Electronic commerce (e-commerce) and mobile commerce (m-commerce) are multi benefit opportunities for both businesses and consumers at this stage of technological advancements.

E-commerce pertains to websites which sell products or services directly from their online portal using a shopping cart or a shopping basket system and payments via credit or debit cards, internet banking and cash on delivery or COD. M-commerce is a subset of the electronic commerce which includes all e-commerce transactions, carried out using a mobile (hand held) device.

There are a number of established definitions of M-commerce. Keen and Mackintosh (1991, 2001) define it as an extension of e-commerce from a wired to a wireless computer and telecommunication; and from a fixed location to anytime, anywhere and anyone. In Durlacher’s research report (1991), M-commerce is defined as any transaction with a monetary value that is conducted via a mobile telecommunication network.
Skiba et al. (2000) defines m-commerce as the use of mobile hand-held devices to communicate, transact or inform by using text and data via connection to public or private networks (Refer to Figure 1, 2 and 3).

Many companies and organizations in India are opting for e-commerce and m-commerce because of the substantial growth in internet accessibility via the devices like laptops and cell phones, the survey itself proves that online shopping would supersede traditional shopping. But the penetration of mobile phones with viable internet connections has now set broad boundaries for the utilization of cellular devices now popularly referred to as smart phones.

With the extent of adoption of mobile phones, researchers have forecasted that the number of mobile phones on the earth would exceed the population in 2017 (Batra et al., 2013). This proves that most of the companies are shifting towards mobile platforms attracting shoppers with discounts and incentives, and this is only possible with the advancement in technology.

According to the statistics as of March 2014 given by TRAI (Telecom Regulatory Authority of India):

- No. of mobile phone subscribers – 867.80 million
- No. of mobile internet users – 143.20 million

The rural tele-density has also seen an increase over the previous year to about 41.02. (Refer to Figure 1)

Over and above, statistics suggests that there has been an increase in the rural density of usage of mobile phones with internet facilities. This opens a whole new segment of consumers that organizations can target via m-commerce.

However, the growth of e-commerce and m-commerce has negatively impacted the local brick and mortar or mom and pop stores. Brick and mortar stores literally refer to the businesses that deal with customers in person typically in an office or store. Examples are banks, local grocery stores, etc. They have a greater operating costs and lower flexibility as compared to web based businesses (electronic or mobile commerce) on account of the supply chain and intermediates cause the prices of the products to be higher than their online counterparts.

With the advancement in technology, there is an obvious and growing shift of consumers from the brick and mortar outlet purchasing to online purchasing. And needless to say, the e-commerce and m-commerce sector strongly benefits from this shift and needs to identify the ways and means to encourage more online purchasing.

The emergence of e-commerce has led to the establishment of a number of online purchasing portals both as e-commerce as well as m-commerce ventures. Consumers have tuned to sites such as flipkart.com, amazon.com, ebay.com, jabong.com, myntra.com and many more for their discounts and shopping convenience. And these websites certainly drive the consumers to shop via their mobile sites to encourage shopping on-the-go. Additionally it caters to a whole new segment of untapped consumers who have no access to computers or laptops but who very well own an internet enabled smart phone.

We strive to fulfil the needs of this segment with the idea of utilizing the brick and mortar stores for catering to the online purchasing aspirations of consumers who -

(i) Cannot afford an internet enables laptop / computer but are users of internet enabled mobile devices,

(ii) Are located at places where not accessible to e-commerce business yet,

(iii) Do not have the necessary credibility to carry out online payments i.e. No credit or debit cards or internet banking facilities.

Need of the Study

With the increasing awareness of m-commerce, more and more people are ready to hop on the M-commerce bandwagon. The drivers of M-commerce – which are ubiquity, reachability, security and convenience – are making it an increasing attractive option for e-commerce engagements. With a number on consumers on board with M-commerce, these online shopping portals do see enormous potential market but still lack certain key factors that make it tedious to target them. Issues that stand in the way to servicing this untapped market segment are –

(i) Consumers located in regions inaccessible to these e-commerce and m-commerce sites.
relationship between brick and mortar stores and m-commerce facilitates customers towards shopping online

(ii) Consumers who do not trust the online payment system and would like to transact in cash.

(iii) Consumers who are not eligible enough to acquire a bank debit or credit card.

(iv) Retention of the large number of delivery boys to deliver the ordered goods.

(v) Consumers need an extended credit who didn’t have enough dispensable income to make payment in one go.

In order to tap this potential, the e-commerce and m-commerce portals need to identify a viable solution.

The dark side of the e-commerce and m-commerce boom is the decline of the brick and mortar stores. With the margins of the intermediaries in the distribution chain, these brick and mortar stores perpetually sport prices higher than those online which have minimal to nil distribution intermediaries. This further leads to the loss of its customers. These stores now need to hunt for solutions to sustain their business.

This concept paper sheds light on how these potential consumers can join the m-commerce bandwagon via these brick and mortar stores such that the consumer, online portal as well as the brick and mortar stores is benefitted. Thus, keeping the relation between the local retailer and the customer sacrosanct making it a win-win situation for both.

Concept Design

Gap Analysis

In spite of the rapidly improving outreach and access to locations around the country, it is still impossible for m-commerce and e-commerce to deliver to every household. These include some of the urban dwellings like the chawl system, for example, and many more in the rural or interior locations, who are potential customers for m-commerce. Consumers typically access e-commerce portals via their laptops or computers but there is a segment who are financially capable of access to only internet enabled mobile devices. In order to increase their market size to include these consumers, most e-commerce organizations are shifting their focus to m-commerce. Hence, a whole new segment of potential customers is identified.

We are looking for a solution of how to make it possible for these consumers to shop on m-commerce portals and have their commodities delivered to them; how to get consumers preferring to pay cash instead of online payment or consumers who are not capable of transacting via internet banking, or via credit card or debit card on board the m-commerce bandwagon.

This gap can be quantified with statistical data from the Internet and Mobile Association (2012). From about 150 million internet users in the country, about 10 million of them access e-commerce portals and another 75 million users are ready for e-commerce. For Product Sites, 57% of the e-commerce consumers are in the Tier 2 and Tier 3 cities and the remaining 43% from the 8 metro cities. For Service sites, 54% consumers are from Tier 2 and 3 cities while the remaining 46% are from the metros.

Concept

The concept reaching out to delivery-dark m-commerce consumers by turning brick and mortar stores into dealers for those various e-commerce and m-commerce portals. In order to tap this new segment of consumers, these online portals need an intermediary to cater to every home in this segment. The brick and mortar outlet behaves as this intermediary and delivers the products on behalf of the e-commerce / m-commerce organization, they deliver the products to the consumer’s doorstep.

Both the online organization as well as the brick and mortar dealer gets a margin and the consumers get their products at the lower rates. And the expected increase in the number of m-commerce consumers would get the online prices even lower exploiting the economies of scale. The application of this concept would be beneficial to the customer, the e-commerce portal as well as the brick and mortar dealer.

The consumer always pays cash directly to the brick and mortar store. By shopping online, an individual consumer can save a minimum of 2%, not even taking into account his travel expenses to and fro from the retail outlet.
Issues

Our Project is designed to address the following issues:

(i) How can e-commerce tap the consumer segment located in delivery-dark regions?
(ii) Are consumers ready to purchase online if they can collect it and pay for it at the local brick and mortar stores?
(iii) Are the local brick and mortar stores ready to take up the dealership of various e-commerce and m-commerce websites?
(iv) In this era where e-commerce is stealing consumers, how would these local brick and mortar stores benefit from this alliance?

Objectives

Hence, the Primary objective of our study is to provide a solution to the consumers via m-commerce to purchase commodities online and procure them from their local brick and mortar stores and pay via cash.

The secondary objective is to understand the consumer perspective to this solution.

Consumer Survey

The Sample

We surveyed a sample of about 48 consumers randomly.

The Study

The study focussed on understanding their opinion on m-commerce and the idea of involving their local brick and mortar stores in the delivery of their online purchased goods. A questionnaire containing 11 questions to judge their perception was administered.

Results and Discussion

The survey brings out the fact that users are yet not considering e-commerce as an option because they find online payment risky. And there still lie a doubt when it comes to the credibility of the vendors. Another fact that came up clearly is the delivery charges and the delivery time is causing a hindrance for consumers to get on to the online platform. The survey did show that the people are aware about e-commerce will be the next and only mode for transactions. And the fact that a better payment option can encourage more shoppers to the habit of buying online, gives the model proposed a slot to fit and pull in a sizeable consumers to try and expand their usage to the services online (Refer to Chart 1).

Delay in delivery problem that significantly tells us that the logistic and once the customer punches in the order online, there is no point of contact for the exact tracking of the shipment. In spite of many payment options available and COD known to be the convenient option available in India as being one of the fewer locations availing the service. There still lies significant amount facing payment and need another instrument make payment (Refer to Chart 2).

Traditionally accepted and believed that Indian consumers buy behaviour is influenced by price, touch and feel factor which comes very clearly in the sample analysed. Maximum of the online transaction are contributed by Air/ Rail, Cinema Ticketing and books. There lies a huge potential to attract customers to use online mode of shopping (Refer to Chart 3).

Methodology

Let us consider an e-commerce / m-commerce organization ABC.com. ABC.com identifies such delivery-dark locations and locates brick and mortar stores in the location that would be potential dealers for their delivery. Let us consider XYZ Kiranastores (General Stores) accepts their dealership as are prepared to act as the delivery point for ABC.com. XYZ Kirana stores hands in 12 cheques for a year to ABC.com. Once an official dealership is established, XYZ Kirana stores is now added on the online site at the payment option step.

The flowchart for the proceedings is simplified in the image below. The customer in the delivery-dark location places an order through via his mobile device (there would be no difference if he places the order via the laptop or PC). While placing the order, he is sure to select the XYZ Kirana stores while placing the order at the payment option step. This certainly implies that the customer would be making the payment via cash. Once the order is placed, ABC.com delivers the products to XYZ Kirana stores within the stated delivery time and
Relationship between Brick and Mortar stores and m-commerce facilitates customers towards shopping online

deducts the stated amount from the cheques that the Kirana stores had deposited with them. Once it reaches the Kirana stores, the owner would send his regular delivery person to the customer’s doorstep, hand in the products to the consumers and collect the cash as stated on the mobile site.

In this entire process, ABC.com typically acquires m-commerce ready users to shop online and also facilitate the customers to go from ‘just trying’ to extensive use of all the categories which will further slash down the prices because of economics of scale.

The dealer’s margins are subject to the product purchased by the customer, but it primarily ranges between 10-20% depending on the type of industry, the price of the product and the acceptability of the product in the market.

The concept can be easily structured.

Benefits

Consumers POV

The consumers are always looking for a best buy and in most cases, they find it online. So even in locations where the delivery isn’t possible, they can get their online goods delivered to their doorsteps via the brick and mortar stores. Since this is an “only cash” option, the consumer need not worry about acquiring credit or debit cards or availing the internet banking facility. They can simply pay the brick and mortar outlet with cash while receiving their products.

Additionally, the delivery is done by their local stores hence the trust factor remains intact. If the selected dealer would be a local Kirana stores, their traditional system of lending out credit to their regular customers. The Kirana stores may choose to extent this credit system even as an e-dealer to their customers and collect the payment at probably the end of the month as he would traditionally.

By shopping online, the consumer can save almost a minimum of 2% against shopping from brick and mortar stores.

For an individual with a monthly income of Rs. 25,000/-, an online purchase of a product worth Rs. 35,000/- would result in saving approximately 2.8% as compared to purchasing via the brick and mortar stores.

Brick and Mortar Store Owner’s POV

With the emerging shift of the shopping trend from shopping via brick and mortar stores to online shopping, they find it tough to keep their sales from dropping. This concept can indeed benefit the brick and mortar to stay in competition with the presence of ecommerce portals. The local store can also opt for carrying out his business as a sole dealer and delivery point for multiple m-commerce portals. In such cases, they can choose continue their existing daily business and also extend services to the e-commerce site. They can showcase, to a customer via his laptop, computer or mobile, the various products of the e-commerce / m-commerce site he represents. He doesn’t need to possess any warehouse facility to store any product making his operational costs even lower and his savings

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(A) Consumer places an order through an internet enabled mobile phone to ABC.com and selects the dealer XYZ Kirana store as delivery point.

(B) Once the order is processed, the amount equivalent is deducted from the deposit of the local XYZ Kirana store.

(C) ABC.com delivers the ordered products to XYZ Kirana Store.

(D) The XYZ Kirana Store delivers the products to the customer’s doorstep.

(E) The Customer pays XYZ Kirana stores the amount in Cash.
even higher. This model also gives them the opportunity of selling premium products without having to bear the cost of pre-investing in one. The model eliminating the middle – distributor gives them an additional earnings which can be passed on the customer.

**E-commerce / M-commerce POV**

The online portal sees a potential untapped market of consumers financially capable of acquiring an internet enabled mobile phone. They typically earn a small margin, with every transaction.

Let’s consider about 75 million more consumers ready for e-commerce / m-commerce with an average of earning of about Rs. 25,000/- per month with an expenditure of about Rs. 10,000/- that can be diverted to shopping via m-commerce. This realizes a potential gap of approximately Seventy five thousand croresthat could be converted to business for e-commerce and m-commerce portals.

Additionally, the problem of tough competition to acquire delivery boys, that e-commerce / m-commerce sites face, can be somewhat mitigated with delivery to only a few brick and mortar stores against delivery to every doorstep.

**Limitations and Future Research**

The application of the concept is yet to be carried out on a larger scale.

The views of e-commerce/m-commerce sites, consumers as well as the brick and mortar stores need to be accounted for by taking in a larger sample size. This can be continues as a part of a full scale research project.

The rural outreach is yet to be considered. The idea can be extended to using the local transport like the ST buses to deliver the ordered products from the warehouses of the e-commerce / m-commerce portals to the local brick and mortar stores. Private transport may also be considered depending on the volume of orders places from those localities.

**Conclusion**

The concept is simple and has a vast scope of application. The newly identified segment of consumers would vastly broaden the consumer base and increase the revenue of the e-commerce / m-commerce sites and at the same time the consumers can benefit by economies of scope. The declining local brick and mortar stores would also benefit from the expansion and boom of e-commerce and m-commerce and act as dealers and delivery drop off points eliminating the geographical delivery constraint. There is still further scope that can be explored to tap even the rural segments of the country so as to reach out to every part of the country the benefit of low prices and good margins.

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<td>77.78%</td>
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<tr>
<td>Share of Rural Subscribers</td>
<td>39.47%</td>
<td>22.22%</td>
<td>38.89%</td>
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**Fig. 1: Overall Subscriber base and Teledensity (from the Annual Report 2013-2014 of TRAI)**


**Fig. 2: Mobile Commerce**

http://archiv.iwi.uni-hannover.de/lv/seminar_ss03/Dittel/Literaturlinks/Durlacher/mcomreport.pdf
Relationship between Brick and Mortar stores and m-commerce facilitates customers towards shopping online.

Fig. 3: Attributes of Mobile Communication
http://archiv.iwi.uni-hannover.de/lv/seminar_ss03/Dittel/Literaturlinks/Durlacher/mcomreport.pdf

Chart 1: Consumer Responses towards E-commerce/M-commerce

Chart 2: Problems While Shopping Online

Chart 3: Preferred Means of Shopping

References


Notes
An earlier version of this paper was presented at 10th SIMSR Global Marketing Conference held on February 24 – 25, 2015.