

The Impacts Information Technology On Business

Moses Isdory Mgunda

Faculty of Economics and Business, Diponegoro University

Correspondence Email: mgundamoses@gmail.com

ABSTRACT

Information Technology (IT) is among the relevant factor assisting the business to penetrate in a new market for being innovative and generating new product and services which help the growth of the business and company. The revolution of IT and internet facilitates the outstanding performance of the economy in business sector, through the exchanges of information by using internet and electronic devices facilitate accessibility of doing business between companies globally. This study tries to analyse the impact of IT on business and the performance of the economy. The empirical findings show that the role of IT in business is tremendous.

Keywords: Information Technology (IT), Business, e-commerce(e-business), company, organisation.

1. Introduction

In the global business, there are producers as product sellers and consumers as product purchasers. These two people are interdependent; the business does not exist or successful if there is no one between them. Producers require consumers to purchase products to sell, so consumers require producers to satisfy their needs. Manufacturers sell goods at a market place, and when consumers want to buy their needs, they go to the market place. These have occurred hundreds or even thousands of years since the starting of business when technology not yet improved. When technology improved, affects the development business system. Currently, information technology is advancing very fast so that it is difficult to avoid it's development. The advancement of information technology not only assist people's life to become better every day but also support the global business. Things that are used to be expensive and take a long time, now days can take a short period to complete. A work that would involve ten people now days can involve one person(Shaqiri, 2015)

Information Technology (IT) has a role as a means of the transaction of online business, such as through offering media facilities like the internet. The websites, apps, are given as an area for consumers to select the items they want. These transactions also need other technologies to support the online business, which is a telephone communication technology, banks that enable consumer payment, media with producers, shipping agents such as post office. These things are technologies that play a significant role and affect the development of online business. The facilities offered due to the part and influence of IT makes online business tremendous due to it is efficient, economical, and faster to both sides producers and consumers(Steenhuis & De Bruijn, 2012). The purpose of IT on human life is critical. The development of information technology presently developing along with the progress of social development. Information technology is broadly applied by people who see business opportunities due to the development of this technology, such as online business. Globally online business is going to be usual. These have become commonplace and have developed quite well. By using an online business, it is simple for citizens to get the goods and services they are searching. The increasing number and cheapness of internet connections in some countries influence the development of online business. So this is beneficial for the advancement of online business, compared with the offline business.

Information Technology explains any technology that enables humans to create, change, store, communicate, and spread information. IT brings together high-speed computing and communication for data, voice, and video. For instance of IT consists not only of personal computers(laptops), but also telephones, Televisions, electronic household appliances, and modern handheld devices like cellphones. The advancement of the tools is significant and supportive of business activities that carried out, but it does not cost a small investment; besides, technological advancement should be supported by facilities and infrastructure from the area or place where the company is doing business activities.

The progress of information technology brings a significant impact on different aspects of life, specifically in the business sector. The new concepts currently are e-business (e-commerce) or electronic business. The performance of e-commerce gives new prospects and challenges to business professionals and organisations. Globally changes in the way of conducting business are trending, and These changes are mainly in meeting the required information and comprehensive network systems to assist faster and more flexible accessibility of services. Internet-based computer technology has increasingly developed into the most effective form of handheld computers and tablet PCs. High population mobility needs the world of commerce to enable to offer goods and services instantly by consumer demand. In order to overcome challenges, most business organisations are now using the media Internet to connect producers and consumers (seller and buyer) doing transactions. The transactions through the Internet are well known as e-business and e-commerce(Chaffey, n.d.). Many researchers describe that the main characteristic of global business today is e-business. The business model facilitates the exchange of information and business transactions that are paperless, via Electronic Data Interchange (EDI), e-mail, electronic bulletin boards, electronic fund transfers, and other network-based technologies. The e-business supported by three main factors, such as.

1. Increasingly of competition, to the global economy, Regional trade agreements, and growing consumer power.
2. Social and Environmental factors such as changes in workforce characteristics, government deregulation, awareness and demands for ethical practices, knowledge of corporate social responsibility, and political change;
3. Technological factors, such as the short lifespan of product and technology life cycles, innovations that occur almost every time, information-overloaded, and reduced risk of technology costs on performance

Business

Business is a process whereby an individual/group of people offering or sells goods or services for the aim of gaining profit. Business starts with the desire of humans to meet the requirements that are impossible by themselves. Therefore, comes the desire to interact and help each other. In development, humans have a variety of needs and interests that continue to grow. So it is not enough to give and take, humans, try a system that brings benefits to fulfil the instincts of individuals to prosper themselves. Business becomes a structured system for getting welfare in life (Juan, 1991). High profits in any business obtained when there are cooperation and proper organised management, so the business is now it has a close relationship with the company, which is an organisation that runs to get benefits for its members. The company structured in a structured manner, and there is a clear division of labour within a company. Regulators in the company are known as managers, and the implementers are known as employees (Nikoloski, 2014).

Electronic business (E-commerce)

E-business is an electronic media-based business system like radio and television. Since the e-business system is better known by the wider community when the internet employed as an electronic media, the broad community assumes that e-business is an internet-based business as its medium. The development of e-business continues to change with the availability of electronic devices, like mobile phones and tablets. On cellphone or tablet systems, internet access is wireless, and this supports the ameliorate of new protocols such as the Wireless Application Protocol (WAP), which is an internet application without using a cable so that by using a cellphone or tablet, users can access the internet in when and wherever there available(Oetomo, 2001 & Shagiri, 2015). According to Mohan Sawhney(Indrajit, 2002, Rudianto, & Zainuddin, 2007), e-business is: "the use of electronic networks and associated technologies to enable, improve, enhance, transform, or invent a business process or business system to create superior value for current potential customers. "In principle, the definition clearly shows how electronic and digital technology function as a medium for achieving business processes and systems (exchanges of goods and services) that are far better compared to conventional methods, especially seen from the benefits that can be felt by those concerned (stakeholders).

Changes in Technology

Technology is advancing very fast and diverse; the existence of IT now has entered various aspects of life. Technology provides a smoother, more efficient, and more comfortable

experience. Currently, almost all people use technology in their daily life in ranging from simple to complex. Technology has a very broader area, so it is not comfortable to be explicitly categorised. In essence, technological change can be grouped in four fields, including the Computer sector, Transportation and Communication Sector, Energy and natural resources, and New production process fields.

Technological advancement in the computer sector influences the company's internal performance, especially in administration. Database systems can easily classify company data in detail and accurately. Even this system can also be used for employee absence. In general, the database system plays an essential role in the collection of company inventory. The sophistication of the computer that previous doubted would decrease the number of employed people now actually applies vice versa, such as increasing employment opportunities because most of the large companies' present time needs computer experts in the fields of data collection, informatics (programming), and of course computer technicians. It is because of the importance of the presence of technological resources that support the company's works (Issa-salwe, Ahmed, Aloufi, & Kabir, 2010)

The capability of computers to handle complex problems today is undeniably beneficial for the performance of the company's employees. Processing various variables that takes a long time to solve manually now is very easy and fast with a computer. Also, supported by the progress of various analytical applications that are very diverse. Many choices for companies to use in which applications are suitable for company needs. Secure storage and back up is also a plus. Now no longer need to worry about missing data provided; the computer has no errors. Advancement of technology in the field of transportation facilitates the movement of goods flow in a company. Various services are available both from the land, sea, and most express, like airlines. The transportation budget now is one of the things that take into consideration given the consequences of funding and speed that are rising equally. Land transportation has the advantage of cheaper funds. Sea transportation allows interisland services and large amounts of capacity. Air transportation is flexibility and speed, but not for the size of the transport capacity and cost.

Communication is the most talked-about field, easy to access due to the expansion of the internet network, shifted the existence of tools such as facsimile, telegram, or post. E-mail facilities that are easy, inexpensive, and fun with a variety of exciting features now become the foremost choice. The internet is also a powerful weapon for marketing, given the increasingly increasing public consumption of the internet. Networks also facilitate communication between employees and the board of directors. Informal relationships now are more needed because they are considered to have a significant impact on strengthening relations. Aside from the internet, TV and radio remain the most significant focus of public consumption that companies use mainly and advertise. Increasingly diverse and quality TV programs now adding certain parties' interests. For instance, Automotive events initiated by transportation companies now adorned many screens. The possibility of exchanging resources within one another is minimal, but technological development makes it possible, even though sometimes it expensive.

The issues of environmental pollution are not friendly from the excessive use of technology. It is undeniable; many technological tools made from inorganic (chemical) than natural ingredients (organic). Carbon emissions are enormous, particularly in sophisticated equipment such as computers, motor vehicles, and air conditioners. Nevertheless, present days, scientists are starting to find solutions for the use of environmentally friendly technology initiated by advanced companies, mainly from Japan and other parties of the world. Therefore this paper intends to determine the effect of information technology on the global business and economic performance, to know the role of technology in business and companies. The following section of this paper is the researcher explains the methodology applied in this paper, section 3 consist the main results and discussion about the impacts of technology on business, Utilization of Information Technology in Business, The Role of Technology in the Company/Organization, and the Impact of Technology Change on Economic Transformation and the last section is the conclusion and recommendation based on data obtained in findings.

2. Research Methodology

The data applied in this paper are secondary data obtained from Internet World Stats, Digital market outlook, international communication union (ITU) and other data this paper are from the literature study and library research. Documentary method for data collection was applicable

through the use of a checklist to collect various data due to prestigious of various information concern variables such as business, internet and ICT. The descriptive analysis was done to elaborate more concern the impacts of IT on business and performance of the economy.

3. Results and Discussion

The information system is significant in many companies/organisation; the main components included are hardware, software, brain ware (human resources), and network. These types of equipment are applicable to improve and raise work productivity, efficiency, effectiveness, and assist in the achievement of the organisation's goals. Through the utilisation of organisational information systems, internet technology has become an arena of exploration of experts and practitioners — several business opportunities created due to this. Since the internet works as a business facility in the 1990s, the activities of various companies seemed never to stop. Virtual shops are open 24 hours to exchange information and transactions. The using of information systems and internet technology by business organisations has given birth to e-business. There are 3.9 billion internet users in the world, up to over 3.65 billion in the last year (ITU, 2018). According to internet world stats data shows that Asia has the highest number of internet users around globally. More than 2 billion of Asia's people are using the internet. Due to this fact indicate that most Asian companies using internet services in their business activities, like paying bills, transfer money, exchange of information and communication. The second region which has most numbers of internet user in Europe, in 2018, Europe had more than 700 million internet users compared to Africa, which had more than 450 million internet users. The Middle East and Oceania/Australia region has a lower number of internet users.

Table 1. Internet Users in the World (In Millions)

Year	Asia	Europe	North America	Latin America/ Caribbean	Africa	Middle East	Oceania/ Australia
2009	764.4	425.8	259.6	186.9	86.2	58.3	21.1
2010	825.1	475.1	266.2	204.7	110.9	63.24	21.3
2011	1016.8	500.72	273.07	235.82	139.88	77.02	23.93
2012	1076.68	518.51	273.79	254.92	167.34	90	24.29
2013	1265.11	566.26	300.29	302.01	240.15	103.83	24.8
2015	1563.21	604.12	313.86	333.12	313.26	115.82	27.1
2016	1792.16	614.98	320.07	384.75	339.28	132.59	27.54
2017	1938.08	659.63	320.06	404.27	388.38	146.97	28.18
2018	2062.14	704.83	345.66	438.25	455.84	164.04	28.44

Source: Internet World Stats

Therefore, being connected to the internet, companies and organisations have the opportunity to conduct research faster based on the business company does. Form websites that promote their commodities monitor consumer behaviour and advancing of video conferencing.

3.1. The Utilisation of Information Technology in Business

Many companies enjoying the presence of IT, the global business, the banking sector, education, and health, these assist people in various activities and certainly ameliorate the standard of living, while the description in this field is the application of Information Technology incorporate needs time, and cost efficiency causes each business actor feels the need to use information technology in the work environment. One of its uses is in business. Information Technology is used for electronic trading. E-commerce is part of e-business, where the scope of e-business broader, not just for business but also includes collaborating with business partners, customer service, job vacancies. Besides, e-business also needs a technology database, e-mail, and other forms of non-computer technology, such as goods delivery systems and payment instruments for e-business. E-business was first introduced in 1994 when electronic banners first utilised for promotional and advertising purposes on a website. Examples of popular e-commerce in the world are Amazon, Alibaba and Apple

Table 2. Overview of the E-Commerce Market for Consumer Goods with Values in Us Dollars

Total number of people purchasing consumer goods via e-commerce (in billion)	Penetration of consumer goods e-commerce (total population) (in percentage %)	Value of consumer goods e-commerce market (total annual sales revenue) (in \$)	Average annual revenue per user of consumer goods e-commerce (ARPU) (In \$)
2.818	37	1.786 Trillion	634
YEAR ON YEAR CHANGE IN PERCENTAGE (%)			
+3.1	37	+14	+11

Source: Digital market outlook 2019

3.2. The Role of Technology in the Company/Organization

Technology is significant in the development of any company and organisation; it plays a substantial role in boosting the economy of a particular company, the following are fundamental roles of information technology in a company such as

1. Operational functions make the organisation structure more streamlined, and its functions are taken over by information technology. Due to the nature of use that spreads throughout the organisation's functions, units related to information technology management carry out its functions as supporting agencies where information technology is considered as a secure infrastructure.
2. The Monitoring and control function, imply that the existence of information technology is an inseparable part of the activity at the managerial level embedded in each manager's function, so that the organizational structure of the unit associated with it must be able to have a span of control or peer relationship that allows for effective interaction with managers in related companies.
3. The Planning and decision function, as an elevates information technology to a more strategic role because of its existence as an enabler of a company's business plan and is a knowledge generator for company leaders who are confronted with reality to make some critical decisions every day. It is not uncommon for companies to ultimately choose to place the information technology unit as part of the corporate planning and development function because of the strategic functions mentioned above.
4. The function of Communication, in principle, included in firm infrastructure in the era of modern organisations where information technology placed as a medium for individual companies in communicating, collaborating, cooperating, and interacting.
5. Inter organisational function is a role that is unique because it triggered by the spirit of globalisation that forces companies to collaborate or establish partnerships with other companies. The concept of a strategic partnership or information technology-based partnerships, such as the implementation of Supply Chain Management or Enterprise Resource Planning, makes the company make many significant breakthroughs in designing the organisational structure of its information technology unit. Indeed, it is not uncommon to find companies that tend to outsource several business processes related to information technology management to other parties for the smooth running of their business. The type and function of the role of information technology directly affect the design or structure of the company's organisational structure; and the organisational structure of departments, divisions, or units related to information systems, information technology, and information management.

Many entrepreneurs nowadays are using Information Technology. The need for time and cost efficiency influence every business sector to feel the requirement of applying information technology in the activities. Application of Information and Technology causes changes in work habits. For example, the application of Enterprise Resources Planning (ERP). ERP is a software application that includes a management system in a company. Also, the application of ICT in Banking used in global Information and Communication Technology in transactions through the internet or known as Internet Banking. Some transactions that can be done through Internet Banking include money transfers, checking balances, bookkeeping, bill payments, and account information

3.3. Effect and Role of Information Technology in Business

In recent days there is an explosion of information; information is vital for operations management activities. Many information outcomes in some companies being carried out by human being and partly carried out by machines; as a result, the idea arises to overcome the problem of humans and machines having to form a joint system with the results obtained from dialogue and interaction between machines (computers) and human processors. Information technology is one of the things needed in global business development. Indeed, we can say that Information Technology (IT) is a critical factor for the development of global business nowadays. Everywhere already using IT inside process the business activities. That is clear because IT makes it easy for business people to carry out their business activities. The reason companies implement IT in their companies is to get closer to consumers because of the ability of IT to bring distance and time so that the company's products are near to consumers. So this facilitates the business to grow, this period companies that do not use IT, we can say is waiting the day of the company bankrupt. Doing business by using information technology creates a broad open market opportunity. Conducting business through the internet makes it easier to promote products, find consumers, customers through advertisements. There are factors that influence business development, such as: increasing business complexity which is accelerated by the influence of the international economy, global business competition, IT advancement and growth, time utilization, social considerations and information technology capacity which are caused by information, service needs, interaction capacity in computer network, data access speed capacity. In the field of business, both trading goods and computer services, the role of information technology is essential for routine, periodic, and incidental transaction activities and offers a wealth of information faster and accurately. The influence and role of IT on the development of online business include:

1. IT facilitates the dissemination of information can develop online business in various regions of the world. such as e-commerce used by companies selling books, music, videos, games and electronic goods
2. The experts in the IT field also assist in expanding and growing online businesses on the internet. A significant number of experts in the IT field lead to the improvement of many online business systems. Online businesses are very vulnerable to credit card tapping, which causes consumers' disinterest in this business. Nevertheless, with the amelioration of the system, the confidentiality of consumer identity, the product again the trust to buy needs they want online.
3. Online businesses are popular because of the flexibility. Seller does not need to be in the shop to wait for customers, but with computers and connectivity, the seller can sell the products throughout the country and outside. Purchasers do not have to tire out to buy their needs, because by only buying online, the purchased goods c delivered directly to his address.

3.4. The Impact of Technology Change on Economic Transformation

Technological advancement not only motivates economic transformation but also somewhat the result of technological advancement is social transformation. In many studies, it elaborated that technological changes affect effectiveness and efficiency. So, this is proven because, in many cases, when technology advance, the higher level of sophistication happens. The advancement of technology is not as fast as the advancement of information technology (IT). Because of the rapid advancement of information technology, it is inevitably to spur the development of other technologies. Technology continues to change with the process of globalisation, shift towards the transformation of the economy known as the Knowledge-Based Society (KBS). The further stage of economic development based on natural resources towards science-based development. In this, human resources are the result of the growth of education is a factor that determines in public policy to ameliorate the welfare and quality of life of a country. Some literature provides a simple meaning of KBS is an economic establishment with a knowledge or information base for the production, distribution, application and consumption processes. In some unique sense, KBS is the outcome of a technological revolution in the previous era. Three aspects of change are essential in the process of implementing KBS. First, the factors of production that significantly affect economic growth change in principle. Innovation and accumulation of knowledge are the main factors of production. Second, the production equipment, which also affects economic growth, changes in principle. Third, the primary sectors that drive economic growth experience change qualitatively. There are four pillars to support KBS, such as (1) Education System, which

guarantees that the public can utilize knowledge widely; (2) Innovation system, which is enable to bring researchers and business people to apply commercially the results of research and technology; (3) Infrastructure information Society, guaranteeing that the community can effectively access information and communication and (4) Institutional and Economic Framework, guaranteed macroeconomic environment stability, competition, labour employment and social security (Purbo, 2004, 2008).

Economically, the advancement of information technology influences the increase of productivity, and It facilitates to accomplish many works efficiently due to effective utilisation of resources, In the 1980s developing countries aggressively promoting the vitality of their natural resources by utilising information technology. These activities were successful and then motivated to increase the investment in developing countries which subsequently encouraged local capacity building, assist determination of government regulations, policies, and ameliorated the effectiveness of technology implementation, because the countries interested in investing due to promotion also bring technology from their home countries to developing countries(Zen and Qiang, 2007.2). To accelerate technological change that greatly facilitates development in China, since the 1980s the Chinese government tried to stimulate and encourage the influence of technological advancement by providing various facilities and aids for domestic companies to conduct Research and Development in various fields (Zen and Qiang, 2007.4). Outcomes of technological advancement influence the execution of commercial shifting by attaining efficiency and effectiveness in economic activities.

The technological advancement condition also eventually created a new mindset for the society, particularly in urban areas, which lead to a shift in values and culture as a form of social transformation in the life of the community. Improving the quality of life humans to carry out various activities required by optimising the resources they have. Information Technology, whose development is fast indirectly requires humans to use it in its activities.

4. Conclusion

The influence and role of information technology have indirectly made the business flourish. Because with information technology, a company can increase the need for time and cost-efficiency. The more advanced technology also has a negative and positive impact on business, which makes it easier to increase production and income but on the other hand much work that was initially done by humans can be replaced by technology, this is a threat to all workers who are experts in this context because their position is taken with technological . in general, the role of information technology in the global business has many tremendous positive impacts than negative impacts. The influence and role of IT on the development of business and economic performance are as follows

Information technology makes it easy to dissemination information and the advance of online business in different areas of the world without knowing the period, limitation and boundaries of the countries. For instance, an e-commerce that applied by companies to sell a variety of commodities. Currently, many people are experts in the IT field; it assists in advancing and growing an online business through the internet. Therefore, due to many experts in the IT field, online businesses can experience advancement and improvement in terms of the system. System improvement is made to overcome the vulnerability of e-commerce against credit card tapping that can decrease consumers of a business.

Nevertheless, through the awareness of consumer confidentiality, systems can be maintained, and consumers can trust again to buy products via the internet. Online business is the most popular platform because of its simplicity. Also, online businesses do not need always to be there to supervise and wait for customers, but with a system that has been made in such a way as to run it automatically. Internet connections that are increasingly easy and affordable due to IT advancements also lead to prosperity in online businesses. Therefore the entry of the information technology period in the global business brings a positive impact on the business progress, in the period of information technology, a business can run without distance and time. Besides doing business today can run without the need for substantial costs, for example, is conducting business by using the internet. Also through a business such as export and import of goods and services, payment of taxes, exchange of money, creation of employment and other merits facilitate the outstanding performance of the economy, this enables the growth of national income. Therefore, the author recommends the companies to improve their services and to be innovative in using information technology in their business this will enable the company to earn a supernormal profit, grow and advance.

5. Acknowledgements

The author would like to thank God, who made everything possible for the accomplishment of this article, also author thank an editor for some correction that he made this article.

6. Reference

- Brynjolfsson, E., & Yang, S. (1996). Information technology and productivity: a review of. The literature. *Advances in computers*, 43, 179-214.
- Cavalcante, S. A. (2013). Understanding the impact of technology on firms' business models. *European Journal of Innovation Management*, 16(3), 285–300.
<https://doi.org/10.1108/EJIM-10-2011-0085>
- Chaffey, D. (n.d.). *E-Business and Management E-Commerce*.
- Chesbrough, H. (2007). *Business model innovation : it ' s not just about technology anymore*. 35(6), 12–17. <https://doi.org/10.1108/10878570710833714>
- China's Information Revolution, Managing Th Economic and Social Transformation
- Dedrick, J., Kraemer, K. L., & Xu, S. (2004). Information technology payoff in e-business. Environments: An international perspective on value creation of e-business in the . financial services industry. *Journal of Management Information Systems*, 21(1),
- Dimovski, V. & Škerlavaj, M. (2004). Communication Technologies as Management Tools: Case. of Slovenia", Faculty of Economics University of Ljubljana, 636.
- Gambardella, A., & McGahan, A. M. (2010). Business-Model Innovation : General Purpose Technologies and their Implications for Industry Structure. *Long Range Planning*, 43(2–3), 262–271. <https://doi.org/10.1016/j.lrp.2009.07.009>
- Indrajit, R. E., Rudianto, D., & Zainuddin, A. (2007). *Electronic Government in Action*. 195.
- Issa-salwe, A., Ahmed, M., Aloufi, K., & Kabir, M. (2010). *Strategic Information Systems Alignment : Alignment of IS / IT with Business Strategy*. 6(1), 121–128.
- Lecturer, A., & Juan, R. (1991). *The impact of information technology on business competitiveness*. 1–10.
- Nikoloski, K. (2014). The Role of Information Technology in the Business Sector. *International Journal of Science and Research (IJSR)*, 3(12), 303–309. Retrieved from <https://www.ijsr.net/archive/v3i12/U1VCMTQzMjA=.pdf>
- Nikoloski, K. (2016). Technology and economic development: Retrospective. *Journal of Process Management. New Technologies*, 4(4), 45–50. <https://doi.org/10.5937/jouproman4-11468>
- Profile, S. E. E. (2014). *Business model innovation - the challenges ahead Editorial : Business model innovation – the challenges ahead Joakim Björkdahl * and Magnus Holmén*. (January 2013).
- Purbo, O. W. (2004). *Motivating Community Based ICT Infrastructure Development*. 1–10.
- Shaqiri, A. B. (2015). Impact of Information Technology and Internet in Businesses. *Academic Journal of Business, Administration, Law and Social Sciences*, 1(1), 73–79.
- Soete, L., 'Uncertainty and Technological Change: Discussion'. In: Fuhrer, J.C. and Sneddon Little, J. (ed.), *Technology and Growth: Conference Proceedings*, Federal Reserve Bank. Boston, Boston, 1996, pp. 119-125
- Steenhuis, H. J., & De Bruijn, E. J. (2012). Technology and economic development: A literature review. *International Journal of Innovation and Technology Management*, 9(5).
<https://doi.org/10.1142/S0219877012500332>
- Technology, C. (2005). *The role of ICT in the economic development of Africa : The case of South Africa Kehbuma Langmia*. 2(4), 144–156.
- The impact of technology on business process operations About the research*. (n.d.). 1–12.
- Tica, J., & Šimurina, J. (2006). Historical Perspective of the Role of Technology in Economic Development. *Global Business and Economics Review*, 385(06), 1–13.