

How E-Commerce is Transforming in Bangladesh

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ABSTRACT

In Bangladesh E-Commerce is growing beyond the expectation. Young Consumers are buying and selling through E-Commerce and relying more on this platform than ever before. E-Commerce is giving a new dimension of doing business and shaping the business environment worldwide. However, the major barriers of E-commerce in Bangladesh are Consumer Behavior, Culture, and Perceptions of E-Commerce. In 2013, 3G was introduced in Bangladesh, and it increased Internet usage, and on the other hand, E-Commerce usage continues at a rapid growing pace because of aggressive sales and marketing of smartphones. Businesses in Bangladesh have realized that Bangladeshis are quite enthusiastic about technology and at the same time passionate about E-Commerce shopping (especially, during Eid festivals). On the other hand, when constantly facing numerous barriers to urban life style in capital city Dhaka, consumers have increasingly favored online shopping, with an increasing supply of virtual businesses. These online entrepreneurs are inspired by convenience, competitive pricing, range of products, dedicated service, improved payment security, on site delivery and flexibility, and demand from buyers and sellers. E-Commerce has witnessed a booming of online shopping websites, particularly in the businesses-to-consumers and consumers-to-consumers category. Supportively, Government of Bangladesh has taken many steps to improve E-Commerce's infrastructure. A point to note is that high speed internet access, connectivity and lower cost of internet is not the only way to bring success for E-Commerce. Shift in consumer behavior is another major factor of E-Commerce's success.

Keywords: Consumer Behavior, Culture, Perceptions, Mobile Usage, Technology Infrastructure, Connectivity, Payment Security

1. INTRODUCTION

Since the dot-com boom and bust of the 90's, e-commerce application has been rapidly getting acceptance worldwide. Globally, e-commerce spending is expected to be \$2.35 trillion by 2017. Mobile Commerce itself has the potential to grow over the next few years and is expected to reach USD \$114.50 billion by 2017, a 172% increase from 2013 (Source E-Cab Power Point Presentation). Globally 42% of the population are regular Internet users and 29% are connected through social media (Source Brand Forum, September 2016 issue). In Southeast Asia however, E-Commerce or online market place is still small. Google and Bain & Company conducted a survey in Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam (Hoppe & Lamy, 2016) and found only 25% out of 6,000 consumers over the age of 16 has ever made an e-commerce purchase. Correspondingly, E-Commerce sales in Southeast Asia is only about \$6 billion which is 3% of total retail sales (Hoq, Kamal, & Chowdhury, 2005), but on the other hand, E-Commerce sales in China and the U.S. exceeded \$250 billion which is 14% of total retail sales. According to the Wall Street Journal, a survey of 150 million people researched or inquired about products from sellers of e-commerce sites and 100 million of them made purchases from them. E-Commerce market in Southeast Asia is reaching a tipping point and some industries are already starting to see the positive result. Clothing and footwear industry is seeing 24% and 18% of all travel purchase taking place on e-commerce.

According to Goldman Sachs, contribution of e-commerce to India's GDP is predicted an increase of 2.5% amounting \$300 billion by 2030 (E-cab) (Source E-Cab Power Point Presentation). E-commerce sales in India was USD\$13.31 billion in 2015 and by 2019 the growth projection is going to be USD\$65.09 billion (Retail e-commerce sales in India from 2015 to 2021 (in billion U.S. dollars), 2016). India has millions of new internet users because of affordable Internet cost and that makes India the fastest-growing e-commerce markets throughout the world. Due to of affordability of Internet connection, people send mobile messages, watch online videos, use mobile services, and also shop online. The majority online users in India were male as of 2015, and accounted for almost two-thirds of online shopping audiences in India. Women are unbalancing online presence and digital

spending, but by 2020 female online shoppers will be estimated at 42%, up from only 20% of total retail e-commerce expenditure in 2015. In India average annual e-commerce sales in 2014 were USD \$247 and are projected to reach USD \$424 in 2020.

By 2020 Pakistan will experience a boom in e-commerce the online market will exceed USD \$1 billion in the next four years (By 2020: Pakistan's e-commerce market to surpass \$1 billion, 2015). Every year e-commerce market in Pakistan is doubling in size, it's annual compound growth rate over 100%. Industry experts of e-commerce are predicting this trend will continue until 2020 and help the sector to exceed the \$1 billion dollar mark. Pakistan's broadband penetration is still in the 12% range (number of internet connections per population size), but it is the major factor for the recent growth in e-commerce. The economy introduced 3G in mid 2014, adding more than 1 million new users every month to its mobile Internet base ever since. Broadband users skyrocketed to 23 million by the end of October 2015, which is up from 4.7 million a year ago. Investigating the real monetary impact on the consumer's market, overall retail in Pakistan is worth \$40 billion, in retrospect to the mere USD \$80 million (0.2%) share of e-commerce in the retail industry; analysts hence logically concluding that the online sector is fledgling in its infancy.

According to e-Commerce Association of Bangladesh (E-cab), e-commerce is also rapidly growing in Bangladesh. The changing habits of using technology in Bangladesh are going to be the major reason for growth in the country's e-commerce sector over the next three years. Predictions place our growth of e-commerce in next few years at 40% per month from 36% now. Currently the monthly value of the country's e-shopping is USD \$10 billion (BDT 1,000 crore) which continues to rise rapidly. In Bangladesh, over 80% e-commerce traffic comes from Dhaka (35%), Chittagong (29%), and Gazipur (15%). Like India majority of Internet users in Bangladesh are male; approximately 83% users relative to 17% female users (Ishtiaque & Sarwar, 2016). Another research by Kaymu found (Khan) 90% of the e-commerce customers' are in between the ages of 18-44 years and from within them, 25-34 year-olds constitute the most frequent purchasers above all others.

Of the total local online traffic in Bangladesh, 49% online shoppers are new whereas 51% are returning visitors. Most popular mode of payment is still cash on-delivery (COD) for e-commerce transactions. Modes of payment are broken down into 95% cash on delivery, 2% wire transfer, 2% mobile banking and remaining 1% on credit cards. Most of these e-commerce shoppers purchase consumer electronics and mobile phones. Besides, well known e-commerce site Facebook is also playing a major role to expand this sector in Bangladesh. A large numbers of young entrepreneurs are selling their products through their Facebook page. According to E-commerce Association of Bangladesh (E-cab), currently there are approximately 8,000 page selling their products and services through Facebook. Some of the top e-commerce websites of our country are given in Table 1 of Appendix 1. In general e-commerce in Bangladesh is in early stage. Table 2 in Appendix 1 highlights some of the key indicators that constitute the foundation for e-commerce sector's current growth.

2. LITERATURE REVIEW

The rapid pace of Internet development and connectivity through the country has undoubtedly contributed to the rocketing e-commerce growth. Coupled with this, various policy initiatives and infrastructure development plans taken by the authorities the future of the e-commerce sector in Bangladesh seems to be reaching a positive note. To compare our growth standards to the saying "consumer is king", we must investigate the literature on what are the current standards of countries with developed e-commerce sectors. This will help us to formulate our research direction and provide this paper with a cause.

1. E-commerce in Southeast Asia

A recent research in Southeast Asia by Google and investment firm Temase (Tegos, 2016) on sectors like digital market and specifically the verticals of e-commerce, i.e. travel (including airline bookings, hotels, and cab/ride-hailing services) and online media (digital marketing and gaming) produced some aggregate results which seep into Bangladesh as well. The regional market was already worth US\$31 billion in 2015 and research indicates this worth to be US\$200 billion by 2025. Young population (70 percent of people are under the age of 40), increased internet speeds and increasing GDP (growing at 5.3 percent over the next 10 years) were speculated to be the main drivers of this projection. Currently, Southeast Asia's startups attracted US\$1.1 billion in funding last year, spread over 355 online deals where 88% was earned by Singapore and Indonesia, 65% going to five giant startups.

(Tegos, 2016) suggest that to penetrate the regional scene, any Ecommerce 2.0 model launched in Southeast Asia will need to be customized for the local market. The customization has to follow a general timeline which is seen in this industry. An e-commerce life cycle follows the progression of Classifieds and C2C, to B2C, to eventually Brand.com; e.g. the US went from Craigslist, eBay and Amazon to brand sites like Nike, J.Crew and Gap. Today's Southeast Asia however, is following a much

faster pace: Classifieds (e.g. OLX), C2C (e.g. Tarad, Tokopedia, Shopee), B2C (Lazada, Zalora, MatahariMall) and Brand.com (e.g. L'Oreal, Estée Lauder, Adidas) all happening at once very quickly.

2. Prospect of B2C

With regard to the Bangladesh e-commerce sector, the major subsectors, thus far, have been B2B, B2C, C2C, and B2E segments. B2B websites were once the biggest constituents of the e-commerce sector in Bangladesh. Although other authors (Bhowmik, 2012) also chalk out 3 basic scopes of the sector into B2B, B2C and B2G models. B2B and B2C are considered as the main forms of e-commerce.

Some studies cast doubt on B2C in E-commerce to flourish at the time, due to frail infrastructure, and trust issues between parties; the international context was similarly not likely as per payment and regulation measures outstanding (Hoq, Kamal, & Chowdhury, 2005). B2B was identified as a future leading segment, spearheaded by the RMG sector promoting personal business websites. B2G has been seen as a limited model. Few laws have been identified, of which Bangladesh possesses only a distantly-linked Act on Information Technology to serve for E-commerce. E-signatures and E-payments are both under way, but personal data protection and electronic crime still remained largely unaddressed.

B2C e-commerce categories involve financial services, computer electronics, travel, event ticketing and general retail. Several B2B websites are also in service; in Bangladesh they are engaged in providing manufacturing and supply-chain solutions like RMG procurement, business directories, trade deals and information on suppliers.

Between 2012 and 2013, there has been the most massive growth of apparel sale, in the Online category more than any of the other selling outlet forms, even if it constituted the lowest gross sales. The apparel industry of Bangladesh, apart from leading exports, is also the forerunner of e-commerce growth, through engaging in B2B services and capitalizing on B2C advantages. The clothing industry however, relies on the individualistic nature of customers, making it difficult to characterize products for every single buyer with apparel purchase decisions. B2B in this aspect expects to face less barriers to business, since inter-connected businesses depend on established communication codes of products and services, rather than the individual feel.

B2E (employment) through highly busy website bdjobs.com, where formal process of vacancy announcements for recruitment are experiencing sustained growth (Ishtiaque & Sarwar, 2016). E-banking has begun to be the commoners bank gradually as more users realize the comfort online-banking. Security is an important consideration, while credit card usage drives the future prospects. Facebook-commerce grew out of extensive business applications as a selling platform, communicating platform or a medium for entire business operation for some entrepreneurs.

3. Studies Conducted

A study, conducted by the e-commerce Foundation (Tanvir, Muqaddim, & Billah, 2015) looked at both online fashion pure players (all sales online) and fashion retailers. Within the retail fashion industry, participants are either Generalist (18%) or operate in specific segments, such as Women (34%)/Men (13%), Shoes (4%), Body (12%) and finally Jeans (3%).

Another e-commerce study (Ohidujjaman, Hasan, & Huda, 2013) on 500 random people in Bangladesh focused on the educated people and found that about 57% of the population was educated. Majority respondents were unfamiliar (44%) with the concept and some were mixed, while only about one-fourth (24%) knew about it. Those who are familiar with e-commerce nonetheless, admitted not to use e-commerce (71%) much; but confessed that this concept provides solutions by eliminating middlemen (57%) and are more suitable than traditional business (74%). Within the users who access those websites, they did so via PCs (62%) and thereby make purchases (43%). From these buying online, a mere one-tenth make online payments. They have utilized predominantly C2C facilities (66%) on possibly local, auction and second-hand-item websites. A crucial finding reported only partial satisfaction expressed by the audience.

A survey of 17 online entrepreneurs (Ohidujjaman, Hasan, & Huda, 2013) was also conducted, their operation being a mix of B2B (13%), B2C (38%) and C2C (88%) businesses. Predominance of C2C signaled the existence of such markets online. The flow of revenue from these sites were all involving product sales, while advertising was the second largest earner (63%), miscellaneous fees making very little contribution. All of these websites served locally, while only a tenth did so beyond borders. Thus, they all targeted the local audience in their local currency, with only a handful serving otherwise in addition. Online payment was supported by some (38%), but all of them accepted physical modes. These businesses only partly had

a third-party delivery service and only partly invested in marketing. Most of them thought the government is not supporting (88%) enough promotion of the sector.

Pi strategy conducted a Survey (THE E-COMMERCE PLAYBOOK) of 300 people with respondents from Dhaka (74%) and Chittagong (12%), found very similar online buyer proportions. Findings showed the largest buyer segment (80%) to be aged 18-30 years old. Respondents were mostly male (89%) and shop more than females, in the 35 years and above demographic category. These respondents were educated: holding Bachelor's (47%) and Master's (34%) degrees. Profession-wise, 39% were Students, 28% were young professionals, and 20% were mid-level managers. Over half of the people visit website and of them three-quarters bought items, middle income groups opting to browsing more. Nearly 90% of them paid through Cash-On-Delivery; although almost half of the respondents trusted online payments but still they only used about a tenth of the time.

They reported to having some advantages to online shopping: 62% liked avoiding crowd or road traffic to reach shopping centers, one-fifth of them admitted to save time, and around 80% liked home-delivery service. Those doubting online shopping, were because of the lack of touch-and-feel factor, while a few expressed lower price of physical stores.

Size of E-commerce in Bangladesh as of 2015 was USD \$50 million, with 167 registered businesses. Gender division was found to be skewed towards males in their study (83%), while highest earning shopper's were within the \$125-375 thousand income bracket. The sample was from Dhaka (35%), Chittagong (29%), and other regions. Kaymu.com produced a study on this sector recently. The study showed largely recurring customers, those who return to websites to buy, aged between 25-34 years (61%) (Khan). In Bangladesh Kaymu's study revealed that top product category is electronics (8%) and service category is looking for employment (7%), while top search-queries revealed mobile, electronics, and clothing items. These items are browsed mostly through desktop PCs (number needed) and not enough through mobile phones (26%). Favored payment methods by customers consisted of predominantly Cash-On-Delivery (50%) and bKash (25%) (a form of mobile-banking).

Kaymu suggests from some results which focus on challenges to sales. Online shoppers are very sensitive; brand loyalty is merely 16%, while returning customers are divided in the middle. Shopper's are also precise and calculative; shopping cart abandonment is at 65% for customers rethinking their purchases.

To further investigate the current status of the different aspects facing the E-commerce industry, an FGD of local ecommerce entrepreneurs conducted by Center for Enterprise and Society (CES) (Ishtiaque & Sarwar, 2016), which revealed the following points:

- Facebook has been the base structure of e-commerce in Bangladesh
- Third party delivery services employed
- collection of payment from third party delivery is slow
- Cash-on-Delivery dominates payment; credit card use is apprehensive due to fraud
- Inexperienced e-commerce entrepreneurs at large; inadequate marketing knowledge
- lacking skilled human resource
- lack of customer awareness about the sectors benefits

Lightcastle's survey (Sabrina, Choudhury, & Nahid, 2016) on digital consumers on a sample of 450 respondents from mostly Dhaka, Chittagong (17%) and Sylhet (5%) revealed some characteristics on E-commerce. Around 65% of them were between 20-40 years old and could be easily categorized. Traditional physical shoppers were about one-quarter of the sample residing outside Dhaka. Half of the sample were "early starters", identified as sole decision makers, purchasing online. They were from Chittagong and established regions in Dhaka. About a fifth were "Digital aspirants" - buying low cost items online, preferring Cash-On-Delivery. "Maestros" were under one-tenth of the sample, who are chief000 breadwinners and use tech devices to purchase and make payments online.

The E-commerce scene in Bangladesh reported by Lightcastle is composed of Female consumers (55%), while half of them are aged 26-30 years. These consumers are Young professionals (44%) and students (33%), being almost entirely (90%) Dhaka based and a third of them having over BDT 30,000. These Middle and Affluent Consumers (MAC) are Technophiles (tech lovers) (32%), sport fans (14%), smart device lovers, Movie lovers (10%), music listeners (11%) and TV show followers (9%). Respondents preferred e-commerce due to home delivery (22%), time and convenience (19%), price and quality (14%), and choices available (12%); but not due to ease of purchase or payment (3%). These are all low priced items; high value items require "Feel" of the products and thereby not favored over physical modes of shopping. The popular categories bought in websites are revealed to be fashion wear (22%), accessories (18%), electronics (15%), footwear and food (10%). These products have been purchased from some of the popular websites in the country. Respondents revealed that traffic came from

Ekhanei (21%), bikroy (17%), priyoshop, and daraz (10%). Traffic and times varied but were prevalent all year round (37%), during religious festivals (27%), and Pohela Boishakh (20%). Nowadays even deals and discount 'seasons' have appeared in the scene. Findings also showed payment methods to be ruled by Cash-On-Delivery (68%), while the second preferred medium which was mobile banking (20%). These findings were based on a sample of users who highly (39%) trusted (47%) this platform of doing business. The study found that the important models of e-commerce which are growing with confidence are online retail (daraz), food delivery (HungryNaki), grocery (Chaldal, Meenabazar), E-ticketing (shohoz), and other forms.

The reviewed literature finds great potential in B2C sections, where customer profiling, segmentation and targeting is essential. Detailed e-commerce use and purchase characteristics have been studied in the review, which sheds light on the current behavior, culture and perception of consumers, and also potential ones. We regard this as an opportunity to study consumer characteristics further to highlight significant developments in the maturing industry, since it is at a stage where a lot of incumbents are finding opportunities and supply competition is encouraging quality and price. This will further generate customer behavior modifications as they adopt to the plethora of products and services continuously being innovated and offered in the growing E-commerce market.

3. FINDINGS

Recently there started a new trend of bringing out new information on the E-commerce market of Bangladesh. This is partially due to the fact that the current government of Bangladesh has made e-commerce and ICT in general a development priority under the newly formed ICT ministry. The government has also declared their 2021 vision of Digital Bangladesh. To validate their promise, the government is providing various subsidies along with various other non-financial incentives to any organization that are willing to invest in the ICT sector regardless of the organization being a private organization or a developing institution. On the basis of this focus on the ICT sector, the authors have decided to conduct a study focusing the consumer behavior of online shoppers, particularly living in Dhaka city. The findings below are reflective of a consumer survey that the authors have recently conducted in four major zones of Dhaka city.

The methodology matrix is given in Table 3, in Appendix 1. The Appendix 1 also contains other Tables used in the paper. The findings are clearly illustrated from a combination of Tables and Figures, based on which the following analysis has been presented. The Figures are presented in Appendix 2.

1. Buyer Demographics

i. Gender distribution

If we look into the buying behavior of the respondents in Figure 1, we find that majority of the respondents (57%) are male and only 31% are female. The finding references previous studies, more so with a recent one earlier this year (Sabrina, Choudhury, & Nahid, 2016) compared to previous ones (THE E-COMMERCE PLAYBOOK)(Khan). This indicates that producers/suppliers should specifically target the male population to sell their products. However, this gender discrepancy should be further studied, to identify whether the female population are unaware of the online shopping option or whether they are not interested for some other reason. In the USA, it was found that, 62% of women shoppers are responsive to discounts and promotional activities (Pienaar, 2015). Thus, Literature suggests there is a potential target market in female shoppers, where the Bangladeshi market is yet to develop its women demographics. Detailed identification is suggested because there is a significant amount of the target respondents (12%) who have still not experienced the online shopping phenomenon which leaves scope for further business expansion along with targeting a niche market for Bangladeshi women.

ii. Age distribution

The expected majority (about 80%) of the online buyers fall among the age groups of 19 to 40 as seen in Figure 2; 19 to 24 (44%) are the young adults and 25 to 40 (36%) are the working adults. The age group remains consistent with earlier research by Pi Strategy (18-30 years around 80% of sample) (THE E-COMMERCE PLAYBOOK). But the findings have shifted slightly from the research by Kaymu with consumer age tilting more in favor of older young-adult age groups (18-24 years at 14%, 25-34 years at 61%) (Khan); as well as the study by Lightcastle Partners (26-30 years at 50%) (Sabrina, Choudhury, & Nahid, 2016) on the Bangladeshi E-commerce scene (Smith, 2015). The youthful dynamics of the sector has developed here with a clear reflection from the US market, where research has found similar trends in age demographics from majority of 18-34 year-olds who shop on auction sites, frequently using their phones (Smith, 2015). The third significant segment are the teenagers between the age of 15 to 18 years of age who are all tech-savvy; although represented in our finding with only about 6%, they in fact make

up large portions of the online community and are constantly on-top of trendy, modern gadgets, developing intuitions which enables them to cut down their learning-curve when it comes to online shopping. Millennials' (online shoppers aged between 18-34), are top e-commerce spenders relative to other age groups, despite being lower earners in their early lives (Hoq, Kamal, & Chowdhury, 2005). The age group easily overcomes most of the common barriers to online purchasing, such as knowing which vendor to trust and purchase from, how to make the payments, where to find authentic products, etc. In fact, Google and Bain's research showed a whopping 25% purchase segment 16 year-olds and above made an ecommerce transaction (Bhowmik, 2012).

iii. *Income distribution*

Exploring the monthly income of the current target market of online buyers in Bangladesh in Figure 3, we find almost a third of the buyer's (27%) are earning between 45 to 50 thousand per month. Also, another segment (19%) is earning between 55 to 65 thousand per month. However, about a fourth of the buyers (around 26%), are also earning between 15 to 35 thousand per month; which indicates that the online market is not only for the affluent Bangladeshis, but the market also has a lot to offer to the lower to middle and Affluent Consumer (MAC) income groups. USD \$31bn e-commerce retail around Southeast Asia (Ishtiaque & Sarwar, 2016), USD \$13 bn in India (in 2015)(Retail e-commerce sales in India from 2015 to 2021 (in billion U.S. dollars), 2016), and USD \$80 million in Pakistan (By 2020: Pakistan's e-commerce market to surpass \$1 billion, 2015) do not necessarily constitute the higher income segment of the society involved in this activity only. A growing sector very often outlines the results of the middle-income group in their bandwagon to success. The participation of MAC is apparent because most of the local products that are sold online are expected to be slightly cheaper than the price range in the shopping malls; another reason why online shopping is quickly becoming more and more popular specially among the young web browsing consumers.

iv. *Occupation of respondents*

Again if we look closely at Figure 4 the consumer demographics we find that over half (57%) of the respondents are students. This is indicative of the age groups previously identified as being the regular online shoppers. One other significant segment (about 18%) would be private service providers. Pi Strategy mentioned that their respondents have been Students (39%), and others were professionals (48%) (THE E-COMMERCE PLAYBOOK). Similarly Lightcastle mentioned that consumers in their study (Sabrina, Choudhury, & Nahid, 2016) have been students (39%) and young professional (44%). A slight increase in student population is found in our study. Therefore producers/suppliers should keep the target audience in mind whenever designing their marketing mix strategies. For instance, if majority of the buyers are still studying, then most of the promotional activities should be targeted at college and university campuses; or through those websites where the browsers are mostly students or young working adults who are private service holders. It is worthwhile to be strategic in this multi-billion dollar sector: copying the auction driven model of the US, fueled by excess goods and hobby-ists popularizing eBay, China failed to gain momentum in the Ecommerce industry initially. Chinese retail consist of niche consumers who prefer personal attention (electronically via online chat) while purchasing online (Ho, 2016).

v. *Education of respondents*

As far as the education level of the buyers are concerned, Figure 5 shows majority are between Higher Secondary to Graduates. It seems that most of the respondents are coming from a strong educational background where over 52% of the respondents have a Graduate or Postgraduate degree. Although this could indicate that people have to be well educated to be comfortable enough to be shopping online; but the Secondary and Higher Secondary school and college students are not far behind where about 32% of them are also shopping online. This suggests to us that it may not be the level of education, but rather the comfort level of browsing and shopping online that matter more and of course the younger you are the more comfortable you would be with new and upcoming technologies. We also need to consider that the respondents need to have the purchasing power to be able to shop online and clearly the working adults, who would most likely be the Graduates and Post Graduates, would have high purchasing power than any other segment. This is consequentially seen in our reviewed studies in education; Bachelor degrees holders at 47% and Masters degree holders at 34% by Lightcastle (Sabrina, Choudhury, & Nahid, 2016), 30% consumers having incomes around USD \$380. Consumer incomes reported by Kaymu(Khan)were of similar proportions – USD \$127-380 in 34% of buyers.

vi. *Locations covered in Dhaka City*

When it comes to location and online buyers, it seems from Figure 6 that the virtual market have no physical boundaries. The location of the online buyers shows no significant difference when it comes to their purchasing behavior. People are equally purchasing online regardless of if they are living in the more affluent areas such as Gulshan and Dhanmondi or living in Uttara and Mirpur, which are considered to be more middle income segments of the city. However, it can be mentioned that majority of the purchases are still being made at home rather than offices, universities or any other location for that matter. This could be due to the fact that people are more comfortable at home where they can take their time and make online purchases at their

own convenience. We suspect that this could also be due to the fact that most of the locations mentioned, regardless of them being high income areas or low income areas, have relatively high speed internet these days due to the continuous expansion of broadband service providers; no of ISPs were 557 in the country, which is ample but must ensure maintenance of regulation to serve the growing no of internet subscribers in the country (More detail in Table 2).

2. Purchasing Behavior

i. Purposes for which products are bought

When the respondents were asked about the purpose of their online purchases, regardless of the product category, the customers view is that most of them are buying products out of personal needs and not as a luxury item. Particularly when it comes to purchasing, Figure 7 highlights Clothing & Accessories, Electronics & Electronic Accessories, Shoes and Food items, consumers considered these products to be of greater personal need than luxury items. When it came to purchasing items such as cosmetics, majority of the buyers still believe this product is in the personal need category, but can equally be considered as a luxury item also. If we look at the current scenario of Bangladesh we find that it has recently moved from a developing to a middle income country. We also find that our GDP has risen to over 7%, our per capita income has also increased by 11.4% (USD \$1,316 to USD \$1,466); not to mention the consumer buying power which is also on the rise. This growing trend of the nation would lead us to believe that consumers' perception has slowly changed where products which were considered a luxury items are now being considered as a necessity. Since customers are now treating many luxury items as necessity they are becoming more comfortable to buy these products from e-commerce sites which in itself is another consumer behavioral change.

ii. Purposes for which products are bought

Looking at the product variety that is currently available in the online market we have identified and categorized 5 major categories shown in Figure 8. Among these, the highest selling online category is understandably Clothing (about 62%) and this is applicable for both male and female. Lightcastle's study results cross referenced ours; their findings – fashionwear being bought highly (22%), followed by fashion accessories (18%). Only then consumers chose electronics (10%) (Sabrina, Choudhury, & Nahid, 2016). The second most purchased category in our study is indeed Electronics (almost 40%) as well. The dominance for searching electronic consumer goods has been a consistent trend across other studies. In Kaymu's study (Khan), highest affinity of consumers towards electronics was at 8%, while Lightcastle too showed consumers identified themselves as Tech lovers (32%) (Sabrina, Choudhury, & Nahid, 2016). The difference between buying electronics and searching for electronics implies consumers are aware of constantly evolving technology and are excited to gain information about them, buying this category much later or less than regular clothing related items. Our study's other preferred purchase categories are Cosmetics, Shoes and Food items (22%, 19% and 15% respectively).

Our neighboring country India has their own product category preferences. India's breakdown is led by clothing (13.4%), followed by consumer goods (2.9%), sports (2.8%) and others (Prajosh, 2014). Although the categories in Bangladesh may be similar to the purchasing behavior of India or most other countries that have an online consumer base, whether there is any product variety or variation in subsidiary products for consumers to chose from is another question in itself.

iii. Purposes for which service are purchase

The purchasing of services online is also increasing these days. The number one service being purchased online is the buying of tickets as per Figure 9 such as bus tickets, tickets of sports matches etc. India's service related e-commerce community is not very different as well. Their corresponding online industry segment is composed of air ticketing (50%), train ticketing (40%), bus ticketing, hotel booking, tour booking and movie ticketing (Prajosh, 2014). The next item more commonly being purchased are ordering gifts online and having them delivered to the customer. Many of the youth have picked up this trend where gifts are being sent all across the nation to loved ones. These gifts are not only being delivered within the country, but many of the gifts actually come from abroad and are delivered to the desired address anywhere in the country. The success of the prompt and relatively safe delivery service have attracted more and more online buyers to take up this service. Other services such as recharging mobiles or booking holiday packages and paying for other utility bills online are also on the rise.

iv. Services related to sales (Figure 10)

Please add findings in this section. Literature speaks droves here. Out of 5,000 US consumers, 83% expressed interest in any form of customer support, whereas 31% needed it immediately, and some other 40% within five minutes. Additionally, majority of them welcome friendly natured customer service representative, 55% of them lauding the convenience of this support, a third through live chat facilities (Pienaar, 2015).

v. ***Repeat purchases in top websites (Figure 11)***

Please add findings in this section According to literature (Khan), 51% are returning visitors while brand loyalty is merely (16%), with considerable amount of shopping cart abandonment (65%). The US market has seen more than 50% of online population as returning online shoppers (Pienaar, 2015).

3. Product Availability, Ease of Navigation, Ease of Ordering

This section is illustrated through a combined Table 4 in Appendix 1, which demonstrates the proportion of responses in each category of the corresponding segments of Product Availability, Ease of Navigation and Ease of Ordering.

When it comes to the availability of product, although half the respondents have mentioned that there are enough products available to be purchased online, if the other half of the respondents are complaining about not having enough products or even enough variety in the products then the producers/suppliers have to think of major revamping of their current operational system. Already mentioned that Indian e-commerce is leading with clothing and electronics, while in the service segment they have tour ticketing systems, all of it much similar to ours. So investigating in these segments are the responsibilities of businesses.

As majority of the users (about 60%) feel that Navigation and product Ordering is relatively easy through the various web sites we have currently available. This would suggest that minor operational improvements could make the user experience more user-friendly. This would also address the other large segment (about 30%) of users that feel that the quality of the navigating and product ordering experience is ok, but can be improved.

Also improving the user experience by making navigation and product ordering a simple process could open up new opportunities such as attracting other potential segments such as the 40 plus age group who might just be shying away from the online purchasing just because they feel that the online purchase experience is too complicated. However, there is scope for growth in convenience. In the USA, one out of four shoppers are over the age of 55 years (Smith, 2015), while similarly, two-thirds of American shoppers have been found to be aged over 50 (Pienaar, 2015). Of course this particular older segment would be more conservative at the start, not only due to navigational and product ordering complications, but other issues such as learning to trust online purchasing in general, having faith in the organization and its delivery system, higher expectation when it comes to customer care services etc. These issues need to be improved upon before new segments can be targeted for business expansion.

Furthermore it was also indicated that majority (almost 70%) of the Bangladesh online purchasing market is still highly relying on cash-on-delivery (COD) system. Although other alternative solutions are currently available such as Credit Cards and Mobile Banking services, these services constitute only about 30% of the total purchases. It is the expert's opinion that this ratio needs to be improved significantly before this sector can go forward in this country. Indeed, our reviewed studies found dependence of 50%, 68% and 90% on COD from reports by Kaymu(Khan), Lightcastle (Sabrina, Choudhury, & Nahid, 2016) and Pi Strategy (THE E-COMMERCE PLAYBOOK), respectively.

4. CONCLUSION

Bangladesh made rapid progress in Internet development and connectivity through the country and that has contributed to the massive e-commerce growth. ICT (information and communication technology) ministry took some effective policy initiatives and infrastructural improvement which also plays a major role in the progress of e-commerce sector. Above research study is telling us 80% of e-commerce traffic in Bangladesh are coming from 3 big cities which is Dhaka, Chittagong and Gazipur leaving enormous scope for other major cities that can bring more customers to this platform. In addition 57% of e-commerce buyers are male and 31% are female and 12% of the total population has never used or unaware of e-commerce so there is a need to increase awareness of e-commerce for women and people who never used it. Currently majority of e-commerce users in Bangladesh are in the age of 19-40 years old and they are tech savvy and comfortable making online purchase. In addition the potential customers who are below 19 and over 40 are not using online shopping because either they are too young or they are not comfortable using modern devices and couldn't trust the online shopping. Therefore the e-commerce vendors need to pay attention and penetrate this market with creating trust and provide more product variety in their offers. Through in our survey we also found 72% of the e-commerce buyers are in the income between 15-65 thousand taka per month so rest of the 28% customers who is earning below 15 thousand and above 65 thousand are not buying from online. So there is a potential market that e-commerce vendors can tap into to increase the market size. Another significant information we found from our survey that is 62% customers (male and female) buy clothing products and almost 40% buy electronic products, while there are also buyers for cosmetics, shoes and food items so the vendors need to create value and demand of other products. On the

other hand, services are also being purchased online, top services being bus tickets, tickets of sports matches etc. Majority of the e-commerce users (about 60%) think that Navigation and product Ordering is relatively easy through the various web sites those are currently available. This would also address about 30% of the users feel that the quality of the navigating and product ordering experience is average, but can be improved. This would suggest that minor operational improvements could make the user experience more user-friendly. Improving the user experience by making navigation and product ordering a simple process could attract other potential segments such as the 40 plus age group who might just be shying away from the online purchasing. Through the research we found some customers advantages of online shopping: 62% liked avoiding crowd or traffic jam, one-fifth of them admitted to save time, and around 80% liked home-delivery service. A good number of customers has doubts about e-commerce shopping because lack of touch-and-feel factor therefore e-commerce vendors should pay attention to these issues and resolve them to expand the market. Since the nations GDP, per capita income and consumer buying power have increased, it led us to believe that consumers' perception has slowly changed where products which were considered a luxury items are now being considered as a necessity. Therefore customers are now treating many luxury items as necessity and are becoming more comfortable to buy these products from e-commerce sites. This in itself is another consumer behavioral change.

These above numbers gives us a current picture of the e-commerce sector in Bangladesh and it has the huge potential to grow further. Customers are behaving positively towards online shopping so to move the progress forward all stakeholders should keep working to add more values for the customers.

5. RECOMMENDATIONS

The current scenario and various research results have found great potential in this exponentially growing sector, Although not a streamlined growth of this industry, incumbents are rushing in finding profitable opportunities by observing the successful companies. The government's initiative to recognize the IT, hence the e-commerce sector will further augment market entry of firms. To promote this current policy is not to tax e-commerce firms through VAT. Similarly, the business environment is advantageous in multitude of other respects, which attract entrepreneurs. Struggles will still be faced in this infant industry since participation is often happening without sufficient technical knowledge creating difficulties for both the producer and customer. The customer perspective nonetheless, should be the dominant focus so that producers are able to predict market direction and provide relevant, convenient, attractive, and revolutionary offerings. Some immediate developments are required to nurture the sector towards the next stages.

Recommendation The report outlined some growth segments in Bangladesh. Already mobile phone use is exponential; along with it, the social medium Facebook, where E-commerce entrepreneurs are active. Customer segmentation through marketing strategies (emailing newsletters, package offers preferences, providing service at peak hours/days, etc.), smoother delivery services and e-payments can be tapped into for an improved e-commerce industry as envisioned by Kaymu. Similarly, Advantages outlined which would take these sub-sectors further are:

- Pricing strategies,
- EFT Gateway for online payments,
- Credit Card Gateway for safe payments,
- Expanding internet connectivity and cutting costs,
- Promoting regularly purchased goods to be made more available online
- Optimized product searching capability at one's fingertips.

Cost advantages, other than the established cost transfer to customers by online information provision, can be attained by:

- Decrease in the number of required employees,
- Lower costs associated with buying,
- Savings in inventory and associated costs through easier e-database management,
- Lower distribution costs,
- Improving ability to forecast short-term demand;

All of these may bring in significant productivity gains. To enjoy these possibilities, firms ought to be more transparent with suppliers and customers.

With these anticipated changes, B2C e-commerce is expected to rise due to encouraging micro, macro, legal and regulatory, and lack of need for foreign implementation skills. It is expected that these should invite customer participation and adoption of this emerging world of convenient business.

Since the apparel sector is doing well in e-commerce a guiding hand is needed in this visionary sub-sector. Relevant advantages of apparel have already been outlined to effective marketing, precise information, and brand value, not to mention convenience. An entrepreneurial idea by Glit (an USA based company) for offering time-sensitive flash sales eventually failed due to the redundancy of disposing of clearance stock; however, nowadays sale do attract large revenues. To customize to the local market, M2C/D2C (Manufacture/Direct-to-Consumer) approach of building its own fashion brand and vertically integrating its supply chain, (manufacturing its own clothing and apparel) can be adopted; or other innovative ideas by curating vintage clothing sourced from second hand stores can be pictured. Even some foreign entrepreneurs have offered “try-on” photos of models on request, all in the efforts to penetrate the “feel” factor through a different angle. Currently, sale culture has emerged in Bangladesh to differentiate selling forms and attract large revenues. Word of caution, not all sale-culture is fruitful. An entrepreneurial idea by Glit for offering time-sensitive flash sales eventually failed due to the redundancy of disposing of clearance stock. Nonetheless, nowadays sale do attract large revenues. Eventually, the growth aspects remain with retailers and manufacturers, who must extend their willingness to adopt strategic supply chains, ever-changing to meet the expressed and untapped consumer needs.

Challenges that are already outlined in terms of E-commerce in Bangladesh:

- Building greater trust in the minds of the consumers
- expanding connectivity in internet infrastructure to penetrate into rural markets
- ensuring security from online fraud
- Moving beyond Cash payment methods
- streamlined adoption of payment methods for the greater unbanked population in Bangladesh
- Under-developed logistical framework in the delivery sector,
- continued funding in the later operational stages
- IT talent recruitment to overcome unskilled human resources

Recommendations to take this rolling sector to new heights:

- International standard for E-commerce policy for Bangladesh
- Third-party delivery consortium with separate management policies
- Government approved single online payment gateway
- Please add one on how to improve Consumer awareness on E-commerce
- Please add more if you can
- Please check if this is the same as the presentation

All these will build consumer trust and expand their acceptability of these, still alien-experience to many, services from online business thereby laying the foundations for the next steps to the developing industry in our developing Bangladesh.

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7. APPENDIX 1

Table 1: Top E-Commerce Sites In Bangladesh

S.L.	E-commerce site	Social media fan base	Total visit	Avg. visit duration
1.	daraz.com.bd	3 M	1.50 M	4.19 Min
2.	ajkerdeal.com	331 K	735.50 K	5.35 Min
3.	ekhanei.com	3.1 M	516.30 K	4.15 Min
4.	kaymu.com.bd	4.9 M	248.90 K	6.52 Min
5.	bagdoom.com	694 K	65.20 K	4.21 Min

(K=Thousands, M=Millions, Min=Minutes), Source: (Bangladesh Brand Forum, 2016)

Table 2: Indicators for E-commerce growth Bangladesh recent statistics on ICT & Telecom infrastructure (all figures of 2015)

S.L.	Category	Percentage: (as of July 2016)
1.	Tele-density	80%
2.	Internet Density	29%
3.	Fixed broadband internet usage	7%
4.	Mobile phone subscribers (Millions)	130
5.	Internet subscribers (Millions)	64
6.	Mobile internet subscribes (Millions)	58
7.	3G & 2G users (Some are both users)	13% & 98% respectively
8.	Coverage	64 districts, 126 Upazillas, 108 Unions
9.	Numbers of ISPs	557 (204 to face regulatory hurdles)
10.	Smart phones users of 3G	14%
11.	Laptops, Desktops , etc	7%
12.	Facebook users	1,02,000 (25% penetration)
13.	Cost of peck hour Internet	TK. 1.5-2.0
14.	Lowest call rate	1.1 paisa per sec

Source: BTRC website

Table 3: Methodology matrix

SL.	Category	Description
1.	Study approach	Exploratory study using Quantitative survey approach
2.	Respondent category	Anybody shopping at one of the 5 major shopping areas of Dhaka city, between the age of 15 to 45
3.	Sample size	100 respondents * 4 areas=400 respondents
4.	Study area	4 major shopping areas of Dhaka city Dhanmondi Mirpur Uttara Gulshan
5.	Sampling technique	Non-probability convenience sampling technique was used for this survey
6.	Study tools	Semi - structured questionnaire, using face-to-face interviews at shopping malls
7.	Analysis	Descriptive analysis of findings using Cross tabulation of data

Table 4: User friendliness in E-commerce websites

	Ease of navigation	Product availability in online shopping portal	Ease of product ordering
Yes	62.0%	50.7%	59.1%
No	8.1%	15.3%	14.1%
Neutral	30.0%	34.0%	26.8%
Total	100.0%	100.0%	100.0%

8. APPENDIX 2

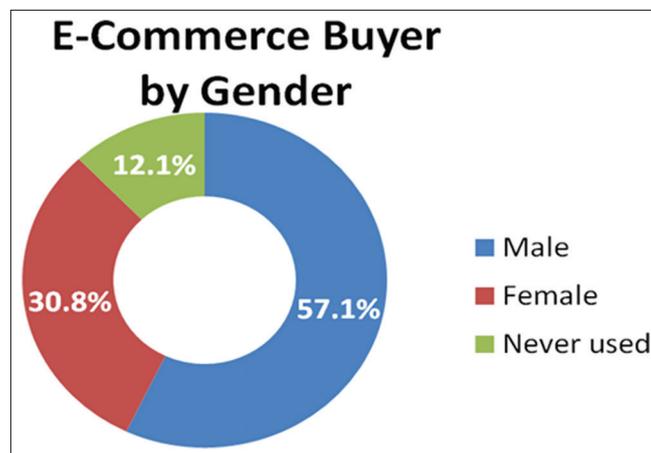


Figure 1: Gender distribution

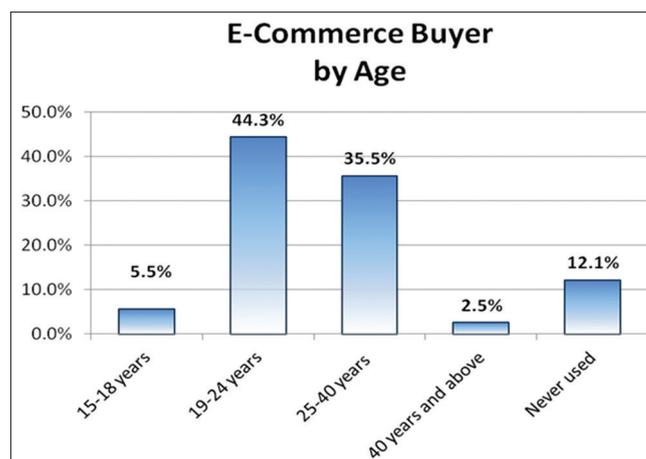


Figure 2: Age distribution

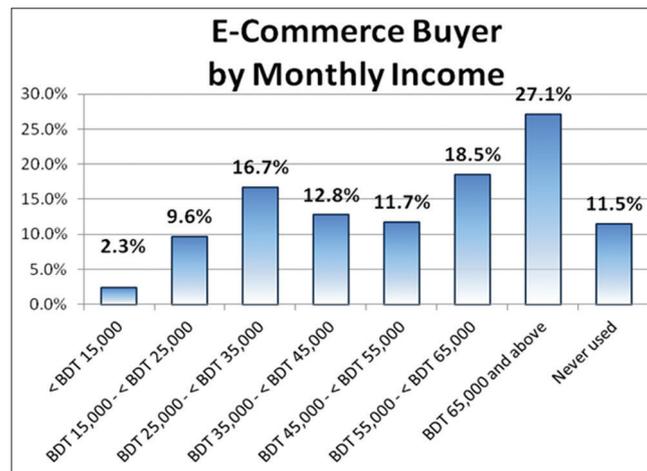


Figure 3: Income distribution

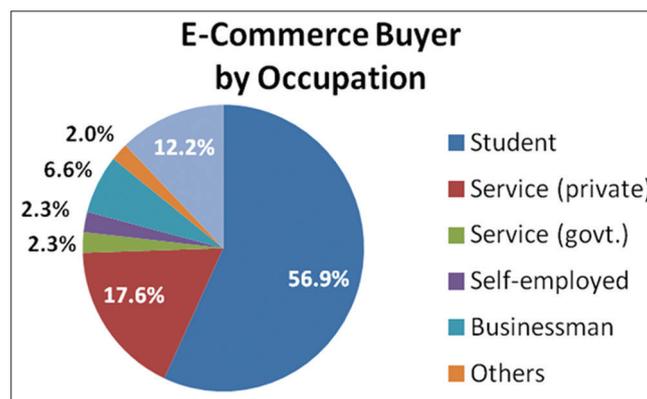


Figure 4: Occupation of respondents

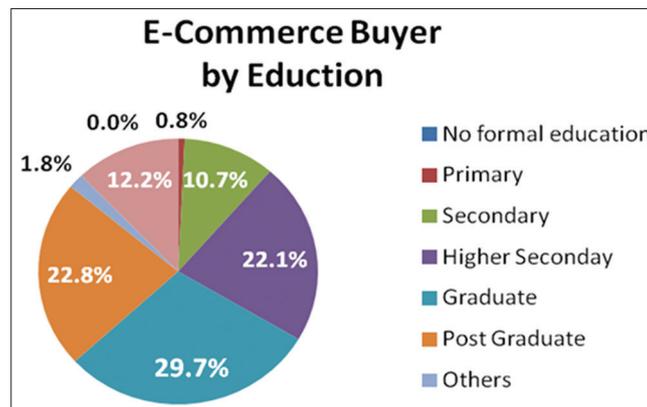


Figure 5: Education of respondents

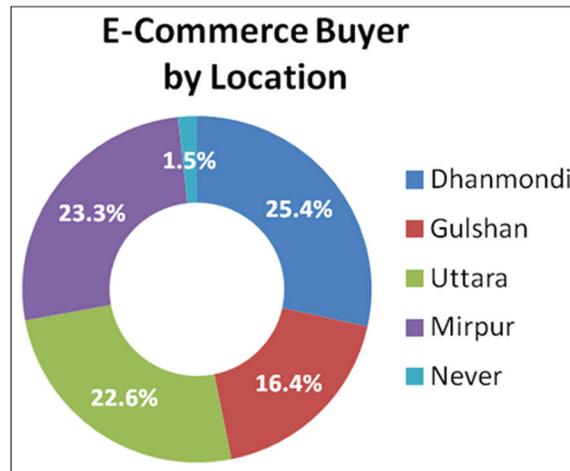


Figure 6: Locations covered in Dhaka City

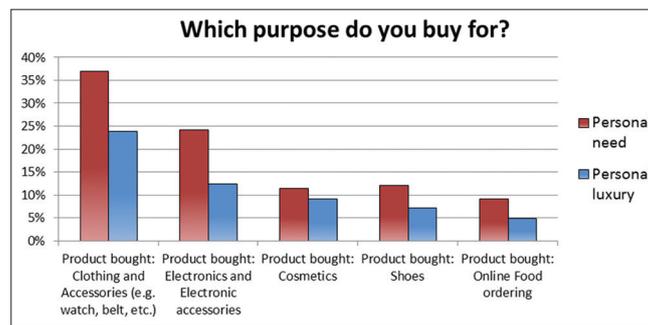


Figure 7: Purposes for which products are bought

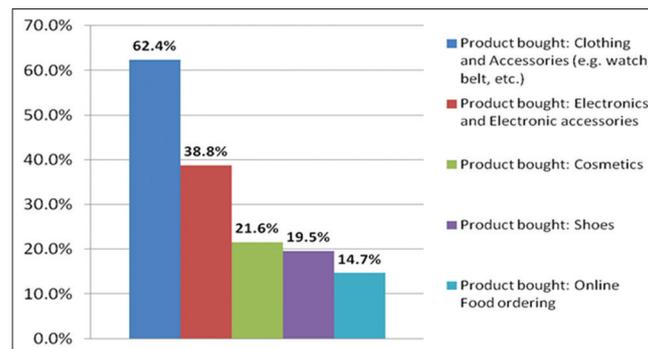


Figure 8: Purposes for which products are bought

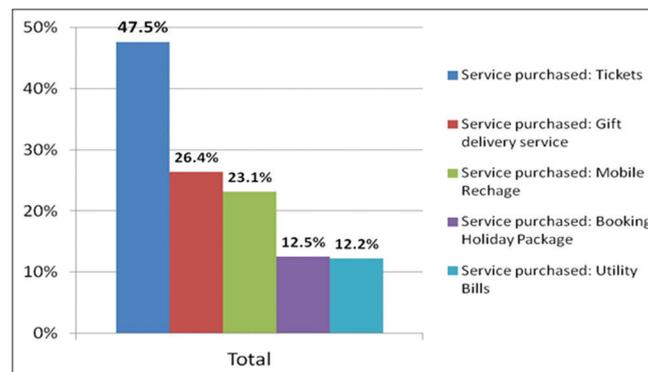


Figure 9: Purposes for which Service are purchase

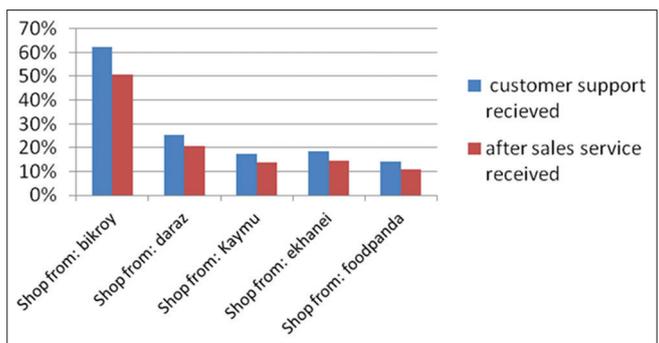


Figure 10: Services related to sales

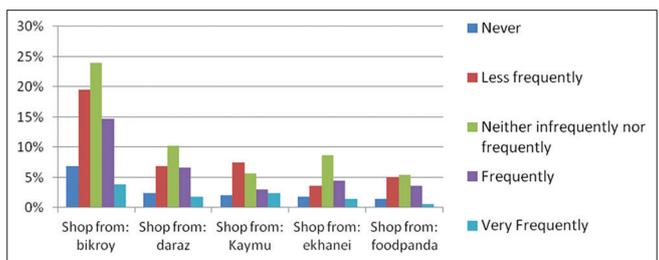


Figure 11: Repeat purchases in top websites