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E-Commerce and GDP: A Study of Measurement Challenges and Issues in Bangladesh

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Abstract

Cyber technology (Internet) is a globally interconnected network that includes billions of individual, corporate body and government user as known as f-commerce, e-commerce, m-commerce, e-governance, digital government and so on. These are a hot topic; however, petty is known about the real size and impact of e-commerce in Bangladesh. In particular this is due to e-commerce is a contemporary and sharply evolving phenomenon, but it is also because the measurement of e-commerce provides a number of issues and challenges. This study finds that some of these issues are fundamentally unique. Others may similar to, or additional of traditional economy measurement issues. Thus this paper suggests that the measurement authority needs to rise to the occasion and devote the additional resources to address these challenges. Although at this elementary stage in Bangladesh e-commerce may be provided a comparatively small figure of all segments such as B2B, B2C, C2C, G2P, B2G, B2E, F2D and D2F, its potential size, figure and impact on cyber business processes and growth probably be large.

Key words: e-commerce; f-commerce; m-commerce; e-government; GDP; Business to Business; Business to Consumer; Consumer to Consumer; Business to Government;

JEL Code: B21, B22, B31, F01, F24, G21

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Introduction

The first formal e-commerce application was initiated by CompuServe for the United States and Canadian markets. Nowadays cyber-powerhouses such as Amazon.com, eBay so on and more recently Alibaba.com, were established (Keen 2015). The remarkable prosperity of e-commerce is evident in countries such as India as well, where the market value is estimated USD 12.6 billion as of 2013 and swiftly growing. In the United States, the total value of the e-commerce sector is estimated USD 294 billion (UN 2015).

The market demand of e-commerce is exceedingly driven by the extending proximity of the Internet facilities in the rural level of economy. Globally, the scale of international trade being carried out on the Internet is rapidly extending. In the continent of Asia, countries such as China, Japan and India are leading the way with regard to e-commerce, with an average annual growth rate of 143 percent over the period of last decade (Broadman 2007). However when it comes to the consumer of Internet for online shopping purposes, country-level data vary notably. While in South Korea, online shopping constitutes 50 percent of Internet users, in China, the proportion is about 20 percent of Internet usagers (WTO 2015).

E-commerce in Bangladesh

E-commerce transaction would increase the Gross Domestic Product (GDP) growth and thus, assistance Bangladesh attains the Millennium Development Goals (MDGs). The internet has brought up revolutionary changes, and in developing countries for instance Bangladesh, e-commerce has become a usual norm of doing business (Dey et. al 2009). Bangladesh cannot be stayed behind from this phenomenon. The development story of Bangladesh has become well-informed. The

country's annual GDP growth rate of about 6% over the last decade is reflected across sectors (Ishtiaque and Sarwar 2016). The fact of mobile phone penetration in Bangladesh is also a case study in its own right and not too far behind is the unfolding events of Internet adoption and usage. Nowadays, several established business entrepreneurs have opened up internet portals while others are trying a new as solely e-commerce, partially, due to the latter's comparatively less investment intensive nature (Eurofound 2012). Surprisingly, these trends are not covered only to metropolitan cities, but also to an extent, rural areas as well. The Bangladesh Governments' vision 2021 to provide a Internet backbone nation, promising a well-founded telecommunication sector, connecting all government offices, and introducing up Information Technology Parks are all major indicators that point to the e-commerce sector's potential development (Rahman 2015)

Recently growth of Internet usages, 3G roll-out plan in 2013, and the robust marketing of smartphones, e-commerce usage pick up at a quick pace (Mathur 2015). Entrepreneurs have understood that Bangladeshis are perfectly enthusiastic about technology and at the same time keen shoppers. Therefore, with the numerous obstacles to urban life in metropolitan cities, citizens have progressively resorted to online shopping, with flourishing demand of practical businesses to match. Encouraged by convenience, range of products, dedicated service, competitive pricing, improving payment security and flexibility and demand from consumers and sellers, e-commerce has evident a booming of the online shopping web-portals, especially in the B2C and C2C segments.

Commonly, the indicators associated to e-commerce in Bangladesh, well-portend, considering the primary-stage of this sector.

Following table highlights the internet users in Bangladesh that constitute the foundation for e-commerce sector growth:

Table 1: Indicators for e-commerce growth in Bangladesh

Year	Users	Population	% Pen.	GDP (US\$)p.c.*
2000	100,000	134,824,000	0.1 %	N/A
2007	450,000	137,493,990	0.3 %	466
2009	556,000	156,050,883	0.4 %	574
2010	617,300	158,065,841	0.4 %	624
2011	5,501,609	158,570,535	3.5 %	700
2012	8,054,190	161,083,804	5.0 %	700
2015	53,941,000	168,957,745	31.9 %	1,080

Note: Per Capita GDP in US dollars, source: International Monetary Fund.

Source: Internet usage, broadband and telecommunications reports, Internet World Stats
<http://www.internetworldstats.com/asia/bd.htm>

The total number of Internet Subscribers has reached 61.288 million at the end of March,

2016. The Internet subscribers are shown below Table 2:

Table 2: Number of Internet Subscribers in Bangladesh

Operator	Subscriber(million)
Mobile internet	58.045
WiMAX	0.131
ISP + PSTN	3.112
Total	61.288

Source: Bangladesh Telecommunication Regulatory Commission (BTRC)

(<http://www.btrc.gov.bd/content/internet-subscribers-bangladesh-march-2016>)

First and foremost, 61.29 million Internet subscribers have been reached in March 2016 that is quite significant for Bangladesh. This state is to the popularity of the Internet use among average people. However, we can be compared this to the 127 million individual mobile phone subscribers, the prospective for mobile Internet use is more underscored. Basically, computers do not enjoy very high levels of adoption due to their high costs, and this obstacle is a felicity for mobile Internet

penetration, and eventually e-commerce. In addition, a huge penetration of Facebook, is also perfectly high, and indicates the possible of a segment of e-commerce well-known as f-commerce. The first way of social media communication in that case facebook will remain first position in Bangladesh. Bangladesh is a land of opportunity for social media because this country got more than 60 percent adult population and with adoption capacity. According to Bangladesh

Telecommunication Regulatory Commission (BTRC) 38 million Facebook users on Nov 15/15, 16.6% penetration rate 80 percent internet users of Bangladesh are on social networking website Facebook. The positive vibe is that the using rate is increasing in a rapid way. Moreover, the cost of peak-hour Internet at is expected to go down significantly in the coming years, as telecommunications companies have recouped the costs incurred in availing 3G licensing.

Bangladesh is mostly dependent on its 2G network. It is expected as mobile usage is rapidly growing in Bangladesh. However, emphasizing the transformation from 2G to 3G will be enabled swift development for the e-commerce sector. Presently, the initiative of the government to establish a second submarine cable will go a long way in creating the required

infrastructural factors within which to merge to a low costs and more efficient platform such as the Broadband. In addition to a nationwide broadband network should be segment of the government's short-term rural-urban development plan.

Finally, there have been remarkable steps in infrastructure development which have simplified the access of e-commerce sectors. There are, however, deterrents, such as lax consumer protection rights, weak enforcement of contracts, absence of intellectual property regulations and a lack of privacy protection, to name a few.

Major E-Commerce Segments in Bangladesh

There are various applications of e-commerce, the major categories can be outlined as follows.

Table 3: Industry categories of E-Commerce

B2B (Business to Business)	Organizations selling goods & services to other organizations
B2C (Business to Consumer)	Organizations selling goods & services directly to consumers
C2C (Consumer to Consumer)	Consumers selling goods & services to other potential consumers
G2P (Government to Public)	Government selling goods and service to the public
B2G (Business to Government)	Private organizations selling goods & services to the government
B2E (Business to Employee)	Private organizations selling various goods & services at in individual level primarily targeting various employees of different organizations
F2D (Foreigners to Domestic)	Foreign company selling product and service to the domestic consumers
D2F (Domestic to Foreigners)	Domestic company selling product and service to the foreign consumers

Bangladesh e-commerce sector, the major subsections, thus far, have been B2B, B2C, C2C, G2P, B2G, B2E, F2D and D2F segments. B2B subsections were once the biggest segment of the e-commerce sector in Bangladesh. However, this has shifted and contemporary trends state that their representation in the sector at large is expected to lessen. Numbers of B2B entrepreneurs in Bangladesh are

involved in providing manufacturing and supply-chain solutions. For example, Bangladesh Garment Manufacturers and Exporters Association (BGMEA) has actively established B2B e-commerce solutions for international ready-made garments orders and procurement, as do several RMG entrepreneurs. There are also B2B portals that feature business directories, trade deals and information about

suppliers for instance BangladeshBusinessGuide, Bizbangladesh and Addressbazaar, which, recently, have limited popularity.⁶

There have also become very popular B2C websites as evidenced home delivery of food, such as FoodPanda and HungryNaki. This has come as a remedy to citizens provided the high levels of traffic in areas such as diplomatic area Gulshan and Dhanmondi in Dhaka especially when people like to go out to dine. C2C portals, thus far, have been the life force of the e-commerce sector in Bangladesh. The major players in this segment include Bikroy, Ekhanei, and ClickBd. There has already been a re-organization D2F of this segment with CellBazar being bought by Telenor, followed by the acquisition of the foreign market player OLX by Ekhanei.com. These portals consist of individual and auction-based online marketplace compare to eBay. ClickBd was the country's first auction platform, while Cellbazaar was the first to use SMS-based transactions.

For examples of F2D introductions comprise Facebook-based f-commerce platforms such as Shopr.bd and ShoptoBd which provide Bangladeshi consumers to buy products and services from prime online shopping portals in the India, UK, USA, and even China, as for Amazon.in, Amazon.com, ebay.co.uk, and Alibaba. Notwithstanding the market competition between domestic entrepreneurs and foreign-based players in the B2C market, especially, the food delivery systems, is anticipated to determine the future structure of the B2C segment, what arrives to be inevitable is its sustained development (Ridah, 2015). A B2E portal, employee recruitment, basically in the private sector in Bangladesh, has somewhat moved online, for instance bdjobs.com, prothom-alojobs.com, and jobsA1. In spite of the fact that internal hiring and lobbying are

largely dominant, vacancy announcement takes place through the largest and most accepted web recruitment portal Bdjobs, although others such as prothom-alojobs.com and jobsA1, so on also enjoy growing popularity.⁸

Historical Background of GDP estimation in Bangladesh

There was no systematic aggregate measure of economic activity until the end of World War II. Before then economists had to rely on disparate sets of data such as data on retail sales, iron and steel production etc. to make any sense of the economy and how it was performing. The Great Depression put into question the usefulness of such data to understand the performance of the economy and above all, to make any reliable predictions on the future direction of the economy. Simon Kuznets in his pioneering work National Income, 1929-32, published in 1934, set the stage for estimating what we now know as gross domestic product (GDP). By the end of the World War II a system of national income accounts was put in place in advanced economies. The measures of aggregate output since then have been published by major developed economies but later on by developing countries. Bangladesh has also been publishing national income accounts data since its independence.

Like any other accounting system, the national income accounts system clearly defines the concepts that are used to estimate aggregate national output. The most widely used measure of aggregate national output in the national income accounts is gross domestic product (GDP). GDP is defined as the market value of all final goods and services produced in a country during a period of time; usually a quarter or a year. There are a number of key terms in this definition; market value, all final goods and services and during a period of time. Market value implies that the value of goods

and services are determined through the market forces i.e. there must be market-based transactions. Final goods and services indicate all intermediate transactions must be ignored otherwise this will result in double counting thereby inflating GDP. Final products and services are at the final stage to be consumed by the ultimate users.

During a period of time (i.e. quarterly or annually) is important to gauge the rate of change in a given period of time thus making it a flow concept rather than a stock. However, second-hand goods are excluded as they were counted during the year of their production thus again avoiding double counting. All transfer payments (all welfare and pension payments) are also excluded as they do not represent a payment for any currently produced goods or currently provided services. All transactions in the underground economy are also excluded as they are deemed to be illegal transactions. All in all, it is now clear that GDP is nothing but the sum of all value added (GDP=? Value Added) during a particular period time (a quarter or a year).

GDP can be measured using the expenditure method by adding all expenditures on goods and services during a period of time or by using the income method where incomes of all factors of production are added together. A third approach can also be used where the value of all goods and services produced are taken into account and this is called the output method. Theoretically all three methods should yield the identical result but in reality they differ due to the different estimating methods being used. Nominal GDP is the current market value of final goods and services produced during the year or quarter. As the price levels change over time as well as nominal GDP, this necessitates to make GDP over time comparable. This is done by using a deflator to make GDP over time comparable and called real GDP.

The most commonly used method of measuring GDP is the expenditure method. The expenditure method stipulates that spending by the household, business, government and international sector determines the value of goods and services purchased. The estimating equation is :

$$Y=C+I+G+(X-M)$$

where Y is GDP; C is consumption expenditure; I is investment expenditure; G is government expenditure and X-M is net exports. The macroeconomic policy making is very heavily reliant on trying to influence the right hand side variables to stimulate economic growth.

Given the definitional and the conceptual framework of GDP, there are a number of limitations that can be identified. It has long been identified that environmental costs in generating the national output has been ignored and continued to be ignored, also ignored are contribution of household work, do it yourself (DIY) work, changes in the quality of product over time; the kind of products (huge armament production vs. consumer goods) and technological progress resulting in new products and processes. One may also add that finer human accomplishments such as literary, artistic and scientific achievements are also ignored.

It is recognized that the size of the underground economy in Bangladesh is quite substantial as reflected in demands for undisclosed income to be allowed to be invested in the housing sector. The Panama Papers indicate that some Bangladeshis are stashing away their ill-gotten money in overseas tax havens. There is no reliable data available on the extent and the size of the underground economy in Bangladesh. This suggests that the actual size of the

economy is larger than what it is estimated to be using the current method of estimating GDP.

Furthermore, peasant farming does not feature prominently in the calculation of GDP. While recognizing that over the last two decades or so the agriculture sector in Bangladesh has been slowly getting commercialized, yet for the vast majority of peasant farmers both consumption decision and production decision are made by households (in a purely market economy production decisions are made by firms and consumption decisions are made by households). This is so because food self-sufficiency, in particular food grain self-sufficiency, remains the corner stone of the household's production decision. Therefore, a significant proportion of farm output is not placed on the market. This seriously underestimates GDP and the contribution of the agriculture sector to GDP in Bangladesh.

A model of aggregate economic behavior represents a very simplified version of the very complex real world. In building such models economists concentrate on, from their considered view, as most important determinants. The purpose now for measuring GDP is to estimate how the economy is growing and growth is considered not only good but essential so that people can live an increasingly better material life and more importantly, enables the economy to absorb any increases in the labor force. Growth can also enable more leisure thus improving the quality of life but that will depend on how the benefits of growth are shared among the populace. In Bangladesh, 33 per cent of the populations still live in extreme poverty despite the continued growth of the economy. While in developed countries billion of dollars are spent on personal beauty care (in developing countries, including Bangladesh, also the same is happening) and on pet food - some times even for pet grooming, yet there is not enough money available for

better health care and better public education. This is simply because increased levels of prosperity do not automatically translate into willingness to pay more taxes to finance better public services.

The current method of measuring GDP based on spending by various sectors of the economy has its historical roots in the Great Depression. Keynes was pivotal in providing the theoretical foundation to stimulate aggregate demand to overcome the depressed state of the economy during this period. It was how the focus was concentrated on spending and the concept of GDP was organized along that line and it remained so till today. Keynes' reasoning was far more subtle than the way it was conveyed. Economic orthodoxy with its sole reliance on the market mechanism remains the main force to perpetuate such a concept with the corresponding estimating method. But there is nothing immutable about the concept as such, it will be appropriate now to redefine what constitutes or does not constitute economic activity. A redefinition of national accounts would also cause a shift in government policy orientation.

Methodology

In this paper multiple secondary data sources were used such as official statistic and public documents, journals, articles, international statistic and from companies' web-portals to analyze.

Discussion

E-Commerce Estimates and Forecasts

There are many estimates and forecasts of the category of e-commerce remain. Differences in methodology, general outlook and coverage are various enforceable contentions for the dissimilation in the estimates and forecasts. This is often strenuous or improbable to

determine the particular methodology or coverage underlying the estimates and forecasts. It is very difficult to evaluate the estimates, without a clear understanding of the methodology employed. A conventional anxiety is the limit of double- calculation. Further concern is the reliability and validity of comparisons to gross domestic product (GDP). For instance, in the United States, the achievement of e-commerce is generated transportation sector activities to GDP including the value of the product being shipped, instead of only the margins that are included in the national income and product accounts GDP (Fraumeni 2001). Surprisingly if coverage variances are known, differentiations are critical, as segmentations of e-commerce operations are usually not attainable. In the one hand some forecasters are very optimistic about the future of e-commerce, on the others hand less so. It is fact that there are no e-commerce estimates and a forecast reflects the existence of Bureau of the Statistics (Census) survey programs that are emphasizing the estimation of the GDP. Recently, e-commerce retail sales increased undoubtedly from every year but are still not reflected of total retail sales. There is also no general statement reflected the size of sectoral e-commerce in Bangladesh economy.

Is E-Commerce Covered in Aggregate Bangladesh Economic Statistics?

As mentioned that e-commerce operations are not yet established in the Bangladesh national accounts, including the GDP figures. There are many transactions previously done in more conventional procedures. However, these operations should not be divided from traditional economic activities (as for the head of accounts as to estimate and forecast e-commerce GDP) except particular surveys or supplementary questionnaire on existing surveys.

Looking beyond the national accounts to aggregate Bangladesh economic statistics in general, the unanimity is that the extensive part of e-commerce operations is not covered. There probably some lag and differences in survey capture rates by the government of Bangladesh such as either economic or statistics departments, as surveys are conducted and sample rotations are carried out on various time schedules. Usually all sort of issues are arising for data collection in dynamic sectors of the economy. Thus, this is not be convinced by that this provides to importance e-commerce under coverage.

E-Commerce Estimation Issues and Challenges in Bangladesh

E-commerce is included in the statistics, measuring it is frequently problematic therefore the question of whether e-commerce is included in aggregate Bangladesh statistics is just a starting point for discussion of e-commerce measurement. Usually, E-commerce enhances preexisting traditional economy measurement problems. To measure active or emerging e-commerce sectors such as banking, insurance, brokerage services, education, and medical care there a number of e-commerce intensive sectors are in difficult. Commonly, the difficult to measure sectors are concentrated in services and in finance, insurance, and real estate industries, the broad sector categories that have grown most rapidly over the post-World War II period (Sherlene K. S. Lum et al., 2000) Furthermore, additional work needs to be undertaken to measure the value of investments and quality adjusted prices for e-commerce infrastructure, such as servers and telecommunications equipment.

In connection with several free services, especially information provision, seem to be service sectors of the web-portals. There might be few of a contact between information

arrangement and sales due to the web-portal. For instance, a consumer can now obtain airlines full services including tickets, flight information, price quotation, boarding, meal etc on the web-portal, over the m-commerce, or in person at the office establishment. Therefore, a new business identity is involved as a third party agent service to increase sales information and customer services such as a call center. It is further observed that there might be a transform from pricing for products to free products mostly developed nations and few in developing nations, for example of the daily printed version newspaper. It is also to be noted in the case of advertising revenues, together with prices to have a link show on a web portal, illustrate a significant origin of income for numerous e-commerce entrepreneurs, in accordance with anecdotes. Advertising is frequently the only source of revenue, for web-portal that provide for free search engines, content, e-mail or Internet-service providers, It is fact with television and radio, there may different from those who buy the advertised goods and services and who enjoy the free services. Thus, the Census retail surveys do not account for free goods and services; therefore it is vague how these operations would be introduced in a study of e-commerce's achievement to economic development.

B2C, who provides what may be changing. There are two ways of the e-commerce purchase is sent such as electronically and home delivery. For instance, the full e-commerce home delivery transportation cost is included in the output of the U.S. economy; the transportation margin component of it is included in GDP, however when the consumer picks up the good himself, a much smaller transportation related cost appears in output and GDP, including items such as consumer expenditures for gasoline, motor-vehicle depreciation, and so forth (Fraumeni 2001). Nowadays, the customer is typing in the order,

provide delivery address and billing information on the e-commerce web-portal whereas previously corporate personnel executed these activities, thus employee wages were accounted in product prices. There is evidence that a number of transaction transforms between the non-market and the market sector. It is still vague that the complete sector has transform into e-commerce at all, thus output and GDP might be higher

Mostly in the national accounts are not captured profit and loss of e-commerce,. Frequently the affirmation is formed that these prospects should not be in the national accounts, yet to a restricted dimension, they are by this time comprised. At least some of this is reflected in the quality adjusted computer price indexes usually when computers become faster and easier to use. This is the fact of degree. if not a satellite household production account is established, Commonly, losses from e-commerce and another perspectives of the digital economy will not be computed This is indefinitely that a family manufacturing account would assimilate dimensions of convenience. Consequently, perhaps a significant component of e-commerce would be omitted; otherwise convenience is accepted by standard coordination.

The question has raised that encompasses the provision, convenience and time prospects of e-commerce goods and services as well as other characteristics is in case of e-commerce goods and services are truly the equal as store goods and services? Are there nature differences and similarities between, for instance, a paper magazine purchased on the web-portal, a paper magazine purchased in a magazine store, and an electronic magazine purchased either on the web-portal or in a magazine store? There is a difference as an electronic magazine probably cannot be lent while a paper magazine can be lent to anyone. Moreover, in the case of

electronic vs manual airlines ticket, an electronic ticket, which may or may not be purchased on the web, if a customer mislay a paper ticket, they usually have to pay a penalty to have it.

It is also fact that e-commerce blur the difference between goods and services. Is an online book a good or a service? A purchased paper book is obviously a good, while an electronic online book may be classified as a service.

E-Commerce Business Processes in Bangladesh

It is very difficult to determine the challenges of potential business and social impact of e-commerce business changes process. Usually, e-commerce data record transactions mostly either incompletely or indirectly by the inputs used in production but there are no traditional set of economic data as how business do business. The impact of cyber revolution on industrial composition and organizational structure several ways such as some organizations may increase the operational costs of others; some entrepreneurs who take a greater advantage of process changes, including channel of distribution changes, may have a comparative advantage over others. There may not have proper estimation/accounts of what has happened for a number of periods. Furthermore,, e-commerce probably introduce new venture for consumers and other entrepreneurs in the domestic and international market for global economy, shifting the physical channel of distribution of the geographic boundaries, reach, and distribution channels of businesses process. Thus, the digital economy and e-commerce might be facilitating the global economy in term of the changes in business processes might be the truly revolutionary impact.

In addition, if we want to know about the impact of e-commerce segment such as of B2B and B2C then we needs to actual accounts of each segment on real GDP and e-commerce productivity. Thus, there are additional estimation obstacles due to B2B transactions are in-between transactions that do not reflect as GDP. Few questions has risen, For instance, are the prices falling? Are there greater efficiencies due to the e-commerce revolution, including B2B? How associated high technological infrastructure? There are also different natures of efficiencies for goods and services. Mostly, the efficiencies of the new economy are possibly to be captured in the estimates while for services the absence of ample price data commits it complex, if possible, for measures to reflect higher measured output and productivity arising from the new activities and technologies.

Elusive

As usual one of the major problems to measures intangibles is in the traditional economy which also enhanced by the digital economy and e-commerce. There is no debate that knowledge and information are significant at any field of study, while it is very difficult to quantify as inputs. However, the cyber technology has facilitated the speed and ease with which knowledge and information are transmitted. Moreover, the types of intangible capital that are often mentioned include organizational goodwill, intellectual property, institutional, and other assets. While some development has been made in measuring research and development and human- capital investments, these are generally not accumulated into a set of national GDP accounts. According to (Margaret and Wallman, 2000), very little is known about how to quantify intangibles, yet they seem to be a greatly significant source of market valuations for new economy firms, including those involved in e-commerce

Transformation Data

By introducing e-commerce is changing data for product and service, thus for a byproduct of digital economy is the need for more timely and new data. Timely data could be helpful with respect to changes in point of sale, channel of distribution methods, new products/services, and remuneration for all employees. E-commerce is transforming channel of distribution systems from conventional marketing, for example, home and electronic delivery as mentioned above. In terms of manufacturers, for instance, branded computer is also selling their product and service directly to the customer, bypassing all kinds of middlemen. The advent of cyber economy increases the need for periodic reporting on all employees, together with non-manufacturing employees and the self-employed. Therefore, new forms of remuneration, new data on exports and imports, product pricing and output indexes are very difficult to measure sectors and e-commerce infrastructure. There is also stock options represent a potentially significant new form of remuneration that anecdotally is more generally received by e-commerce business employees. Since e-commerce simplifies business around international boundaries, data on imports and exports may be decreased, because of no middlemen on the web-portal. It is also fact that e-commerce country of origin and destination may be unknown. Since prices and quality of e-commerce goods and services may not be the same as those obtained in traditional outlets and web-portal. Thus, both clicks and outlets should be comprised in point of purchase surveys. Therefore, this study suggests that above few of the additional data are needed to consider by the development of e-commerce business.

Conclusion

In this stage, it may not seem feasible to separate e-commerce transactions from other traditional business. Nonetheless except attempting a detachment, e-commerce provides a number of measurement issues and challenges. It is fact that in any period of speedy shift, the measurement authority needs to improve to the purpose and commit the supplementary assets to address these challenges and issues. Notwithstanding at this elementary stage in Bangladesh e-commerce may be provided a comparatively small figure of all segments such as B2B, B2C, C2C, G2P, B2G, B2E, F2D and D2F, its potential size, figure and impact on cyber business processes and growth probably be large.

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