

Digitalization as a New Stage in the Formation of Economic Relations

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Abstract. From barter system trading, to paper currency and now to digital economy, the global economy has come a long way. With enhanced technology, the digitization has spurred the communication between people. People can interact with each other, and thus, the effect is quickly observed in the economy. The country-to-country enhanced communication has sped up the economic activity. The countries are using the digitized technology the make their countries prosperous for the business environment. Seeing all of this, the countries are slowly adapting the digitalized technology. The impact created by the digitalized economy has been felt greatly by the firms and overall economy.

1. Introduction

An economy as defined and explained by the classical and modern economist is a way to equal distribution of the scarce resources amongst the humans to fulfill their wants and desires. It is upon countries to organize, create and deploy these resources. Good governance means to improve the economic structure in a way that its entire people gets an equal opportunity to earn and use the resource.

The intensive and deep academic studies on economics might not be older than 2 centuries but civilizations have always worked on the basic economic principles. A marketplace where people went to buy and sell goods has always been the part of societies of old civilization to modern times. Providing us the evidence of basic trading system as a part of economy [1].

The prehistoric times saw people trading the goods in exchange of other good, commonly called as Barter system. Though, with greater technological advancements, the system changed and the global economy used paper currency to trade goods. The transformation from barter system to a common currency was a revolution in itself. The change in modes of payment lessens the complexity of created by the barter system for trading activities. With passing decades, the economic system saw slight changes in modes of payment, which was all possible with the technological advancement [2].

As the global economy was entering into a new millennium, the world was entering into a new phase of computers and digitized world. People were playing with the latest gadgets backed by the advanced computer technology. Hence, the keen economic observers sensed economy shifting its course towards digitization. In 1995, Don Tapscott was the first one to coined the term in his best-seller *The Digital Economy: Promise and Peril in the Age of Networked Intelligence* as “Digital Economy” [4].

2. Digitalisation of the economy

Nicholas Negroponte believed that the information that is stored in physical form such as USBs and CDs will be saved in the form of 0s and 1s. Hence, described by a metaphor “shifting from processing atoms to processing bits” [5]. The introduction of information technology into the everyday life has not only improved peoples’ life but has transformed the face of global economy.

Unlike olden days, people can now talk to the other person sitting at any part of the world. The online connection between people, businesses have resulted in greater economic activities. The 21st century also saw a new term, globalization, where different countries got interlinked with each other. The business activities expanded as the interlink age between people and organizations occurred at a breakneck speed.

The core driving force of the digital economy is the mobile technology and the Internet, the hyper connectivity, where the person-to-person and person-to-machine communications have advanced to higher levels [6].

The digitization process involves collection of huge amount of data that is organized, structured and transformed for evaluative purposes. Using this data, the businesses have come out of their shells as with greater information, the products and services have been given superior innovations.

2.1. Digitalization of the economy in various countries

The desire for efficient system has what inspired the global leaders to adopt the digital revolution. The digitization has penetrated into various elements of life, and has positively impacted the people, businessmen and governments. By going digital the government now have access to an abundant data volume. The digitization has given the benefit of internetworking to various government organizations providing ease in terms of planning and execution. The adaption of new technology into the governmental departments ensued in time saving opportunity. Also, as the data could be saved into digital form, the paper wastage decreased down to significant levels, thus, bringing down the wastage cost, drastically [7].

The Estonia, for instance, has introduced a new concept of e-residency, where people from different national identities can register themselves as e-residents of Estonia. The increased usage of digital technology has developed a healthy business environment for the country, thus inviting the entrepreneurs from all over the world. The country has built its reputation as an advocate of digital world, therefore becoming a paradise for entrepreneurs [8].

The introduction of Adhar cards to the residents of India highlights the importance and significance of digitalization. The Indian citizens are given a 12-digit ID number, which gets linked to different social programs setup by the government. The policy shift made the Indian government more efficient and allowed them to provide a fairer distribution of subsidies. Previously, the ghost beneficiaries claimed the subsidies, which got undetected by the government officials. The subsidies on liquefied petroleum gas are transferred directly to the Adhar cardholders’ bank account as the identification numbers are directly linked to the person’s bank account [9].

The economist has provided the evidence to how digitalization has affected the consumer price index or inflation rates. The e-commerce industry growing at a fast pace, have given an equal opportunity to remove the barriers to entry. With increasing online competition, the price setters offers low prices to the consumers and putting downward pressure on the prices of the goods. People have now access to international market by showcasing their products on giant e-commerce platforms like Alibaba and Amazon. The two have opened up the global market and making a tough rivalry for the competitors. The only winner of the price wars is the consumer sector [10].

The technological advancement has allowed lots of different countries to make an efficient business environment in their countries. If the company can get registered over the Internet, and businesses could file their taxes online, people will find it easier to get into the tax net. The developing nation can be the real beneficiaries of such digitized policy implications. As the ease of doing of business will go one step ahead, the domestic and international investors will find it invest in various untapped markets of an emerging economy. The business sector might be the director beneficiaries but

the countries will feel the real positive affect. With a growing number of businesses, the country could add millions through corporate taxes [11].

Despite all the efficiencies brought by the digitalization of the economy, some analysts are of the view that the digital economy will not push up the productivity growth. In the argument, analyst tells how the inventions of the combustion engine, telegraph, and electricity hugely supported the productivity growth. Though, as compared to this, the economist thinks that future innovations like driverless cars will unlikely to stimulate the GDP numbers. Thus, citing opinion that the latest digitalization is more evolutionary than revolutionary [12].

Through, digitalization in the economy, the societies have turned into cashless societies. The people can use their debit and credit cards restaurants or shopping malls. Instead of cash, people can pay directly from their bankcard, and the amount gets transferred from buyers' account to sellers account. The introduction of new payment method will have a positive environmental impact, as there would be reduction in paper consumption for printing cash.

The World Bank reveals that Russia's brought reforms in its telecommunication sector enabling larger accessibility combined with greater affordability of Internet connection. The introduction of data analytics and artificial intelligence will help the government to focus on health and education sector [13].

The Russian government however, lags behind its other European and Central Asian counterparts in utilizing the services of digitalization. The weak payment system does not allow the Russia to get a hold on to its e-commerce market. But, with the development of digital economy, Russia has a sublime opportunity to improve its usage of technology for a better payment method.

Meanwhile, The US has a different story to tell. It is expected that by 2025, the US will generate \$2 trillion through digitization. The finance and ICT sectors have the highest digitalization in its operation. Although, the advent of automation brought by the technological advancement would displace 12 million middle skill workers [14].

2.2. Implementation of digitalization tools in businesses and their effectiveness

The small and medium scale enterprises know how to take benefit of the growing digital advancement. In fact, a large number of organizations have adapted to digital transformation, with regard to big data and social media. The utilization of enormous amount of data has been a lot easier and more meaningful for the companies. Businesses are devising plans and strategies to combat the challenges through proper analysis of the data on advanced data analytical software. The from health sector department to large manufacturing firms, the digitization has helped the organizations to gather data and analyzed it for improved results.

For instance, overstaffing is a problem in health sector. The nurses would be given overtime pay if they were called to the hospitals. With no emergencies, the overstaffing can prove to be expensive for the hospitals. Thus, to control the problems through data analytical software, the analyst visualizes the data and creates an efficient schedule for its staff.

The digitization is believed to change the business outlook giving it more elasticity and smoothness. One such advantage is given by the entry of artificial intelligence in large organizations. Despite the debate for its complete success, around 75% executives believe that artificial intelligence will provide new horizons to the businesses. Another 85% believes that the companies with AI technology will have an upper hand due to complete advantage. Currently, companies have automatized their products through AI [15]. Successfully creating algorithms and using the data analysis techniques have successfully done this. The social messaging apps like WhatsApp have allowed the companies to refine the inter-organizational communication skills. With better communications, the companies are able to efficiently convey their strategies to the operations department.

As, all the data is now stored on digital platforms like clouds or other digital media, the employee can quickly retrieve it from wherever it wants. Thus giving the comfortability and flexibility of choosing work schedules.

With growing globalizations and technological progression, many different global organizations get connected with each other. This gives them the luxury to outsource their work to someone working in remote area giving them timely work at better cost. This helps the freelancer to earn money and the outsourcing will allow the firm to trim down the cost.

3. Recommendations

The organizations, which are yet to find ways on how to capitalize on the growing efficient of digitalization must quickly, learn to adapt it for brighter future. The flexible working hours allow the employees to work according to his schedule. This creates a nice bond between the employee and employer. Thus, the organizational heads must put the company's data on digital mediums. With proper usage of digital technology, the companies can save heaps of data into microchips that cost peanuts as compared to the data saved in the physical mediums like registers and books. Therefore, the small companies must buy a system, where they would be able to store important companies' data. The data can be retrieved easily with no fuss.

The governments must take the same policies, as it would help them to record the tax collection. The digitization can help the government improve its ease of doing business and thus, bringing foreign investment in the country.

4. Conclusion

With the advent of technological development in the new age, the digitalization has taken over the world economies. The governments are going cashless by using the enhanced payment methods through bankcards. With this, the governments have found a way to develop a strong business environment in the country, which could bring in international investors from different parts of the world. The digitization helps the country to take better tax measures. The information about non-filers through digitized documentation let, the governments to bring the non-filers to tax regime.

The digitization has not only put a positive impact on the government but the business class is enjoying the benefits of artificial intelligence. With highly improved and innovative products, the AI has helped the companies to earn larger revenues. Seeing the advantages provided by the new digital age, the companies, individuals and governments are gearing up to learn more about the digitalization.

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