

**DIGITAL ECONOMY AND IT'S CHARACTERISTICS****L. Khuntsaria - PhD, Professor**

Georgian Technical University

**Be received 20.09.2019**

**Abstract.** *The Digital Transformation Process around the whole world became the basis for the emergence of the digital economy and its rapid development in the later period. We are transitioning towards a digital economy and society. The Digital Economy is sometimes also called the Internet Economy, the New Economy, or Web Economy. Digital transformation unfolds in two faces: Information Technology (IT) and Communication Technology (CT). Faster connectivity, the deployment of the Internet of Things, increasing data flows all rely on continuous investments in communication infrastructure. Leading Telecommunication providers around the world, describe how competition will become more global and more intense as a result of the digital economy.*

*New Economic Era is accompanied by some negatives – problems about digital inequality, issues on privacy and security, issues of trust within organizations and between people, misunderstandings, linguistic barriers and the entire social gamut of cultural dissimilarities and etc.*

**Key words:** *Digital Transformation, Digital Economy, Information Technology (IT), Communication Technology (CT), New Economic Era.*

Revolutionizing phenomenon fueled by the digital transformation has great impact on the world development. It is widely accepted that the "digital economy" is intertwined with the traditional economy and the growth of the digital economy has widespread impact on the whole economy. Digital economy is a result of digital transformation process around the world and it shows how the Internet would change the way we do business. Digital networking and communication infrastructures provide a global platform over which people and organizations devise strategies, interact, communicate, collaborate and search for information. This is really new Era, when humans through technology combine their knowledge and creativity in order to create new social norms on wealth creation and social development [1].

The digital economy is redefining business-as-usual. By embracing new digital technologies in an increasingly mobile and connected world, companies of all sizes can enhance consumer experiences, streamline operations or create entirely new data-driven products and services.

With the rapid development of technology, the trend of digitalizing is flowing massively. The burgeoning enrollment of startups and government into digital technology is not only clearing the traditional methods of running trade but also building a pathway of an entire digital economy towards the development of the nation. From the last ten years, we have experienced accelerated changes in the digital fields: The trend in technology are changing day by day , within a single click we can buy food, clothes, recharge balance, purchase books , booking plane tickets, movie shows and etc.

Leading Telecommunications providers around the world, describe how competition will become more global and more intense as a result of the digital economy. Investments in information and telecommunication technologies (ICT) are the main channel through which digital transformation and economy unfolds. Businesses adopt digital tools and new business models enabled by digitalization by investing in computer hardware, software and databases. Faster connectivity, the deployment of the Internet of Things, increasing data flows all rely on continuous investments in communication

infrastructure. Monitoring ICT investment is therefore key to measure and understand digital transformation across the countries.

Digital transformation unfolds in two faces: information technology (IT) and communication technology (CT). IT represented by artificial intelligence (AI), robotics, and machine learning speeds up data processing, reduces the number of tasks, and generates concentration forces for economic activities. On the other hand, CT such as the internet and smart phones overcomes distance, makes communication and matching easier, encourages the division of labor, and yields dispersion forces. From the viewpoint of newly developed and developing countries, while the application of IT must be tried, the immediate focus must be placed on CT. The usage of CT has strong implications for Sustainable Development Goals of Economy [2]

It is far reaching that the influence of the digital technology is on the various sectors but for now the changes are due to reducing costs, improving overall efficiency, adding value, squeezing out the middlemen, reducing time and the convergence of computing, communications and content.

Successful implementation of the digital transformation process, that supports wellbeing, **requires development such as :**

- Connectivity;
- Effective use of digital technology;
- Skills;
- Review of Policies;
- Security and privacy;
- Strategic Coordination;
- Understand the digital transformation and its impacts on the economy and society;
- Provide policymakers with the tools needed to develop a forward looking, whole of government policy response;
- Help overcome the gap between technology and policy development.

By the Don Tapscott, digital economy has twelve Characteristics: Knowledge, Digitization, Virtualization, Molecularization, Integration/Internetworking, Disintermediation, Convergence, Innovation, Prosumption, Immediacy, Globalization, Discordance [4].

➤ Knowledge – With knowledge comes power and a way to change life for the better through newer opportunities. In the new economy knowledge is the driver and other traditional resources are secondary.

➤ Digitization –In the new economy, information in digital form, facilitated by the digital devices allows the free movement of vast amounts of information in the shortest time possible between people in different parts of the world.

➤ Virtualization – in the new age of networked intelligence, it is possible to convert physical and tangible things into virtual things.

➤ Molecularization –In the new economy it is the ‘light organization’ instead of the ‘heavy organizations’ and traditional organizational structures are giving way to a more fluid and flexible work environment.

➤ Integration/Internetworking – In the new economy due to new technology networks, all the players of market –suppliers, customers, competitors will have to interact and integrate in order to survive. This will be the basis for wealth creation and distribution.

➤ Disintermediation – the end of the middleman is nearing. There are businesses that are already connected with their customers as technology facilitates the exchange of information between suppliers and customers, newer ways to add value are being found. If the middleman is to survive, then they need to move up on the ‘food chain’ to create value or face extinction.

➤Convergence –The convergence of computing, communications and content create the interactive multimedia which is one of the platforms on which the new age is dependent upon.

➤Innovation – the digital economy is based on innovation and the challenge lies in creating an environment which encourages and rewards innovation.

➤Prosumption –In the new age , unlike the industrial age, the key aspect is mass customization. Every consumer on the information highway is creating and sending a message to order or specify their opinions, additions, adjustments and specifications about the product or service they are purchasing.

➤Immediacy - Due to the result of digital information technology, customers are more informed and delivery of products is shrinking dramatically.

➤Globalization- In the digital economy, globalization is driven by and is driving the new technology that enables global action. This means that the organizations are no longer multinational enterprises but global organizations.

➤Discordance – with any new phenomenon comes change and with that comes resistance and a slow adaptation to it. It is becoming obvious that there are two important issues being raised – privacy and security and the growing gap between computer literates – the haves and the have-nots [3].

The digital economy provides ample opportunities for G20 economies to accelerate inclusive economic growth. To take advantage of digital technology, free flow of data backed up by a series of policies address other public policy objectives that must be promoted. However, policies for the flow of data and data-related businesses are still underdeveloped and fragmented across countries. Nevertheless, although ample controversy exists, G20 economies must design and implement a series of policies as soon as possible [4].

**Main policy messages are:** [5]

- Ensure that digital opportunities that can be harnessed by all firms and individuals, and by governments themselves;
- Ensure connectivity for all, including fiber networks;
- Foster more effective use of advanced digital technologies by individuals, firms and government;
- Strengthen skills for all workers and citizens;
- Review legacy frameworks;
- Embrace the potential of digital innovation, but mitigate social cost;
- Address digital risks strategically;
- Develop whole-of-government digital strategies and effective cooperation across countries;

Establishing a digital economy is not easy for a country , like Georgia. It needs many sources, equipment, and workforce which is still a hard thing for Eastern Partnership Countries.

Since 2014 the project - "Harmonization of Digital Markets (HDM)" is ongoing and the aim of which is to support the process of harmonization of digital markets between the EU and Eastern Partnership Countries, development of digital economy and society through joint projects, harmonization and integration of legislative, administrative and technological systems of national ICT policy.

Under the project is established new EU4Digital ‘‘digital skills (eSkills)’’, ‘‘ICT Innovation (ICT Innovation)’’, ‘‘electronic identification and trust services; network and information security and cyber security (Trust&Secure)’’, ‘‘electronic Trade (eTrade)’’, ‘‘electronic health (eHealth)’’ and electronic communications regulatory authorities EU4Digital: Telecom networks.

For each network development and harmonization with the EU countries action plans and projects have been defined. All relevant institutions are involved in the EU4Digital networks and the Ministry of

Economy and Sustainable Development (Communications, Information and Modern Technologies Department) is the HDM project coordinator [6].

Unfortunately, too much of a good thing is the dark side and this new age is accompanied by some negatives – problems about digital inequality, issues on privacy and security and for those, who do not change or are slow, the repercussions are high. There are issues of trust within organizations and between people, misunderstandings, linguistic barriers and the entire social gamut of cultural dissimilarities, different values and beliefs, as well as plain and simple economics to name a few which could possibly send the digital economy spiraling out of control in the wrong direction. This new age is gradually forcing countries to rethink the way traditional definitions of economic and social relationships, wealth creation, business organizations and other institutional structures. A new demands call for new types of leaders, who will be responsible for the transformation or will be the agents of change in this new era. In order to make all this possible and more, the most important factor is to have a will to change – the people. Without a strong leadership skills committed to positive change and the adoption of a digital based economy, the results will be warped.

## **REFERENCES**

1. Vectors of digital transformation. OECD digital economy papers. January 2019. № 27. 38 p.
2. Defining, Conceptualising and Measuring the Digital Economy, Rumana Bukht&Richard Heeks. Center for Development informatics. University of Manchester. UK. 68 p.
3. The Digital Economy. Authors: Don Tapscott, Publisher :McGraw-Hill. Published: 1994. 368 p.
4. The Digital Economy for Economic Development: Free Flow of Data and Supporting policies. T-20. Japan. 2019.
- 5.[https://www.itu.int/en/ITU-T/Statistics/Documents/events/wtis2017/LightningTalksPartnership\\_Koksal-Oudot.pdf](https://www.itu.int/en/ITU-T/Statistics/Documents/events/wtis2017/LightningTalksPartnership_Koksal-Oudot.pdf)
6. <http://www.economy.ge/?lang=en>;

**LALI KHUNTSARIA**

**Georgian Technical University**

**E-mail: lali\_khuntsaria@mail.ru; Mob.tel.: +995 599 400022**