

The Driving Forces of M-Commerce as an Emerging Technology and Independent Ecosystem



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Abstract

With the advancement in technology and the introduction of internet, the traditional electronic data interchange (EDI) has transformed to internet dependent commerce, electronic commerce (e-commerce). E-commerce has enabled users to access services and make transactions from anywhere and anytime. Nowadays e-commerce is continuously moving towards mobile commerce (m-commerce). M-commerce is not an extension of e-commerce but it is a new dimension in the era of new-age marketing. M-commerce has created a new definition in modern-day marketing. It has set new parameters and designed a path for marketing revolution in the future. The ease, comfort, accessibility, and convenience have broadened the outlook of the participants in the industry and widened the scope of business. Driving forces for m-commerce are the factors which will lead to expansion of the technology to a wider market segment. It will help the companies to walk toward a new technological revolution. It will lead to a better connectivity between buyers and sellers, connectivity which will also encompass Business to Business, (B2B), Business to Consumer (B2C), Consumer to Business (C2B), and Consumer to Consumer (C2C). M-commerce provides customers' comfort, convenience, and cost-effective ways to fulfill their requirements. It also leads to better linkage between the buyers and sellers.

Keywords: Mobile payments, Software, E-commerce, Technology, Transactions, Connectivity, Customers

JEL Classification: C88; D83; M31; M37; O33

M-commerce can be defined as the wireless mode by which buying and selling can be undertaken. The transactions are held through wireless medium without any need for plugging in. the technology provides the comfort and convenience to the users. Mobile communication is a device which stands apart from all the historical communication methods. It is a new chapter and has set multidimensional parameters. Mobile is considered to be most powerful medium of communication.

Technology has reached at a very fast rate to every stratum and segment of the world. It has superseded all the demographical, geographical, or sociological boundaries in the world. Mobile has in true sense led to technological inclusion. It has incorporated each and every individual under its ambit. This technology has created platforms for sharing of knowledge, expression, ideas, and innovations and is building awareness among the masses. There is no

rocket science to get adapted to this great technology. It is user friendly, accommodating, economical, and has bypassed all the barriers of communication. A technology which provides solution to all communication deterrents, language barriers, and above all, it wins over all the special needs. The latest software's have incorporated the demands of the people born with special needs. The technology is not only supporting them but also complementing their requirements. People with different learning disabilities can make use of the technology and a large number of apps, which instill confidence in their abilities.

COMPONENTS OF M-COMMERCE

The financial components of m-commerce include mobile banking, mobile financial services, and mobile payment. M-commerce also includes transportation services, gaming services, household services, house-help services, online groceries, and so on. Mobile technology has been so far successful with the convenience of carrying on all buying and selling activities comprising anything from anywhere, without the need of the usage of desktop. The extension of m-commerce should encompass all the commerce and business transactions to be carried on the internet. M-commerce applications should be user friendly providing the ease and convenience to its users. Mobile financial services are an inherent contributory factor for the success of m-commerce.

Financial services include the money transfer, banking transactions, payment of insurance premium and mutual fund payments, and so on. Mobile payments comprise payment for the usage of services online through application-based services by transferring the funds from the online bank accounts to the mobile payment wallet. Such as if a person has used the online cab service, the payment for the same can be done from the bank account directly to the service providers account through the mobile without the need for carrying cash. Growing demand for mobile banking has created large number of opportunities for the banks to target the account holders for providing mobile banking services. It provides ease and comfort of getting the information related to the banking transactions with respect to your account. Mobile financial services need a large amount of security or an enhanced finger recognition system so as to provide authenticity and thus, increasing the number of users.

When all the financial transactions can be handled through the mobile, it provides convenience as well as the comfort of handling the financial transactions. The 24/7 access to the account is considered to be a safe option. In case of any emergency, the customer will not have to wait for the next day for branch to open to know the robbery or a fraud from his account. The earlier information will lead the account holder to keep himself abreast of transaction on his account. M-commerce provides an opportunity to banks to target their tech-savvy customers and be in constant touch with them by providing variety of schemes and offers. Banks can also reach to new customers by offering technology as a strong point and the efforts taken at their end to ensure safety and security as front-end parameters. Mobile banking could have a brighter future as compared to online banking, if the banks and their technology departments can upgrade and implement the high-end skills to reach out to customers in every possible way. M-commerce requires safety and security as strong phenomena. It also needs the innovative strategies to beat the tough competitive wars and create retention among the existing users. Cost-effective plans can be a possible tool to attract new customers as well.

EXTENSION OF E-COMMERCE. The rise of e-commerce has led to the progress toward m-commerce. Technological revolutions have created a push toward ease and convenience in the most cost-effective manner. Internet access and web browsing on mobiles have become an inseparable part of mobile. Mobiles come with an added advantage of touch screen technology, which makes it easy to handle anywhere and anytime. It also incorporates all the comforts and conveniences satisfying the needs of the consumers. Changes in the technology have given the m-commerce world a better push and a great support to carry on transactions more smoothly. One of the important driving forces for the m-commerce technology is the easy access of internet on mobiles. Consumers are happy to enjoy the merging of two technologies at the top of communication world—mobile and internet. When internet is offered free on mobile, they are willing to make use of it. But a great resistance is shown toward the payments involved in the usage of internet services still by a large number of users. M-commerce is an extension of e-commerce with the provision of using of a large number of apps without the need for a desktop. Customers should be presented with the ideology of a brand-new medium in the m-commerce technology. The participants of m-commerce technology have to develop a change in the thinking abilities and a shift in their approach while using this technology. The m-commerce technology has to imbibe the needs and desires of the consumers, marketers, and all the other authorities participating. M-commerce and e-commerce should be considered as two different tools in the technological inventions. Their roles have to be categorized and understood in isolation. They both vary with their

own advantages and disadvantages. The three main drivers of m-commerce are value chain, technology, and consumer demand, which are the main reasons contributing for the mass revolution this type of commerce.

COST. The cost is higher due to the network and other associated systems. The investment rises as it has to be made available while the customer is on move. Cost also depends on the data usage, downloads, files accessed, and the services provided. Mobile communication companies have tried to lure consumers by providing free internet usage on mobiles. It has proven a good amount of success for them at the initial stage since the number of people opting for the communication services has considerably risen up. But the big question would be that something which was freely available all this while, will it still be popular when the cost factor is added to it. Marketers have understood the fact that the two binaries, that is, mobile and internet are now inseparable from the consumers. In fact, they are more of an addiction for the consumers. The service which was coming free to them for a period of 6 months, customers might will pay a small fee for it rather than forgo the usage of internet addiction which they cannot imagine living without. Pricing strategies should be carefully drafted and efficiently delivered, without the consumer realizing the burden of it. The consumers should feel excited about the brand which they have accessed for this while without paying any charges and a nominal fee might be just a token of appreciation for them to repay.

SOCIAL MEDIA MARKETING. Entertainment industry is a big industry and growing leaps and bounds. Mobile communication systems have changed the entertainment industry as well. Movies can be downloaded, TV serials could be uploaded, movie tickets could be booked online, and utility payments could be made. Mobiles have provided convenience, comfort, and above all, it has caused enormous changes in the business dynamics. Mobile marketing and mobile ticketing are the two terms which have got added in the mobile revolution. Music, movies, TV serials, games, and so on, mobile technology provides a wider range of entertainment services to its users. The technology aims to provide 24/7 entertainment channel to the consumers in the form of mobile, the one of major drivers for the China's mobile economic boom. It is an entertainment outlet which is not dependent on indoor connectivity but also extends to outdoors through a wireless medium. It is available everywhere, with or without internet connectivity. Mobile entertainment also covers videos and audio messages which are travelling through the reins of social media. They are reaching out to a larger number of audiences. Audio and videos once downloaded on the mobiles can be listened and watched any number of times without the requirement of any kind of connectivity or services. Mobile entertainment services provide mobility, which helps during travelling, vacations, or out of station. These services are very helpful for the users to fulfill their leisure requirements. Social media has created impetus in the spread of mobile entertainment. Real or unreal videos keep on getting uploaded on the mobiles and the users ensure the video gets viral faster than any mode of communication.

DRIVING FORCES FOR M-COMMERCE

Mobile applications have been a boom for all the businesses. Every business organization establishes a mobile application to provide services in the viral world. Technology aspires to be accessible all the time. The generations of today, no more waits to log on to the desktop or a laptop. The handiest option is a mobile. Whether it is making payments, transferring of funds, shopping, ordering goods, or any other online transaction, the fastest mode is mobile. Mobile technology, due to its ease, accessibility, and convenience has taken over all the other electronic and other gazettes from us. Whether it is a diary, calendar, clock, alarm, calculator, camera, Walkman, radio, albums, newspapers, or contacts collection, it has taken over almost every other thing. The mode of communication now remains mobile, whether through chat, messenger, mails, social media, video calling, or anything else. Medium of communication for today's generation is largely mobile; therefore, a vast amount of time is spent on it. Marketers realized that to survive the tough marketing warfare, they have to have mobile advertising as an important element of IMC, that is, Integrated Marketing Communication. It has changed our lives, the way we communicate, travel, chat, explore, shop, order, express, celebrate, wish, and handle our relationships. The new social quotient formulas are derived from the number of Facebook friends, Twitter followers, WhatsApp groups, and so on. Social circles are getting viral with the clubs evolving in it, in the form of WhatsApp groups. Psychological satisfaction is now defined by the number of likes, comments on Facebook, comments on Instagram, and comments posted on walls of social media. The changing times have changed the era of communication, the way we express, share, or post anything. The words are replaced now by emoticons available aptly for each and every possible situation. Recent changes in the business environment have brought immense changes in the marketing strategies and have streamlined broader business definitions.

• **COMPETITION** - Three main organic objectives of business are survival, growth, and image. These organic threefold objectives have articulated the businesses to strategize their marketing policies. Marketing warfare has set

new boundaries in the industry. Competition among the brands is omnipresent. The cutthroat competition has crossed all the boundaries and parameters of doing businesses. Every other brand strives for retention and creating reminders in the minds of the customers. Therefore, there is a dire need to be where the customers are, that is, the world of mobiles. Resultantly, most of the brands have created and placed their applications online. In fact, they have gone a step further to motivate the consumers to download the app by luring them to attractive offers, ranging from initial free orders, discounts, or fee waivers. Consumers have to download the app on their mobiles and the services begin along with the monetary incentives.

- **TECHNOLOGY** - Advancements in technology have created a new era in the world of marketing and advertising. Brands are vying for consumer's attention by all means. On one hand, high-end technology has created innumerable opportunities for the brands to make their products and services accessible and believable for the consumers but on the other hand, technology also brings resistance from the users. Technology works all the ways whether it is to involve the customers in the production process or at any other stage of delivery of product. It leads to providing products to customers, especially customized ones by fitting in their desires and expectations. Technology has made possible a delivery system which has never been imagined before, while ensuring that the products and services are being rendered in most shortened time frame. It is an era where the physical delivery of goods could be virtually tracked and exact delivery time can be estimated. The app world makes it easier for the marketers to be available to the customers 24/7. It makes the concept of accessibility and convenience true in the real-time frame. It wins over the barriers of geography as well as demography. The markets are widened when the expansion takes place and the consumer base increases.

- **GLOBAL VILLAGE** - In the current scenario, the world is one big stage with all kinds of products in a big market inclusive of buyers and sellers. The challenge lies for the developing nations, as they have to meet the standards laid by the developed nations. The world is walking on the lanes of cutthroat technology. Every nation and every other company have to imbibe and inculcate the technological advancements in its functioning behavior. Global village has on one hand provided immense opportunities to marketers by creating wider markets. On the other hand, it has laid m-commerce as a challenge. Emerging markets are opportunities in front of the marketers all over the world to be grabbed. They have the advantage of selling the goods to the customers all over the world without any kind of geographical barriers. The wider markets have enhanced the scope of their businesses. M-commerce is an opportunity which stratifies and simplifies the concept of global village more comfortably. Touch screen technology provides the marketers ease as well as opportunity to carry on the business all over the world while sitting at one corner of their place of business. This is a technology which knows no boundaries and makes the world one small village by integration of economies. Marketers can benefit from the differentiated prices and trade on equity while sailing and reaping the profits of the trade. In this big village, there are no entry or exit barriers. There is also no cost being imposed on entry or exit of goods. The goods do not have to be confined to any selected markets anymore. They are free to be sold in any part of the world to any customer.

- **SIMPLICITY** - M-commerce has been successful, magnificent, and powerful tool due to the presence of inherent simplicity in it, a technology which does not require training or a particular skill. It is also not limited to the concept of literacy; therefore, the number of users is inclusive or exhaustive. It cuts across all the boundaries of age, gender, language, education, income, occupation, and so on. It is customer friendly as well as standardized. The aim of any revolution should be inclusion to succeed and to excel. Inclusion should be true and real, encompassing each and every one under its ambit. M-commerce has been truly inclusive with the technology reaching to each and every section of society. Whether it is the domestic helpers in our houses, vegetable vendors, street sellers, hawkers, daily wage earners, there is a choice for each one due to the ease of price ranges offered in the mobile segment as well as telecommunication technology.

- **VALUE CREATION** - Value creation entitles the consumer's ideology about the brand to be positive and supportive. Google maps can be used on the mobiles without any internet connection or any data plan. The websites such as Wikipedia and Twitter can be accessed without internet connectivity. Latest news can be read, FM channels can be listened, bus and train schedules can be planned, spiritual apps can be read, and existing mails can be opened without any connection to internet. Reliance initially offered Jio services for free, but the popularity, number of users, and the usage have driven the company to introduce a plan which will be at a reasonable cost. Large customer base which has now become used to the services of the company and fast internet speed will not like shutting down of the services. They rather might go ahead and pay the reasonable charge to benefit from the continuous internet connectivity. YouTube offers an offline mode, wherein the users can watch the videos offline. The users get the

advantage of watching the videos, which might have been watched earlier, or the videos which have been saved on mobile in offline mode.

• **SAFETY AND SECURITY** - Advent in technology has introduced safety systems so as to detect, capture, and prevent the mobiles from any kind of virus attacks. Increase in the security and safety develops confidence among the users and therefore, the sense of trust builds. Innovative software has been introduced which prevent any kind of malpractices, frauds, or any cheating cases in the m-commerce transactions. The purpose is to prevent the users from any kind of unexpected frauds. Companies have introduced safety devices in their systems and consumers are being warned from time to time about the possible frauds. They are also educated about the cybercrimes and the methodology to prevent such crimes themselves. Government should take necessary steps to ensure safety and security in the mobile communication network. Stringent laws with strict punishments and severe penalties will create a sense of fear and prohibit the culprits to be averse to such frauds and malpractices.

• **INNOVATION** - Technological innovations have been high end, with the slimmer handsets, sleek designs, elegant looks, competitive camera clarity, expandable text, unimaginable memory sizes, and so on. There has been no boundary for the revolution taking place in the new era. The current scenario is highly competitive enforcing the companies to change before the change by grabbing the cutting-edge technology in their processing. The latest software downloaded on the smartphones allows the users to click pictures with clarity as close to DSL camera. It also provides the option to the user to photoshop the pictures and the required editing. Software also provides the advantage of transferring the color movies and sharing it with the friends in the real time. Location-based customized services are provided to the customers wherever they are. The consumers get assistance of any kind if they are at a new place and wish to get accustomed. Innovations have reached to an extent where even if the mobiles are lost, it can be easily tracked by the authorities through a unique number, which provides exact location, even if the robber switches it off.

• **CONSUMERS** - The success of m-commerce lies in its ability to satisfy the demands, changing revolutionary desires and expectations of the consumers. Adequate fulfillment of consumer's value-added services will lead to value creation. Consumers of today have choices, due to which they continuously compare among the brands and look for profitable opportunities. The success of smartphones in a country provides a boost to the m-commerce industry to sail in this winning segment and reap the fruits. The days have gone when the consumers use phones only for making or receiving calls. Customers demand has touched undemanding heights with the inherent changes in the current marketing environment. Consumers are keen on doing m-commerce transactions. The interest and eagerness ratio is very high among the existing mobile users and the presence of rising interest in the new users. Consumers are adaptive and receptive to the technology in the smartphones. The ease and convenience which are inseparable part of the revolution have touched the right chords across all the users. The approach of m-commerce technology is user friendly and customized. Older generation is also not behind and has readily accepted the new addition. They believe that it can make life simpler and easier.

CONCLUSIONS

A systematic effort needs to be in place to ensure the success of m-commerce technology. This will entail incorporating all the stakeholders in the technological innovation process. The internet service providers on the one end, the application developers on the other end, and most important, the users of the m-commerce technology should be encouraged to play a participative role. M-commerce is a technology which is ready to use, explore, and succeed in the present era. It provides all the advantages to the generations whether "X," "Y," or "Z." It is a technology which has adequate business security solutions. It is ready to revive and learn from its previous experiences and is willing to change every second. It is quickly grabbing all the technological innovations happening all over the world. Latest smartphones have finger print recognition system software. Therefore, unless the user itself tries to access the phone, no one else can do so. Digital biometrics not only increases the security of the phone but such software also prevents any kind of data theft or frauds. The success of m-commerce depends on the effective merging of the stakeholders, incorporating marketers, as well as telecommunication companies. Value-added services are an added advantage to effectively satisfy the stakeholders and create high-end brand loyalty among the users.

The growth and use of m-commerce as an emerging technology has the potential to dramatically change the way consumers do business; hence m-commerce has enormous potential to be the dominant form of transactions. The benefits will be gradually introduced and will first be adopted by large companies, and early adopters look for value-added operation efficiencies and convenience, as proposed and empirically tested in this study. The industry needs

to develop standard networks, platform and devices and also create reliability in the medium through which m-commerce will take place.

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