45 years	76	20.2
3	Education Level	Graduate	187	49.6
		Post Graduate	170	45.1
		Doctorate	14	3.7
		Other	5	1.3
4	Job	Company employee	279	74.0
		Own business	38	10.1
		Government staff	60	15.9
5	Monthly Income (MMK)	Below 300,000	6	1.6
		300,001 ~ 500,000	80	21.2
		500,001 ~ 800,000	160	42.4
		800,001 ~ 1,000,000	28	7.4
		1,000,001~1,500,000	49	13.0
		Above 1,500,000	54	14.3

Source: Survey Data, 2023

As presented in Table (4.2), most of the e-electric billing users are females since they do not have much time for going to the electric office. Majority of the respondents are from 36 to 45 years old most of them are post graduated. Regarding education, minority have only middle school education and they can only read and write. Most of the respondents are company employees and earns from 500,001 MMK to 800,000 MMK while minority people gets below 300,000 MMK as monthly income.

4.4 Descriptive Analysis of Influencing Factor and Customer Satisfaction

This section presents the descriptive analysis of influencing factor and customer satisfaction. Structured questions with Five-point Likert scale (1=Strongly Disagree, 2=Disagree, 3=Neutral, 4=Agree, and 5=Strongly Agree) was used to find out the importance of factors influencing on satisfaction and continuance use intention. The mean rating scale is presented in Table (4.3).

Table (4.3) Mean Rating Scale

Sr. No.	Score Range	Mean Rating
1	1.00 -1.80	Very Low
2	1.81 -2.60	Low
3	2.61-3.40	Neutral
4	3.41- 4.20	High
5	4.21-5.00	Very High

Source: Best, 1977

Best (1977) identified the mean rating scale including score range and mean rating to interpret the primary data collected by using structured questionnaire with 5-point likert scale. This study uses mean rating score of Best (1977).

4.4.1 Influencing Factors

In this section, descriptive results of independent variables, influencing factors, are described. Those influencing factors include e-service quality, service cost, perceived risk, and ease of use.

(a) E-Service Quality

E-service quality is the extent to which an online service provider meets client expectations. It is the extent to which an e-electric billing system facilitates efficient and effective payment process. The survey result for e-service quality of an e-electric billing system is presented in Table (4.4).

Table (4.4) E-Service Quality

Sr. No.	E-Service Quality	Mean Score	Std. Dev
1.	Quick E-electric billing service through mobile banking	3.96	1.00
2.	Always accessible to E-electric billing service	3.44	1.02
3.	User friendly of E-electric billing service	3.78	0.91
4.	Always accurate process of E-electric billing service	3.65	0.97
5.	Feeling safe regarding E-electric billing service	3.82	0.91
6.	Easily accessible to Customer service by telephone/ other means	3.56	1.02
7.	Having confidence in E-electric billing service	3.80	0.94
	Overall Mean	**3.72**	

Source: Survey Data, 2023

Based on the data obtained, it can be inferred that a majority of the participants expressed a strong level of agreement (mean score of 3.96) with regards to the efficiency of the e-electric billing system in terms of its speed. Customers are not need to endure prolonged waiting periods at the electric office, as they have the convenience of paying their electric bill within a timeframe of one to five minutes through a mobile application. In comparison to the second highest mean score of 3.82, respondents express a strong agreement with the notion that they perceive a sense of security in relation to the e-electric billing system. This sentiment stems from their ability to access and review transactions at any given moment, as well as the option to retain the pay slip as tangible evidence. Based on the calculated average score of 3.72, it can be inferred that a significant proportion of the participants express a strong inclination towards the notion that the e-service quality of the e-electric billing system is commendable.

(b) Service Cost

Service cost is a charge attributable to using e-electric billing system via mobile application. Customer's perceptions towards the service cost of e-electric billing system are presented in Table (4.5).

Table (4.5) Service Cost

Sr. No.	Service Cost	Mean Score	Std. Dev
1.	No commuting costs for paying electric bill	3.47	1.12
2.	Fair Service cost comparing the cost of going billing office	3.95	0.96
3.	Service charges being not expensive	3.91	0.93
4.	Paying bills online enabling reduced costs	3.83	0.96
5.	A good value for the money	3.89	0.91
	Overall Mean	**3.81**	

Source: Survey Data, 2023

Based on the highest mean score of 3.95, a significant majority of the respondents express strong agreement on the fairness of service prices associated with the e-electric billing system through the utilization of a mobile application. This sentiment is particularly evident when considering the expenses incurred by physically visiting the electric office. The finding of a mean score of 3.91, which is the second highest, suggests that respondents strongly agree with the notion that service charges associated with the e-electric bill are not deemed expensive. This perception is likely influenced by the fact that the cost for a single meter bill ranges from 100 MMK to 300 MMK. Based on the average score of 3.81, it can be inferred that a majority of the participants strongly concur with the notion that the service cost associated with the e-electric billing system is equitable and justifiable.

(c) Perceived Risk

Perceived risk is a subjective judgment of an individual. It combines factors such as emotion, contextual factors, and personal experiences. Table (4.6) presents perceive risk of the e-electric billing customers.

Table (4.6) Perceived Risk

Sr. No.	Perceived Risk	Mean Score	Std. Dev
1.	Less risk when paying bills online	3.55	1.00
2.	No risk of waiting long queues	4.00	0.96
3.	No physical contacts	4.05	0.88
4.	Less risk of handling cash notes that can spread diseases	4.18	0.85
5.	Less risk of losing bill payment slips.	4.05	0.94
	Overall Mean	**3.97**	

Source: Survey Data, 2023

Based on the highest mean score of 4.18, a significant majority of the respondents express strong agreement with the notion that paying energy bills online has a reduced risk, as it eliminates the need to handle physical currency, which might potentially serve as a vector for disease transmission. According to the data, respondents with the second highest mean score (4.05) strongly concur that they are able to minimize physical interactions due to the elimination of the need to visit the electric office. Furthermore, a majority of the participants strongly concur that there is no necessity to save the physical copies of bill payment receipts, as the bill payment application effectively stores the transaction records for meter bills. Consequently, customers face a reduced chance of misplacing payment receipts. Based on the calculated average score of 3.97, it can be inferred that a significant majority of the participants strongly concur with the notion that the e-electric billing system poses a lower level of risk.

(d) Ease of Use

Ease of use is a basic concept that describes how easily users can use a product or service. Perceived *ease of use* is the level of a person believes that using a *mobile banking* system would be free effort. Table (4.7) presents the perception of the customers towards the ease of use of the e-electric billing.

Table (4.7) Ease of Use

Sr. No.	Ease of Use	Mean Score	Std. Dev

1.	Easier than paying at the billing office	4.08	0.94
2.	Ease of learning to use e-electric bill	4.00	0.87
3.	No assistance needed when using E-electric billing system.	3.84	0.88
4.	Simple to use E-electric billing system	4.04	0.84
5.	Feeling comfortable using the E-electric billing system.	4.11	0.85
6.	Clear and understandable system information	3.90	0.89
7.	Easy to interact with the application	3.86	0.81
8.	Finding E-electric billing system easy to use.	4.03	0.89
	Overall Mean	**3.98**	

Source: Survey Data, 2023

Based on the highest mean score of 4.11, a significant majority of the respondents expressed a strong agreement about the ease of use of the e-electric billing system, indicating a high level of comfort when utilizing it. The majority of programs include directions in many languages, facilitating users' comprehension of the step-by-step instructions. In reference to the second highest average score (4.08), respondents express a strong inclination towards the convenience of the e-electric billing system compared to paying at the billing office. Customers have the ability to conveniently settle their power payment within a timeframe ranging from one to five minutes, from the comfort of their own residences or workplaces. Based on the average score of 3.98, a significant majority of the participants expressed a strong agreement with the notion that the e-electric billing system is characterized by ease of use.

Table (4.8) Summary of Overall Mean Value

Sr. No.	Influencing Factors	Mean Score
1.	E-Service Quality	3.72
2.	Service Cost	3.81
3.	Perceived Risk	3.97
4.	Ease of Use	3.98

Source: Survey Data, 2023

According to Table (4.8), all mean scores of influencing factors are above 3.00. Hence, it can be concluded that customers have a positive perception towards the e-electric billing system.

4.4.2 Customer Satisfaction

Customer Satisfaction is one of the high affecting factors on any product or service, to manage and improve their businesses. The level of customer satisfaction towards e-electric billing system is presented in Table (4.9).

Table (4.9) Customer Satisfaction

Sr. No.	Customer Satisfaction	Mean Score	Std. Dev
1.	Satisfied with efficiency of e-electric bill system	3.97	0.84
2.	Feeling satisfied with the accurate functioning	3.85	0.88
3.	Satisfied with the cost of the e-electric bill system	3.95	0.81
4.	Satisfied with the elimination of long queues	4.08	0.90
5.	Satisfied with the easy accessibility of the e-electric bill system.	4.02	0.84
6.	Feeling safe in transactions with e-electric bill system.	3.93	0.89
7.	Being happy with the e-electric bill system.	4.01	0.91
	Overall Mean	**3.98**	

Source: Survey Data, 2023

Based on the highest mean score of 4.08, a significant majority of the respondents express strong agreement with their satisfaction with the e-electric billing system. This sentiment is attributed to the convenience it offers, namely in eliminating the need to endure lengthy waits at the billing counters. Based on the data indicating a mean score of 4.02, it can be inferred that there is a strong consensus among respondents on their satisfaction with the accessibility of the system. Customers have the ability to connect to the system over a Wi-Fi connection, even in instances where they have lost cell signal. Therefore, customers have the ability to conveniently settle their meter bills in advance. Based on the average score of 3.98, a significant majority

of the participants express a strong agreement with their satisfaction with the e-electric billing system.

4.5 Analysis on the Effect of Influencing Factor on Customer Satisfaction

To analyze the effect of influencing factors on e-electric billing customers' satisfaction, regression analysis is applied in this study. Four factors namely e-service quality, service cost, perceived risk and ease of use are analyzed. Table (4.10) presents the effect of influencing factors on customer satisfaction.

Table (4.10) Effect of Influencing Factor on Customer Satisfaction

Variable	Unstandardized Coefficients		Standardized Coefficients (Beta)	t	Sig
	B	Std Error			
(Constant)	.144	.086		1.672	.095
E-Service Quality	.281***	.037	.285	7.534	.000
Service Cost	-.008	.037	-.008	-.221	.825
Perceived Risk	.303***	.040	.306	7.488	.000
Ease of Use	.406***	.043	.402	9.418	.000
R^2	.848				
Adjusted R^2	.846				
F Value	517.456***				

Source: Survey Data, 2023

*** Significant at 1% level

Based on the data shown in Table 4.10, it can be observed that the modified R2 value is 0.846. This indicates that the model under consideration has the ability to explain approximately 84.6% of the variability in customer satisfaction, as determined by the analysis of e-service quality, service cost, perceived risk, and ease of use. The model's overall significance is deemed valid as the F value is very significant at the 1 percent level. Based on the results of the study, it can be concluded that e-service quality, perceived risk, and simplicity of use are key elements that influence customer satisfaction. However, it might be argued that the cost of service does not exert a substantial influence on the level of customer satisfaction.

The significance of E-Service Quality in relation to customer satisfaction is observed at a 1 percent level. The efficiency and security of the e-electric billing system have resulted in high levels of customer satisfaction with the quality of the e-service provided by the billing system. The regression analysis reveals a positive relationship between the level of E-Service for e-electric billing service and customer satisfaction.

The relationship between perceived risk and customer satisfaction is highly significant, with a significance level of 1 percent. The use of an electronic billing system offers reduced risk associated with cash handling and provides a comprehensive record of billing information. Therefore, it can be concluded that clients express a high level of satisfaction with the implementation of online billing systems. Based on the regression analysis findings, it can be inferred that an increase in perceived risk is positively associated with a corresponding increase in customer satisfaction.

The variable "Ease of Use" exhibits a strong and statistically significant relationship with customer satisfaction, as evidenced by a significance level of 1 percent. Due to the provision of a minimum of two languages (Myanmar and English), users perceive the system as user-friendly. Hence, customers are able to conveniently facilitate the billing procedure through the utilization of an online system. The regression analysis reveals a positive relationship between the simplicity of use of e-electric billing service and customer satisfaction.

Based on the standardized coefficient (Beta) score, it can be observed that ease of use exhibits the highest magnitude among the three important explanatory variables. This implies that the primary determinant of satisfaction is the level of ease of use, with perceived danger and e-service quality being secondary factors. The primary concern for customers utilizing the e-electric billing service is the paramount importance of user-friendliness. Furthermore, the factors of risk and e-service quality also hold significant importance in determining customer satisfaction.

4.6 Analysis on the Effect of Customer Satisfaction on Continuance Use Intention

It has been shown that customers who express satisfaction with a particular service are more inclined to repurchase the same service and utilize it with more frequency compared to customers who express dissatisfaction. In the event that the consumer expresses dissatisfaction with the quality of service rendered, the longevity of the supplied technology is compromised as the user declines its utilization. A

structured questionnaire on a 5-point Likert scale is employed to assess the impact of customer satisfaction on the desire to continue using the e-electric billing system.

4.6.1 Continuance Use Intention

Continuance use intention refers as an individual's intention to continue using an e-electric billing system. Continuance use intention of e-electric billing users is presented in Table (4.11).

Table (4.11) Continuance Use Intention

Sr. No.	Continuance Use Intention	Mean Score	Std. Dev
1.	Always using e-electric bill system	3.98	0.96
2.	Going to say positive things about e-electric bill system to other people	4.00	0.83
3.	Seldom considering paying at the electric office	3.63	1.05
4.	Never considering other ways to pay for electric bills rather than e-electric bill system	3.61	1.11
5.	Continue use of e-electric bill system for efficiency	4.02	0.84
6.	Intension of continue use of e-electric bill system to reduce risks	3.97	0.85
7.	Intension of continue using e-electric bill system even there are less crowded at the electric office	4.08	0.91
	Overall Mean	3.90	

Source: Survey Data, 2023

Based on the highest mean score of 4.08, it is evident that respondents strongly agree with the proposition that they are inclined to utilize the e-electric billing system, even in the absence of long queues at the electric office. In regard to the second highest average score (4.02), a majority of respondents express strong agreement with the efficiency and convenience of the e-electric billing system. This is attributed to the ability to conveniently pay meter bills from the comfort of their office or home. In addition, they plan to utilize the online bill payment system due to its efficiency in completing bill payments within a brief time frame of 5 minutes. Consequently, participants commonly discussed favorable aspects of the e-electric billing system with

their acquaintances and family members. Based on the average score of 3.90, a significant majority of the participants strongly agree with the notion that they possess the purpose to utilize the e-electric billing system in the forthcoming period.

4.6.2 Effect of Customer Satisfaction on Continuance Use Intention

Customer satisfaction is a crucial factor in fostering client loyalty and increasing the likelihood of repeat usage of a product or service. Regression analysis was utilized to examine the impact of customer satisfaction on continuing intention. The findings of this research are presented in Table (4.12).

Table (4.12) Effect of Customer Satisfaction on Continuance Use Intention

Variable	Unstandardized Coefficients		β	t	Sig
	B	Std Error			
(Constant)	.296	.093		3.173	.002
Customer Satisfaction	.907***	.023	.898	39.415	.000
R^2	.806				
Adjusted R^2	.805				
F Value	153.577***				

Source: Survey Data (2022)

*** Significant at 1% level, ** Significant at 5% level, * Significant at 10% level

Based on the data shown in Table 4.12, the coefficient of determination (R2) for the regression model is 0.806. This indicates that the model is able to explain 80.6 percent of the variation in continuing intention, as it relates to customer satisfaction. The F value, which represents the overall significance of the model, exhibits a high level of statistical significance, hence indicating the validity of the findings.

Based on the regression analysis findings, it can be shown that customer satisfaction exhibits a positive sign as anticipated. Furthermore, the coefficient associated with this variable is very significant at a level of 1 percent. The likelihood of consumers' continued utilization of the e-electric billing system in the future is positively influenced by their increased satisfaction with the system's convenience.

CHAPTER 5
CONCLUSION

In this chapter, the findings and discussions are presented. Based on the findings, suggestions and recommendations are presented. Finally, further study is recommended as this study has some limitations.

5.1 Findings and Discussions

The objective of this study is to investigate the elements that influence customer happiness with e-electric billing payment services and to analyze the impact of customer satisfaction on the continued usage of these services. In order to attain the objective, primary and secondary data are utilized. A structured questionnaire on a 5-point Likert scale was administered to a sample of 377 customers who are currently utilizing an e-electric billing system. The methodology employed for data collection was the utilization of simple random sampling during the administration of the questionnaire.

Research has revealed that customers have the ability to conveniently settle their energy payment from the comfort of their homes or offices, eliminating the need to physically visit the local electric office in their respective townships. In addition, respondents express the belief that the e-electric billing system is secure, as it eliminates the need to retain physical payment slips. Hence, the participants have the perception that the e-service quality of the e-electric billing system is satisfactory.

The present study examines the fairness of service charges associated with the e-electric billing system through a mobile application, in relation to the expenses incurred by physically visiting the electric office. The service charges associated with the e-electric bill might range from 100 MMK to 300 MMK for a single meter bill. Furthermore, participants perceive the service price associated with their electronic utility bill as a cost-effective option, as it eliminates the need to endure lengthy waits and incur transportation expenses. Hence, the participants perceive the service cost of the e-electric billing system to be just and justifiable.

In relation to the perception of danger, it has been observed that the utilization of an e-electric billing system entails lower risk for customers as compared to physically visiting the electric office. The utilization of an e-electric billing system obviates the

necessity for clients to handle physical currency, hence mitigating the potential transmission of viral pathogens. Furthermore, individuals have the ability to mitigate exposure to big gatherings by adhering to the recommended Covid-19 protocols. Hence, it is perceived by the respondents that the e-electric billing system carries a lower level of risk.

In terms of usability, research indicates that the e-electric billing system is characterized by a high level of user-friendliness, since clients express a sense of comfort and ease while interacting with it. The regression analysis findings indicate that the factor with the greatest influence on customer satisfaction is ease of use. The E-electric billing system provides comprehensive instructions in a minimum of two languages. Furthermore, the system has been designed with a user interface that is straightforward and easy to use. Hence, a significant majority of the participants demonstrate a high level of proficiency in utilizing the e-electric billing system, exhibiting minimal errors in the process. The system's user-friendly interface contributes to a high level of client satisfaction.

Regarding the initial objective, it has been observed that out of the four elements examined, namely e-service quality, perceived risk, ease of use, and service cost, three aspects, namely e-service quality, perceived risk, and ease of use, have a substantial impact on customer satisfaction. However, it has been shown that service cost does not possess a significant effect on customer satisfaction. One of the most crucial aspects on consumer happiness is the ease of use.

In relation to the second objective, it has been observed that customer satisfaction has a substantial role in influencing the intention to continue using the e-electric billing system. This is mostly attributed to the customers perceiving the system as user-friendly and low-risk. Therefore, it may be inferred that customers express satisfaction with the system, indicating their intention to utilize it in subsequent instances and advocate for others to make use of online payment methods for meter bills.

5.2 Suggestions and Recommendations

The primary focus for e-billing service providers should be the prioritization of the simplicity of use of the e-electric billing system, as it has the greatest impact on customer satisfaction. In order to enhance user accessibility, it is recommended that the

system be created to incorporate prominent local tribal languages, hence facilitating a more seamless user experience. Furthermore, it is recommended to provide consumers with explicit and comprehensive instructions, accompanied by illustrative examples, for each input textbox. This will facilitate customers' understanding of the specific data they are required to supply. Subsequently, the enhancement of user-friendliness inside the system is anticipated to result in heightened consumer satisfaction with the e-electric billing system.

To mitigate risks, providers of e-billing services should employ advanced analytics and machine learning algorithms to systematically and consistently evaluate their processes. In the event of atypical system user behaviour, it is advisable for service providers to promptly notify users through the implementation of measures such as asking the use of one-time passwords (OTPs) or security questions. Furthermore, it is recommended that e-billing service providers offer clients the option to set a predetermined spending limit for e-electric billing. This measure aims to mitigate the potential risks associated with payment for customers. In conclusion, it is imperative for e-billing service providers to consistently inform clients regarding potential fraudulent activities. Subsequently, upon receiving updated security information, clients are likely to experience heightened satisfaction with the e-electric billing service.

To enhance the quality of e-service, it is imperative for e-billing service providers to ensure the availability of a 24/7 accessible billing system. E-billing service providers should also establish many customer care channels, including messenger platforms, Viber, hotlines, and other means of communication. Subsequently, patrons possess the convenient ability to establish contact with the customer assistance department in the event that they encounter any concerns or difficulties. It is imperative for service providers to possess a comprehensive understanding of the expectations held by users of e-electric billing systems, and to prioritize the preservation of service quality. Therefore, it is recommended that e-billing service providers employ data mining technologies in order to gain insights into client behavior.

Furthermore, it is recommended that the E-billing service incorporates a feature to save meter bill numbers, hence eliminating the need for clients to manually input the bill number for subsequent transactions. It is advisable that the billing system incorporates a feature to proactively notify customers on upcoming payment obligations, leveraging historical data as a basis for determining the appropriate timing

of these reminders. The development of an accessible system that incorporates a QR code feature on meter bills has the potential to enhance consumer efficiency. Furthermore, it is recommended that the Ministry of Electricity and Energy consider implementing an online payment system for overdue payments, so eliminating the need for clients to physically visit the office. By adhering to the aforementioned recommendations, service providers can enhance consumer satisfaction with the e-electric billing service.

5.3 Need for Further Study

This study only examines the exclusive e-electric billing system provided by financial institutions. This particular billing system does not encompass several other forms of billings. Hence, it is recommended that additional research be undertaken to explore other billing forms, such as trash disposal bills and water bills, among others. Additionally, there exist other providers of billing services. Hence, it is important to conduct a comparative analysis of the billing systems provided by banks and other service providers in order to gain further insights. Subsequently, the forthcoming investigation will encompass all electronic billing service providers operating in Myanmar. Additionally, it is advisable for future research to explore additional potential elements that may influence customer satisfaction with regards to e-billing systems.

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APPENDIX A

QUESTIONNAIRE

Customer Satisfaction and Continuance Use of E-Billing Service

This questionnaire will be used to study customer satisfaction and continuance use of e-billing service. This would be confidential and data will be only used for the academic research of Executive MBF thesis for Yangon University of Economic.

Section A: Demographic Data

Instruction: Please mark ✓ in ☐ for the most possible answer

Part (A) Demographic Data

1. Gender:

☐ Male ☐ Female

2. Age:

☐ ≤ 25 years ☐ 36 ~ 45 years

☐ 26 ~ 35 years ☐ Over 45 years

3. Education Level:

☐ Under graduate ☐ Doctorate

☐ Graduate ☐ Other ……..

☐ Post Graduate

4. Job

☐ Company employee ☐ Government staff

☐ Own Business ☐ Other……..

5. Monthly Income (MMK)

☐ Below 300,000 ☐ Above 1,500,000

☐ 300,001 ~ 500,000

☐ 500,001 ~ 800,000

☐ 800,001 ~ 1,000,000

☐ 1,000,001 ~ 1,500,000

Part (B) INFLUENCING FACTORS

Instruction: Please choose one of the following numbers on each line according to the index.

Index: 1 = Strongly disagreed

2 = Disagreed

3 = Neutral

4 = Agreed

5 = Strongly agreed

Please rate your influencing rate over the following influencing factors.

No.	E-Service Quality	5	4	3	2	1
1	The E-electric billing service delivered through mobile banking is quick.					
2	E-electric billing service is always accessible.					
3	E-electric billing service is user friendly.					
4	E-electric billing transactions are always accurate.					
5	I feel safe regarding E-electric billing service.					
6	Customer service is easily accessible by telephone/ other means.					
7	I have confidence in E-electric billing service.					
	Service Cost					
1	There are no commuting costs for paying electric bill.					
2	Service cost is fair when considering going to the billing office.					
3	The E-electric billing service charges are fair.					
4	Paying bills online reduces costs.					
5	E-electric billing service is a good value for the money					
	Perceived Risk					
1	Paying electric bill via online is less risk.					
2	There is less risk of waiting long queues.					
3	There is less risk of physical contacts.					
4	There is less risk of handling cash notes that can spread diseases.					
5	There is less risk of losing bill payment slips.					

	Ease of Use					
1	Using E-electric billing system is easier than paying at the billing office.					
2	Learning to operate E-electric billing system is easy.					
3	I do not seek assistance when using E-electric billing system.					
4	It is simple to use E-electric billing system.					
5	I feel comfortable using the E-electric billing system.					
6	The information shown at the system is clear and understandable.					
7	E-electric billing system is easy to interact with.					
8	I find E-electric billing system easy to use.					

Part (C) CUSTOMER SATISFACTION

Instruction: Please choose one of the following numbers on each line according to the index.

Index: 1 = Strongly disagreed

2 = Disagreed

3 = Neutral

4 = Agreed

5 = Strongly agreed

Please rate your influencing rate over the following customer satisfaction questions.

No.	Customer Satisfaction	5	4	3	2	1
1	I am satisfied with efficiency of e-electric bill system.					
2	I feel satisfied with the accurate functioning of e-electric bill system.					
3	I am satisfied with the cost associated with the e-electric bill system.					
4	I am satisfied with the elimination of long queues by e-electric bill system.					
5	I am satisfied with the easy accessibility of the e-electric bill system.					
6	I feel safe in transactions with e-electric bill system.					
7	I am happy with the e-electric bill system.					

Part (D) CONTINUANCE INTENTION

Instruction: Please choose one of the following numbers on each line according to the index.

Index: 1 = Strongly disagreed

2 = Disagreed

3 = Neutral

4 = Agreed

5 = Strongly agreed

Please rate your influencing rate over the following continuance intention questions.

No.	Continuance Intention	5	4	3	2	1
1	I will always use e-electric bill system					
2	I will say positive things about e-electric bill system to other people.					
3	I seldom consider paying at the electric office.					
4	I will never consider other ways to pay for electric bills rather than e-electric bill system.					
5	I would like to continue my use of e-electric bill system for efficiency.					
6	I intend to continue use of e-electric bill system to reduce risks.					
7	I intend to continue using e-electric bill system even there are less crowded at the electric office.					

APPENDIX B

Effect of Influencing Factor on Customer Satisfaction

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.921[a]	.848	.846	.30310

a. Predictors: (Constant), Ease of Use Mean, Service Cost Mean, E-Service Quality Mean, Perceived Risk Mean

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	190.156	4	47.539	517.456	.000[b]
	Residual	34.176	372	.092		
	Total	224.331	376			

a. Dependent Variable: Customer Satisfaction Mean

b. Predictors: (Constant), Ease of Use Mean, Service Cost Mean, E-Service Quality Mean, Perceived Risk Mean

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.144	.086		1.672	.095
	E-Service Quality Mean	.281	.037	.285	7.534	.000
	Service Cost Mean	-.008	.037	-.008	-.221	.825
	Perceived Risk Mean	.303	.040	.306	7.488	.000
	Ease of Use Mean	.406	.043	.402	9.418	.000

a. Dependent Variable: Customer Satisfaction Mean

Effect of Customer Satisfaction on Customer Loyalty

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.898[a]	.806	.805	.34453

a. Predictors: (Constant), Customer Satisfaction Mean

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	184.415	1	184.415	153.577	.000[b]
	Residual	44.514	375	.119		
	Total	228.929	376			

a. Dependent Variable: Continuance Intention

b. Predictors: (Constant), Customer Satisfaction Mean

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.296	.093		3.173	.002
	Customer Satisfaction Mean	.907	.023	.898	39.415	.000

a. Dependent Variable: Continuance Intention