

Next Generation of E-commerce's Impacts on Myanmar Business Era

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Abstract- This paper investigates the importance of E-commerce's next generation so called M-commerce in Myanmar business space. In E-commerce, we can buy and sell goods and service online by the computer and laptop. But in M-commerce, the user not only use mobile for chatting ,sending SMS, downloading songs and videos but also use for other ways like sale, purchase and do many more other activities like get traveling information online, online booking etc. M-commerce technology is based on wireless application protocol (WAP). M-commerce helps in improving of buying and selling goods and services through wireless handheld devices such as smart phones and tablets. In other words, it's a complete online shopping experience, but with all the convenience of being on a cell phone or tablet. M-commerce involves the advent of new technologies, services, business models and marketing strategies and rising practice of conducting financial activities with the use of a wireless handheld device.

Keywords: M-commerce, M-commerce application and services, Issues and challenges of M-commerce, Mobile phone usage

I. INTRODUCTION

Mobile phones have radically altered the way that people work, socialize, organize, and entertain themselves. The increase of mobile phone usage has produced a new avenue for marketing applications and services. Mobile has become the leading way for accessing communications because setting-up mobile network is cost-efficient but also mobile provides greater flexibility and ease to users than landline phone. Mobile is the latest happening thing not only in Myanmar but in the world. By the advent of latest technologies in mobile handsets and sophisticated services by Service Providers in Myanmar, mobile telecommunication market is a thrill. Not only in Myanmar urban market but rural market penetration is also great. In 2016, computer use was low in Myanmar and only three percent of the population ranged from 15 to 65-year-olds had ever used a computer. Among these, a small group of computer users, only 16% had accessed the Internet within the day. Nowadays, due to the latest

technology of small computer called smartphones and mobile devices, Myanmar people use such devices as the primary mode of accessing the internet [4]. This is for the introduction of faster mobile 3G, 4G internets by transnational telecommunication companies, Telenor Myanmar and Ooredoo Myanmar, national Myanmar Post and Telecommunications (MPT) and later joined by Mytel. At that time of the survey, 66% of mobile owners aged 15-65 in Myanmar had a touch-enabled smart phone (commonly known as 'touch-phones'- any mobile with a touch screen) for using the internet [4]. According to the survey of Digital, Tech, Marketing & Start-Ups in Asia, Myanmar had at least 33 million active smart mobile phone subscriptions in a country with an official population of 53 million. So, penetration of smartphone usage rate was reported at 80% [36]. In 2018, according to survey by Myanmar Online Advertising (MOA), the main findings are that 85 percent of devices used to access the Internet in Myanmar are smartphones [31].

This continuous increasing statically data indicates that Myanmar moves toward the fastest growing smart mobile phone market. The 'mobile commerce' in Myanmar business market has grown progressively. Devices like smart phones, tablets and technologies like 3G, 4G, Wi-Fi and high-speed broadband is helping to intensify the number of digital customers transacting online. Actors in e-commerce and banks are providing payment gateways for a secured online transaction run effortlessly giving rise to smooth transactions. Now the people use mobile internet applications to access a variety of services: web information search, SMS (short message services), MMS (multimedia message service), banking, payment, gaming, emailing, chat, weather forecast, GPS (global positioning service), and document sharing, searching etc. remotely, anywhere, at any time. We can use the same hand held device for both telecommunications and for bill payment and account evaluation. M-commerce is also an advanced technology of e-commerce. In short, Mobile commerce is defined as the buying and selling of products and services through the use of wireless mobile devices.

Commerce: Commerce deals with exchange of goods and services of economic value between producer and consumer. With invention of new technologies and methods, commerce has taken many forms. The way of

dealing, exchanging of goods and services has undergone massive changes with days passed on. With competition emerging, consumers becoming more aware and having more choice, marketers searching for innovative ways to deals with customers to be in forefront to break the competition [19].

E-commerce: E-commerce is buying and selling of products, services by business and consumers through an electronic medium, without using any paper documents. E-commerce, stands for electronic commerce, on the internet, it pertains to a website, which sells products or services directly from the site using a shopping cart or shopping basket system and allows payments through cards, e-banking, cash on delivery. Customers can purchase anything by sitting comfortably in their office or home and gift it to someone sitting miles apart just by click of a mouse. It offers several benefits to businesses like easily reaching to a fast growing online community, providing unlimited shelf place for products and services, merging the global geographical and time zone boundaries and helping to reach national and global markets at low operating costs. Ease of internet access and navigation are the critical factors that will result in rapid adoption of E-commerce. Safe and secure payment modes are essential to popularize E-commerce in Myanmar. Though it offers many benefits to users, there are many reasons for not shopping online like are lack of trust, security concerns, uncertainty about product and service quality, delay or non-delivery of goods, and lack of touch-and-feel shopping experience.

Mobile Commerce: Mobile Commerce is known as M-Commerce. M-commerce are used to buy and sell goods by using the wireless devices like cell phones, personal digital assistants and other hand held devices that have operated with internet access. By using M-commerce, we can access advanced mobile applications and high-speed services and we can use this devices remotely, anywhere, at any time. We can use the same hand held device for both telecommunications and for bill payment and account evaluation. M-commerce is a subset of E-commerce. The time and space limitation are removed and we can access any time we need. It is a result of combining two strongly emerging trends: electronic commerce and ubiquitous computing. It is online anywhere, anytime and on any device and is providing new business opportunities. “*Internet + Wireless + E-commerce = M-commerce*” [19]

Mobile Commerce is still in its development phase in Myanmar; here it is primarily used for basic banking, purchase of tickets, payment of utility bill etc. Its presence is being felt in the business world. Considering the market growth of M-commerce mobile manufacturing companies are making WAP enabled phones and are also providing maximum wireless internet and web facilities that covers the personal, official and business needs of people and are also optimizing their business. With the quick proliferation of mobile devices such as mobile phones, PDAs (Personal Digital Assistant) and handheld computers,

mobile commerce is widely considered to be a driving force for next generation E-commerce [5].

II. PURPOSE OF STUDY

The use of online transactions is increasing very rapidly nowadays. E-commerce has become very essential part of the daily life of human being. Computers and Internet are used for numerous purposes including email, searching information, music, videos, chatting, job searching, online gaming, online ticket booking, paying bills, online banking and lot more. The people who have once tried the online transactions and succeeded are greatly happy with the experience and are ready to take benefits of it. But some people are still hesitated to use mobiles for making online transactions. This paper is going to discuss the going process of online business transactions using smart mobile phone .It also explores the developing M-commerce services and applications that are widely used in Myanmar for various purposes. And then, it also describes M-commerce issues and challenges. Finally it presents the investigation on the potential and opportunities of today M-commerce that will be undertaken in Myanmar business area.

III. ROUTINES OF M-COMMERCE ON ONLINE BUSINESS TRANSACTION

In the current commerce industry, mobile commerce or M-Commerce has been entered in finance, services, retails, and telecommunication and information technology services [14]. In these sectors, M-Commerce is not only being widely accepted but also it is being more used as a popular way of business commerce.

Finance Sectors: Mobile Commerce works vastly in finance sector including all big and major financial institutes, banks, stock market and share brokers. User can conduct money or transfer money, or pay the bill from its bank account using mobile commerce facilities. Everyday evolving mobile apps have changed the whole functioning of banking by shifting it from desktop to the screens of smart phones. From balance inquiry to a quick transaction, every banking activity is at our fingertips. While in the stock market, the user can access the stock market quotes and get in live touch with current trading status on its mobile in two forms either voice (customer assistance) or non-voice (SMS alerts) or both. The share broker sends market trends and tips of trading on their clients' mobile. Also broker can suggest the appropriate stock for intra-day trading to their users.

Telecommunication Sectors: Mobile has played a giant role in communication technology through its versatility and superiority. The ubiquity and easy usage has further made it extremely popular across the globe. It has already surpassed the fixed phone in the world. Software platform is essential for operating any mobile and this tool has revolutionized the communication world because of its functioning as a small computer. The booming popularity has forced the corporate world to develop a new commerce platform that can reach to

masses. Mobile commerce has attracted massive traffic because of its unique characteristics. Several bills can be paid using mobile and user can also check the available balance, the status of cheque, and the status of requested processing and customer care support.

Service/Retail Sectors: Service and Retail sectors are also among the leading sectors, which have nurtured most from mobile commerce. M-commerce has proved a major benefit for these sectors. Several business dealings no matter how big or small are being finalized on the mobile phone. Customer would be able to book the order, can hire carrier/courier services and above all could also pay the dues related to it through mobile.

Information Sector: After the bursting of dotcom bubble, ecommerce has gone downwards to hell. But the evolution of mobile commerce has again worked as ambrosia for them. A separate sector has been evolved to exercise on this field for the IT experts. The webmasters have skillfully exploited this new area of IT-enabled commerce. In the IT field, mobile commerce has been used massively to deliver financial news, stock updates, sports figures and traffic updates and many more onto a single handheld device 'mobile'.

IV. M-COMMERCE SERVICES AND APPLICATION IN MYANMAR

Mobile Banking: Today, in Myanmar, Banks and other financial institutions use M-commerce to allow their customers to access account details and make transactions like purchasing stocks, remitting money, receive notifications, transfer money to other banks. Some mobile banking services are mini statements and checking of account history, checking account balance and recent transactions, PIN provision or change and reminder over the internet.

Mobile Ticketing: It is the process where the users can order, pay for, obtain and validate tickets from anywhere, anytime using Mobile Phones. Tickets can be booked or cancelled on mobile phones with the help of simple application. Ticket check as a digital boarding is passed in the form of SMS or by MMS. This is used in many applications like Airline ticketing, Cinema ticketing, Railway and Bus ticketing, Event ticketing.

Mobile Money Transfer: Refers to Online payment services which are performed by using a mobile phone. It is possible to transfer money from one person to other by using a mobile phone.

Mobile ATM: An introduction of mobile money services for the unbanked, operators are now moving efficient ways to roll out and manage distribution networks that can support cash-in and cash-out. Mobile ATM has been specially engineered for connecting mobile money platform and provides bank grade ATM quality.

Mobile Content Purchase and Delivery: Nowadays mobile purchase and delivery mainly consists of the sale of ring tones, songs, wallpapers and games for mobile phones. The convergence of mobile phones, portable video- audio players into a one device is increasing the purchase and delivery of full length music tracks and movie. The download speeds available with 4G, 5G

networks make it possible to purchase a movie on a mobile device in a couple of seconds.

Mobile Brokerage: Stock market services offered through mobile devices also become more famous and are known as Mobile Brokerage. It allows subscriber to react to market development in a timely fashion and introspective of their physical location.

Mobile Browser: Using a mobile browser, a World Wide Web browser on a mobile device, customers can shop online without having to be at their personal computer system. Some mobile marketing apps with geo-location capability are now providing user-specific marketing messages to the right person at the right time.

Mobile Purchase Catalogue: Merchants can accept orders from customers electronically, via the customer's mobile device. In some cases, the merchant may even deliver the catalog electronically, rather than mailing a paper catalog to the customer. Some merchants provide mobile websites that are customized for the smaller screen and limited user interface of a mobile device.

Mobile Marketing and Advertising: In the context of mobile commerce, mobile marketing refers to marketing sent to mobile devices. Companies have reported that they see better response from mobile marketing campaigns than from traditional campaigns.

Location-based Services: The location of the mobile phone user is an important piece of information used during mobile commerce transactions. Knowing the location of the user allows for location-based services such as local discount offers, local weather, tracking and monitoring of people and local map etc.

Information Services: A wide variety of information services can be delivered to mobile phone users in much the same way as it is delivered to PCs. These services include: news, stock quotes, sports scores, financial records and traffic reporting etc. In this service, customized traffic information, based on a user's actual travel patterns, should be sent to a mobile device. This customized data is more useful than a generic traffic-report broadcast, but was impractical before the invention of modern mobile devices due to the bandwidth requirements.

Mobile Education: In today's Myanmar education service economic scenario, remote education facility is now also available on smart phone. We can access and learn various types of information about education training course of distant places and contents sitting at one corner. Mobile learning supports, with the help of mobile devices, continuous access to the learning process. Moreover, every child in Myanmar has the right to access quality education, no matter their circumstance. The mobile classrooms provide these children an opportunity to learn basic literacy, math and computer skills in a safe environment where they can gain self-confidence and develop critical thinking skills through innovative, interactive instruction.

Mobile Wallet: It is one of the most popular methods of mobile payment these days. It is a virtual wallet that stores payment card information on a mobile device. Mobile wallets work with the "tap-to-pay" feature using NFC (Near Field Communication), or by letting you pay

from an online wallet which is preloaded with cash. Payments made through mobile wallets are much faster and convenient as compared to paying by cash, and is a big reason behind their current popularity. Mobile wallets are also a convenient way for a user to make in-store payments and can be used at merchants listed with the mobile wallet service provider. Driven by a population increasingly drawn to technology devices, Myanmar's fastest-growing mobile wallet KBZPay has set an ambitious target of reaching 30 million customers in the next 10 years [32].

Mobile Entertainment: Mobile terminal acts as a portable music player, a home-stay watching live stream musical concert and an efficient cinema at home. Downloading ringtones has become successful M-commerce application. Mobile phone manufacturers and wireless providers are making good money by selling different kinds of customized ringtones. Musicians and movie producer also can make huge amount of money by selling musical and film files to their targeted customers via mobile app.

M-Commerce in Healthcare and Medicine: Wireless services are used in healthcare and medicine for billing, lab ordering, referrals, prescriptions and clinical decisions. Healthcare professionals that run Mobile Doctor App are able to obtain patient information from any location. They are able to access the pharmaceutical information of patients and provide better patient care.

computers and the clothes. If the client wants to post ads about his/her products or services, he/she does not open to an account. And if the customer also wants to buy something, he/she can now buy cheaper price than outside the shops and more interesting products at Ipivi Myanmar.

Shwe Mee Eain Myanmar Book Mobile App : The purpose of this mobile app is to provide literature and knowledge books to lovers of literature from all over the country, including Myanmar. By using this mobile app, the consumer can get more knowledge and education from smart phones with easy and quick access. It's a great Android Mobile App that integrates books from Facebook Myanmar book lover's fan page and website's links of Myanmar books into a single place. The client can search the required books with book type and author. And he/she can make bookmarking on his/her favorite books. The books can also be downloaded to their phone for further reading of favorite books.

Myanmar 24h Mobile App: Myanmar 24h News Mobile App is a great mobile app that delivers real-time news updates. It gives information services on general news, local news, politics world news, business activities news, sports news, entertainment news, health and education news, crime news and life, technology and opinion news about Myanmar and International. It's a great mobile app that also lets the clients to read information from other newspapers by browsing through like Thithtoolwin, Burmese.DVB, 7day-daily, BBC-Burmese Mizzima-Burmese, Myanmar-Times, Eleven, Burma Irrawaddy, The voice Myanmar and Popular Myanmar.

mmShop Mobile App: This App is a tool to use added shopping sites at one place. The users can buy or sell products in Myanmar e-commerce community using smart phones. It can be seen the place where you can find and buy over 100,000 products across hundreds of brands which we deliver to your doorsteps in all 14 states and regions of Myanmar. In this shop application, there are variety of product and brands showcasing from mobile phone, power socket, accessories, sunglasses to phone, refrigerator, computer, skin care, shoes, car pump and etc. In this app, it is safe to pay at home. It also accepts the payment on delivery and Visa/MasterCard.

Myanmar Business Directory Mobile App: The Myanmar Business Directory is a comprehensive app that list of 239, 0000 businesses and Services in 222 townships of Myanmar's 14 States and Divisions. Myanmar Business Directory is a valuable tool to help the customers to find products that are made in other parts of the country, search for services which are not offered in their town, promote their business across the country and connect the consumers to their business when they are ready to buy. The customers need an active internet connection to use this application.

Myanmar CIF Mobile App: This app helps for car importer in Myanmar who wants to import automobile from oversea. In this application, the user can search desire automobile car based on brand and type for

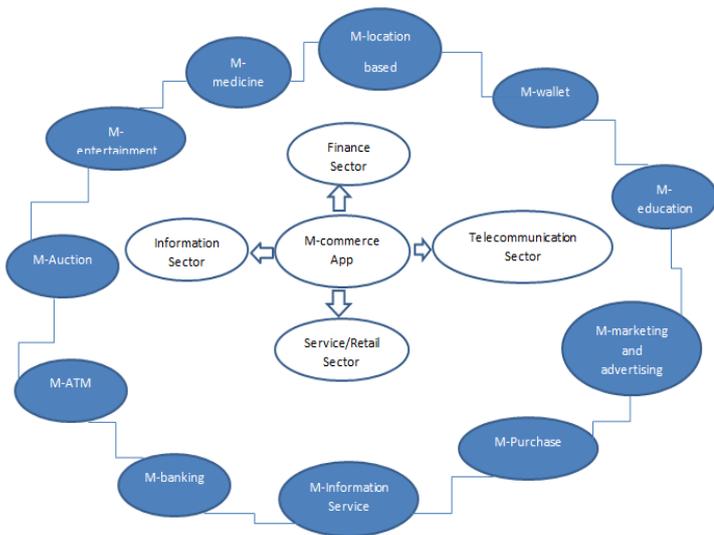


Figure 1. M-Commerce Applications and Services

Here is a list of some well-known innovative mobile commerce apps that are currently used in Myanmar. Several of the apps are marketplaces or help users to discover new products and services. There are also some resourceful app that redefines how we purchase daily goods and services and how we access useful information via our smart phones within little seconds.

Ipivi Myanmar Mobile App: This is the most used mobile app in Myanmar. It is a free local advertising Mobile App that gives information services from the start of used cars to mobile phones, furniture, laptop

import tax. Information in application is provided by Ministry of Commerce.

mLearn B2B Mobile App : mLearn B2B mobile App is acted as a place to learn and read contents for everyone who interested in business and management sector. Users can access B2B application 24/7 hours. It is a platform that allows you to study online business every day. In this app, participants can take the time they need and set their own schedule instead of working within a structure that was set for them by an instructor. Due to these benefits of Self-Pace learning type, the users can study their interested and useful online new courses at anytime, anywhere by having the Internet access with easily and most cost-effective.

Simply Learn Burmese Mobile App: Simply Learn Burmese Language App is a language app that will assist the user to speak Myanmar quickly and effectively. All Myanmar phrases and words are presented to the user in both phonetic and original Myanmar writing. They are recorded by a native speaker from Myanmar. It can save our favorite phrases and words to review them without fuss, study our vocabulary with flashcards using the spaced repetition technique. And test our knowledge with fun Myanmar language quiz and review our score.

Ondoctor HealthCare Services Mobile App: This app can be seen E-Health Counseling and Health Education by messaging. This includes sharing of audio, images and medical data between patients and healthcare professionals to develop diagnosis, treatment plan, prescription or advice. In this app, the doctors also discuss a range of topics from everyday living, parenting, pregnancy and managing health conditions. It is also a platform for connection between health care providers and the supporters from a variety of fields. There will be the private chat rooms for each society and public chat room for call-for- help in case of disasters and outbreaks. It also introduces offline medical touring to various areas of Myanmar.

Htwet Toe Mobile App: Htwet Toe is the agricultural app mainly designed to support agriculture knowledge to get more profit for farmers in Myanmar. This aim is to provide reliable and informative information to Myanmar's farmers who are struggling with many difficulties. This app can work day and night to answer all Myanmar farmers' questions quickly and accurately. This app has many features on agricultural guides, agricultural market updates news, agricultural technical articles, agricultural call center, agricultural guide videos and real-time weather updates.

KBZPay Mobile App: The mobile phone app will allow users to make cashless transactions, store, send or receive money, and withdraw cash through authorized agents. With KBZPay, the bank hopes to bring millions of people in Myanmar into the digital economy, which will make 100% financial inclusion a reality and ultimately help improve lives. Users will be able to top up their mobile wallets, withdraw cash through authorized agents and at KBZ Bank branches, make cashless remittances, and pay bills. They will be able to check their wallet balance any time. The app will also

resolve the issue of small notes by enabling exact-value transactions of any amount. It also aims to protect risk of theft and fraud, and secure money transfers so that no third-party can take out cash without permission. It also aims to help businesses and customers save time by reducing counting and managing cash.

GrabTaxi Mobile App: It is a mobile application of giving taxi service that connects travelers to one-way destinations. Passengers can travel to a way with Grab-Taxi at a cost 20% of least cost than normal taxi. Grab partner drivers will also be able to earn more commissions as rents increase. Because it is shared by one-way destinations travelers, it may take a little longer, but it will be cheaper for the travelers. Drivers also have the opportunity to earn more money by using Grab-Share with the same amount of time and fuel they spend on a road trip and the more time they spend on a road. By using this application, it can reduced traffic and carbon emissions, passengers are safe at a fixed price and are able to make new friends while traveling, passengers can enjoy up to 20% off than the regular Taxi fare and Grab partner drivers can make more money and improve their lives.

rgo47 Mobile App : The rgo47 mobile application allows you to the customer trending designs and order for a quick delivery to your doorstep anywhere in Myanmar. The customer can do their shopping of clothes, shoes, bags, cosmetic and many other fashion items worry-free from their mobile phone with free shipping and free returns. rgo47 mobile app is the leading online shopping and marketplace in Myanmar with the stellar reputation of providing excellent customer satisfaction. By the advantages of this app, the customer can take great care in offering highly attractive products at best price. Using the application is easy and ordering takes just one click. This app also helps to grow rapidly B2C market strategy in Myanmar.

V. IMPACTS OF M-COMMERCE IN MYANMAR

Nowadays, in Myanmar, online business transaction shifts to smart phone from desktop computers. M-Commerce has proved a major boon for business sectors like fiancé, telecommunication, Retail sectors, Information Sector etc. through its versatility and superiority. Increasing internet and mobile saturation, growing acceptability of online payments and favorable demographics has provided the e-commerce sector in Myanmar the unique opportunity to companies in connecting with their customers. Today, it's become more crucial for E-commerce companies to have mobile apps that are easy to navigate and designed attractively. Its main task is to improve the user experience on mobiles and build a stronger technology infrastructure. Quite a lot of business dealings no matter how big or small are being finalized on the mobile phone. Customer would be able to book the order, can hire carrier/courier services and above all could also pay the dues related to it through mobile. The scope of mobile commerce works vastly business sector including all big and major financial institutes, banks, stock market and

share brokers. Whenever any user needs money or wants any sort of banking and finance related services people can access the services or register services via voice calling or via (SMS) services. The statistical data of below graph shows that the percentage of internet usage penetration rate with mobile phone in Myanmar from 2005 to 2017. In 2017, it can be seen that approximately 30.68 percent of the population in Myanmar had access to the internet by using smart-phone for online transaction [28]. In 2019, about 39 percent of the Myanmar populations were active in using the internet with smart phone. In 2020, 40.8 percent of Myanmar population has a chance to taste the internet for online business transaction [26].

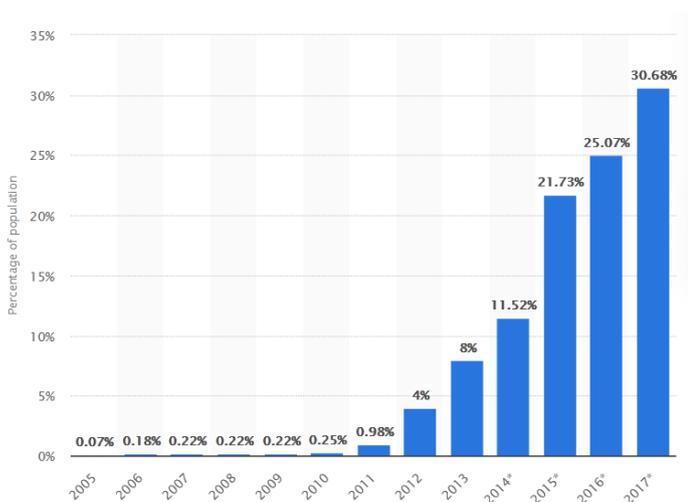


Figure 2. Percentage of internet usage penetration rate with mobile phone in Myanmar (2005-2017)

In Myanmar, due to the increasing mobile usage subscribers from year to year, roughly 80-85 per cent of the total E-commerce sales are being generated by mobile devices and tablets. According to above statistical data, M-commerce also likely continue upwards. Thus, it is not surprising that mobile commerce is emerging much faster than its fixed counterpart. M-commerce is more personalized than e-commerce and thus needs a gentle approach to appraise m-commerce applications. As an ecommerce store owner, he/she need to stay up to date with the latest mobile commerce trends. Whether Myanmar businesses are using Shop.com, Zego Bird or another web site platform to sell products from online, they can't ignore mobile consumers. It's no secret that consumers are using their mobile devices to buy online. So, M-commerce can dominate the global E-commerce market share. Rather than using an Internet browser, more than half of Myanmar shoppers went straight for a mobile app to accommodate their shopping needs. Myanmar business has a huge opportunity for mobile commerce. This is the first time a majority of Myanmar people are getting more connected to the internet due to the investment of foreign telephone operators and increasing the number of mobile phone operators. They

are discovering products at costs that are lower than they've never seen before, and they are getting products that were not available in their market before. So it's a huge opportunity. In Myanmar digital payment, KBZPay, SaiSai Pay are some players in M-commerce. In Myanmar, consumer are paying electronic meter bill, paying property taxes ,making donations to designated charitable organizations, buying data packages to access the Internet, buying high-way bus tickets easily, giving paying homemade bread for a family or friends with their mobile phones. Consumers tie their debit or credit cards to the mobile platform.

VI. M-COMMERCE ISSUES AND CHALLENGES

Mobile commerce is facing many issues and challenges in Myanmar because Myanmar is a rural country and huge amount of people from small towns and villages. Poverty and literacy is a big hurdle in development. Today after the great evolution of technology still people use traditional ways to do business because there are lots of imitations. People uses phone but smart phone is must for m-commerce. Poor people can't buy smart phone or in other condition if they buy smart phone but they can't do business or use other applications because language problem understanding problem. There are number of challenges and issues faced by m-commerce in Myanmar like:

Security issue: Ensuring security of payments and privacy of online transactions is a key to the widespread acceptance and adoption of m-commerce. While the appropriate policies are in place to facilitate m-commerce, lack of trust is still a barrier to using the Internet to make online transactions. Moreover, credit card usage in many developing countries is still relatively low.

Financial costs: Cost is a crucial issue. The initial investment for the adoption of a new technology is proportionately heavier for small than for large firms. The high cost of smart phones and Internet access is a barrier to the uptake of m-commerce. Faced with budgetary constraints, SMEs consider the additional costs of information technology spending as a big investment without immediate returns.

Lack of awareness and understanding of the value of m-commerce: Most SMEs in developing countries have not taken up m-commerce or use the Internet because they fail to see the value of m-commerce to their businesses. Many think m-commerce is suited only to big companies and that it is an additional cost that will not bring any major returns on investment.

Lack of ICT knowledge and skills: People want play a vital role in the development of m-commerce. However, technology literacy is still very limited in most developing countries. There is a shortage of skilled workers among SMEs, a key issue in moving forward with using information technology in business. There are also doubts about whether SMEs can indeed take advantage of the benefits of accessing the global market through the Internet, given their limited capabilities in design, distribution, marketing, and post-sale support.

While the Internet can be useful in accessing international design expertise, SMEs are not confident that they can command a premium on the prices for their goods unless they offer product innovations. They can, however, capitalize on returns on the basis that they are the low cost providers.

Internet Network Connectivity: In Myanmar, mobile network is not available in entire region; low connectivity problem is still faced by our Indian people in remote areas. Internet connectivity is big issue. At the rest broadband connection is not available at many places in Myanmar. Also 3G and 4G networks are not available at so many states.

Other privacy and security-related issues : While security is commonly used as the catch-all word for many different reasons why individuals and firms do not engage in extensive m-commerce and use of Internet-based technologies, there are other related reasons and unresolved issues, such as tax evasion, privacy and anonymity, fraud adjudication, and legal liability on credit cards. In many countries, cash is preferred not only for security reasons but also because of a desire for anonymity on the part of those engaged in tax evasion or those who simply do not want others to know where they are spending their money. Others worry that there is lack of legal protection against fraud (i.e., there is no provision for adjudicating fraud and there may be no legal limit on liability, say, for a lost or stolen credit card). It is necessary to distinguish these concerns from the general security concerns (i.e., transaction privacy, protection and security) since they may not be addressed by the employment of an effective encryption method (or other security measure).

Gender Equality: Digital skills are limited; women often rely on men to learn 'how' to do things on mobiles. Many women did not possess the skills or knowledge to begin using data services (due to a lack of experience with technology), and usually relied on others (primarily men, either relatives or in phone shops) for instruction. This was seen to limit the amount of help women sought and received. Some rural women respondents felt uncomfortable (or shy) asking men for help.

Business Risks: Despite of huge potential for businesses in Indian market, it is important for companies to note that people are looking for innovative ideas and better deals over internet. Another factor against m-commerce is that consumers are ambiguous about quality of products especially the products in groceries, cloths and footwear segment. One major factor behind this is the quality of product, people are able to check for quality of products at store, as per their wisdom and knowledge and then decide if they should buy product or not. Because of this reason, customers do not find shopping groceries online as a convenient way. Size of smart phones is increasing rapidly but still there are times when people are not able to observe and analyses products easily on mobile screen. Therefore, it is difficult for companies to convince consumers that they are going to get high quality products with lower

prices as compared to deals provided at brick and mortar stores.

VII. OBSERVATION AND ASSESSMENT ON POTENTIAL AND OPPORTUNITIES OF M-COMMERCE IN MYANMAR BUSINESS AREA

Recent developments in the environment such as increasing use of smart phone, Internet and social media are good opportunities to businesses to carry out Internet marketing including mobile phone marketing (m-Marketing and Facebook marketing (f-Marketing). There are also a number of businesses offering their goods and services online like retailing. Now, more than 90% of Myanmar population has the mobile phone and over 80% of them use smart phone to access the internet. Myanmar is a dynamic and rapidly-growing, 'mobile first' market, and the telecommunications sector has seen unprecedented growth in a market that went from unconnected to fully connected and from low digital adoption to the fastest growing digital nation in a span of a few short years. Moreover, businesses are well exposed of modern business practices using technology such as smart phone and Internet. The opportunity of M-Commerce in Myanmar is huge as Internet and related infrastructure are being built up. The electronic payment is also being developed and ready to use. Effective customer relationships are developed by the organization as a strategic intent as well as the availability and application of tools and functions in the mobile-marketplace system such as communication networks, databanks and mobile services. Success of B2B (business to business) and B2C (business to customer) marketing depends largely on the ability to operate with the partners along the supply chain which includes the flow of materials, information, money and services from suppliers to the end-user through factories and warehouses [15]. The more the supply chain executives can identify where the value lies, the opportunities in the supply chain, the greater will be the success in the B2B and B2C electronic marketplace. The essence of Internet marketing (including B2B and B2C) is to remove traditional intermediaries and thereby keep lowest costs in the search and transactions [21]. It also promotes the match between seller and buyers, thus it can develop new markets. Therefore, the success of B2B and B2C electronic marketplace depends on the degree and extent of its enhancement on the competitiveness of the seller in these areas such as cost reduction and market development. Electronic marketplace can exchange information effectively between buyer and seller. Information transparency in price, cost and terms and conditions of contract can benefit both parties, despite a belief that transparency can cause some disadvantages in the competition [22]. Moreover, it is also necessary to present information in an appropriate style so that the market participants can obtain information easily. Thus, the design and display of mobile web pages become essential in the determination of success of electronic marketplaces. Success in B2B electronic marketplace requires strong support and commitment. This adoption and application

of e-business usually needs a management of change paying systematic attention to learning process, organization culture and system thinking [11].

Government's support in terms of development of infrastructure and legal framework are crucial for the success and growth of E-commerce in general. Formation and enforcement of electronic contracting calls for the liberalization of telecommunication services and the establishment of legal framework which handles the issues of security, privacy and protection of intellectual property rights [21]. Security measures to protect data are concerned with both sellers and buyers [22] and the adequacy of security measures is thus a critical factor. Similarly, trust is essential in business relationships which can contribute to the loyalty. According to Berry [6], trust is the foundation for relationship marketing. Establishment of legal framework is covering the issues of security, privacy and protection of intellectual property rights. In line with general marketing concept, the success of Internet based marketing depends on the extent of the focus on the specific needs of customers and tailoring the marketing programme accordingly. The emphasis on the local contents and the use of local languages can be helpful for the customers in some other countries [12].

To improve the mobile commerce efficiently in Myanmar, the government should facilitate good network expansion through the country, mobile web page's content design should be designed more affordable and should be taken into account the lack of awareness of privacy and security settings, for example, simplifying settings, making them more accessible, etc. Content in the mobile web pages are more relevant for getting increase awareness of the mobile m-commerce users. Incorporating content on internet safety and privacy (including social media) in digital literacy efforts should also be necessary. Incorporating content on internet safety and privacy (including social media) into national school ICT curricula can help ease concerns about the negative impacts of children accessing mobiles. Some Efforts should be made to improve digital skills and literacy to enable new users to experiment with the features on their phones and find new and valuable uses. Developing locally relevant content and local language content should also help to raise awareness of m-commerce users. Efforts are needed to improve the digital skills of women and men beyond basic mobile literacy, especially women who have somewhat limited opportunities to 'learn'. Another big challenge for Myanmar People to overcome is the widespread use of the Internet for the Facebook. When it comes to Myanmar mobile phone users about using the internet, they mistakenly think that the internet means Facebook. According to a survey conducted by Statcounter in October 2017, Facebook has come up with 94.18% of users' expectations [34]. Peter Sinon, a member of Google's policy team said that Facebook is so popular in Myanmar that consumers are not eager to read other websites. Helena Galpia, Executive Director of LIRNEasia also pointed out that Facebook has political parties, various social services, social networks

campaigns and Companies [34]. This is the fact that the consumer can find all kinds of content through the Facebook and it can also makes impossible for Internet users to think about leaving Facebook. As a result, users do not have access to the rest of the site except for social media. According to NapoleonCat[35],social media analytics and automated customer service solution marketing tool, there were 24,320,000 Facebook users in Myanmar in March 2020, which accounted for 44.3% of its entire population. The majority of them were men that are 58.7%. People aged 25 to 34 were the largest user group (10,900,000). The highest difference between men and women also occurs within people aged 25 to 34, where men lead by 2,100,000.

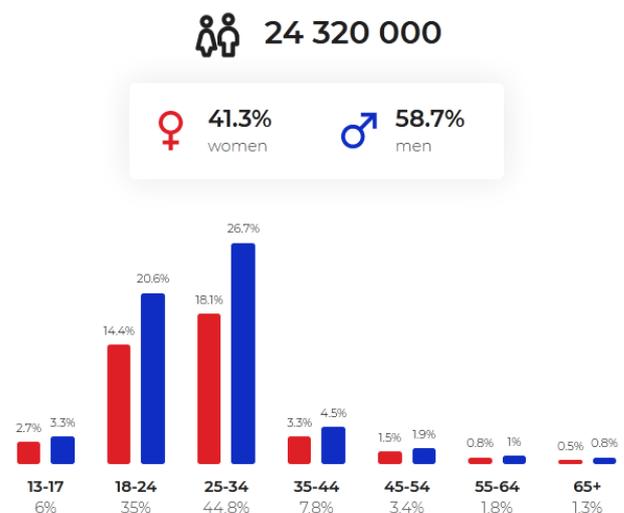


Figure 3. Percentage of Facebook user penetration according to age period in Myanmar at March 2020

By taking the advantage of continuing growing usage Facebook among the young Myanmar people who are greatly interested in ongoing technology and has more active and effective strength , Myanmar vendors should use a powerful tool for developing mobile commerce that jointly contributes to shaping a dynamic and highly interactive mobile electronic market environment where vendors can reach customers anytime anywhere. This tool should enhance the understanding of customers' perceptions and behavior regarding m-commerce and the use of social media on mobile devices. It should also explore the potential of social media for m-commerce, leveraging the augmenting use of social media on mobile devices. These are the factors that are important for m-commerce and social media adoption on mobile devices as well as for the integration of social media in m-commerce. From a business perspective, such tools can help the vendors to locate their fans and customers, and use target their mobile strategy to quickly interact with them. This social web also enables companies to positively influence consumers' opinions and behaviors. So, it is important for Myanmar business vendors engaging in M-commerce to exploit the potential of social media in order to become known, increase their customer base and provide more interactive communication, gaining customer trust.

VIII. CONCLUSION

This paper shows that M-commerce is the extension of e-commerce. It works within a mobile device using a mobile network infrastructure. M-commerce is a rising technology like an e-commerce. It has numerous issues and concerns with them. During these days, everybody is busy in their life and they want save the time and money. M-commerce is a technology that is very suitable and useful technology to save time and energy because people would not go outside. But people face many problems in fully adoption of this technology because there are lots of problems. There are also different limitations in Mobile commerce. We discussed earlier these in issues and challenges. These problems can remove by the following some steps by the people, government and business strategies. Now, mobile companies are spending more to protect their customers and their Information from hacking. There are plenty to be worked from the government surface and provider side to make m-commerce a success by taking necessary steps to enhance these growth factors like building of infrastructure to internet connectivity, provide consciousness and educated more people for english language, reduce cost of wireless connection, provide security and safety on mobile devices. Future of Smart phones are all over the place and peoples are going to use mobile, and developers are constantly update m-commerce technology day by day according to users need. Needless to say, online marketers are custody their eyes open for the latest advancements in m-commerce. Thus, the future of m-Commerce seems extremely bright because several experiments are going on to introduce the upgraded version of mobile likely to merged with the evolution of 5G mobile technology. Overall, convenience of m-commerce is expected to surpass its little disadvantages and in future, m-commerce is expected to become much more popular.

REFERENCES

- [1] Amol Kale and Rajivkumar Mente, "M-Commerce: Services and applications", *International Journal of Scientific and Research Publications (IJSRP)*, https://www.researchgate.net/publication/326082663_M-Commerce_Services_and_applications, (2018), Volume 3- Special Issue 1, Page No.19-21, ISSN:2455-4227.
- [2] A. Deepika, "Trends in M-Commerce", *International Seminar on Recent Trends in Marketing Technology*, <https://zenodo.org/record/1419466>, (2018), Vol. 6 - Special Issue 1, pp. 285–290, ISSN: 2320-4168.
- [3] Aarti Singh, "Impact of Mobile commerce in E-commerce in perspective of Indian Scenario", *Asian Journal of Technology and Management Research (AJTMR)*, http://www.ajtmr.com/papers/Vol6-Issue2/Vol6Iss2_P1.pdf, (2016), Volume 06– Issue 02.
- [4] Ayesha Zainudeen and Helani Galpaya, "Mobile phones, internet, and gender in Myanmar", *Report of a joint GSMA Connected Women - LIRNEasia study*, <https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2016/02/Mobile-phones-internet-and-gender-in-Myanmar.pdf>, (2016).
- [5] Ash, C., "Managing e-Business Change within a Global e-Marketplace: A Buyer's Perspective", *ECIS 2005 Proceedings*, https://www.researchgate.net/publication/221407490_Managing E-Business_Change_within_a_Global_E-Marketplace_A_Buyer's_Perspective, (2005), Paper 78.
- [6] Berry, L., "Relationship Marketing of Services- growing interest, emerging perspectives", *Journal of the Academy of Marketing Science*, <https://journals.sagepub.com/doi/10.1177/009207039502300402>, (1995).
- [7] Chandan Gupta, Anil Chandhok and Dr. Manu Gupta, "Hardship of M-commerce in India: Problems, Issues & challenges", *IOSR Journal of Business and Management (IOSR-JBM)*, <http://www.iosrjournals.org/iosr-jbm/papers/Vol18-issue1/Version-1/F018112226.pdf>, (2016), Volume 18-Issue 1, PP 22-26, e-ISSN: 2278-487X.
- [8] Chitra Kiran N (2012), "Efficient M-commerce Marketing Application Based Internet of Things Using Near Field Communication", *International Journal of Computer Engineering and Technology (IJCET)*, https://www.researchgate.net/publication/256042702_Efficient_M-Commerce_Marketing_Application_BasedInternet_of_Things_Using_Near_Field_Communication, (2012).
- [9] Hu, Q., Wu, X. and Wang, C. K. (2004), "Lessons from Alibaba.com: Government's role in electronic contracting", *International Journal of Information and Science*, https://www.researchgate.net/publication/235262945_Lessons_from_Alibaba.com_Government's_role_in_electronic_contracting, (2004), ISSN: 1463-6697.
- [10] Jean-Eric Pelet and Panagiota Papadopoulou, "Social media and m-commerce", *International Journal of Internet Marketing and Advertising*, https://www.researchgate.net/publication/277621864_Social_media_and_m-commerce, (2015), Vol. 9, No. 1.
- [11] Kush Dhingra, Abhishek Bhardwaj and Aashish Aggarwal, "M-Commerce", *International Journal of Engineering Research and General Science (IJERGS)*, <http://gujaratresearchsociety.in/index.php/JGRS/article/download/2738/2255/>, (2015), Volume 3-Issue 2, ISSN 2091-2730.
- [12] Lo, B. W. N. and Gong, P., "Cultural Impact on the Design of E-Commerce Websites", *Issues on Information Systems*, https://iacis.org/iis/2005/Lo_Gong.pdf, (2005), Volume VI, No. 2
- [13] Manoj Giri and Sonia Singh, "Issues in Mobile e-commerce: A survey", *International Journal of Computer Science and Information Technologies (IJCSIT)*, http://ijcsit.com/docs/Volume/205/vol5issue04/ijcsit2014_050451.pdf, (2014), Volume 5, Issue 4, ISSN: 0975-9646.
- [14] Mitesh Pravinchandra Mandaliya, "Mobile Commerce: The New Era of Shopping", *International Journal of Innovations in Engineering and Technology (IJJET)*, <http://ijjet.com/wp-content/uploads/2015/01/46.pdf>, (2014), Volume 4 - Issue 4, ISSN: 2319 – 1058.
- [15] Muhammad Faisal Sultan, Habib ullah Khan and Shahid Khan, "Studying the Impact of Point of Differences of M-Commerce Over E-Commerce: Are they really significant in providing edge to M-Commerce in developing areas of the world: Evidence from the customers of Karachi City", *International Journal of Scientific and Research Publications (IJSRP)*, <http://www.ijsrp.org/research-paper-1016/ijsrp-p5858.pdf>, (2016), Volume 6-Issue 10, ISSN 2250-3153.
- [16] N. Kryvinska and Christine Strauss, "The role of e-commerce in B2B markets of goods and services", *International Journal of Services Economics and Management*, https://www.researchgate.net/publication/259333744_The_role_of_e-commerce_in_B2B_markets_of_goods_and_services, (2013), Vol. 5, Nos. 1/2.
- [17] Pua Wee Meng, "The Myanmar Consumer Survey", *Publication at Deloitte Southeast Asia*, <https://www2.deloitte.com/content/dam/Deloitte/sg/Documents/consumer-business/>, (2019).
- [18] Rahman MM and Sloan T, "Opportunities and Challenges of M-commerce Adoption in Bangladesh: An Empirical Study", *International Journal of Internet Banking and Commerce*, <http://www.icommercentral.com/open-access/opportunities->

- and-challenges-of-mcommerce-adoption-in-bangladeshan-empirical-study.php?aid=62536, (2015), Vol. 20, No.3.
- [19] Rupinder Kaur and Sofia Singh, "Mobile Commerce: Indian Perspectives", *International Journal of Innovative Research in Computer and Communication Engineering (IJIRCCCE)*, http://www.ijirccce.com/upload/2016/march/169_48_Mobile_2%20HARD.pdf,(2016),Vol. 4 - Issue 3 ,ISSN (Print) : 2320-9798, ISSN(Online): 2320-9801.
- [20] S.Anthony Rahul Golden and S. Bulomine Regi , "Mobile Commerce in Modern Business Era", *International Journal of Current Research and Academic Review(IJCRAR)*, <http://www.ijcrar.com/vol-4/S.Anthony%20Rahul%20Golden%20and%20S.%20Bulomine%20Regi.pdf>,(2013),Volume 1 , Number 4 , pp. 96-102,ISSN:2347-3215.
- [21] Ting, Peng L., "Introduction to the Special Issue: Mobile Commerce Applications Source", *International Journal of Electronic Commerce*, <https://www.semanticscholar.org/paper/Introduction-to-the-Special-Issue%3A-Mobile-Commerce-Liang-Wei/56bb8a2b3f81b62560d366552491faa37d31795e>, (2004), Volume 8 - Issue 3.
- [22] Wagner, C. M., Smyth, A. & Sweeney, E., "B2B E-Marketplace in the Procurement Supply Chain of Airlines: A Strategic Direction for the Future? In Enhancing Competitive Advantage through Supply Chain Innovation", *Proceedings of the 9th Annual Conference of the Logistics Research Network (LRN2004)*, https://www.researchgate.net/publication/254584576_B2B_E-Marketplace_in_the_Procurement_Supply_Chain_of_Airlines_a_Strategic_Direction_for_the_Future,(2004).
- [23] Yen, B.P.C. and Ng, E.O.S., "Migrating procurement onto the internet", *Electronic Commerce Research*, https://www.researchgate.net/publication/226591833_Migrating_Procurement_onto_the_Internet, (2002).
- [24] Zhu, K., "Information Transparency of Business-to-Business Electronic Markets: A Game Theoretic Analysis", *International Journal of Management Science*, <https://www.jstor.org/stable/30046106?seq=1>, (2004).
- [25] <https://www.engpaper.net/m-commerce-research-papers.htm>
- [26] <https://www.internetworldstats.com/stats3.htm>
- [27] <https://www.telenor.com/providing-internet-for-all-in-myanmar-in-record-time>
- [28] <https://www.statista.com/statistics/1063852/myanmar-smartphone-penetration-by-region>
- [29] <https://www.statista.com/statistics/766034/internet-penetration-rate-myanmar/>
- [30] <https://buildfire.com/mobile-commerce-trends>
- [31] <https://coconuts.co/yangon/news/85-percent-myanmar-internet-use-smartphones-survey>
- [32] <https://consult-myanmar.com/tag/kbipay/>
- [33] <https://mm.myanmartechpress.com/most-useful-mobile-apps-in-myanmar>
- [34] <https://mm.myanmartechpress.com/myanmars-prospects-for-the-future-of-the-internet>
- [35] <https://napoleoncat.com/stats/facebook-users-in-myanmar/2020/03>
- [36] <https://digitalinasia.com/2017/01/09/myanmar-33-million-mobile-users-smartphone-usage-80/>