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The terminological nexus of digitalization of adaptive policy in Russia and across the global: a conceptual overview

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Abstract. This article seeks to understand the prerequisites for the formation of state policy of digitalization of the economy. The article revealed that the initial pre-requisite is the fundamental understanding of the concepts underpinning digital economy. Though the study recognizes the significance of financial resources and digital infrastructure, the fundamental must be set right otherwise invested resources will not yield the needed result. The study further goes on to recommend areas needed to be further investigated to bring clarity to policy framers.

Key words: digital economy, financial instruments, digital infrastructure, state policy of digitalization, policy framers.

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Научная статья

Терминологическая связь адаптивной политики цифровизации в России и во всем мире: концептуальный обзор

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Аннотация. Данная статья направлена на осмысление предпосылок формирования государственной политики цифровизации экономики. В статье показано, что исходной предпосылкой является фундаментальное понимание концепций, лежащих в основе цифровой экономики. Хотя в исследовании признается важность финансовых ресурсов и цифровой инфраструктуры, фундаментальные принципы должны быть установлены правильно, иначе инвестированные ресурсы не дадут необходимого результата. Далее в исследовании содержатся рекомендации в отношении областей, которые необходимо дополнительно изучить, чтобы внести ясность в политику разработчиков.

Ключевые слова: цифровая экономика, финансовые инструменты, цифровая инфраструктура, государственная политика цифровизации, разработчики политики.

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Introduction

Digitalisation process has become a complex intertwined relationship which has created a virtual ecosystem for government, business, and society for development. This ecosystem though rapidly progressing, can be enhanced and promoted through a deliberate digital policy to create a conducive environment for all stakeholders [Digital transformation., 2019]. Digital technology is rapidly transforming the dynamics of business and adding momentum to the growth of global economy. Apart from breaking trade barriers and bridging geographical and cultural gaps in societies, digitalisation is playing instrumental role in transforming industries such as manufacturing, energy, education, healthcare, infrastructure etc. [Ukolov, 2019a] and blurring industrial boundaries thereby rapidly establishing a revolution generally termed fourth industrial revolution. Data available revealed that digital technologies like Internet of Things, automation, and AI when projected from 2018 to 2030 will amount to 13 trillion dollars in market value [Twenty-five years., 2019].

Despite the enormous benefit and current trend of global events, digitalisation policy has different implementation approaches for various reasons. Among the reasons is the fact that the concept of digitalisation has elicited different interpretations. For instance, linguistic difference of Russian and English language where digitisation and digitalisation give the same translation as “оцифровка” in Russian language, but the content conveys the meaning of digitalisation. But using the ‘scientific’ interpretation of digitalisation (цифровизация), the content is largely the same as the English term for ‘Digitalisation’ and indeed assumes the same position i.e. the usage of digital technology in all sphere of life. Thus, in the Russian lexicon, digitisation (оцифровка) and digitalisation (цифровизация) convey one and the same meaning whilst in the English lexicons, these are two distinct concepts [Tsirenschikov, 2019]; [Plakitkin, 2018]. To some

extent, as a result of different lexica underpinning, there are obvious differences in approach of drafting and implementing digitalization policy in different countries.

Another reason for the differences in the implementation approach of digitalization among participants is the general misconceptions of the terminologies and concepts of digital transformation, digitalisation and digitisation. Most often than not, these concepts are used interchangeably generating confusion among policymakers and practitioners [Heberle, 2017; Vogelsang, 2010; Parviainen, 2017]. This is because it is the aggregate interaction between these concepts that give rise to elements like automation, diffusion and business model [Brennen, 2016; Bloomberg, 2018]. These three concepts individually are distinct for instance, digital transformation is the change that occurs in the sphere of production on the account of using digital technology. Digitisation is the technique of changing signals and objects into digital goods and services whereas digitalisation is generally using digital information to create values [Tapscott, 1996; Bloomberg, 2018]. Nonetheless these three concepts are intertwined that is digitalisation and digitisation are linked by human, being equipped (the use of digital technology by humans) with digital technology applications in relation to digital products. Digital transformation is linked with digitalisation such that adoption of digital technology changes business model, strategy, content and personnel of organisations. And digital transformation is associated with digitisation as there is the promotion of automation of productions and society (smart society) and a change in the structures of production and the society.

Another popular concept which has significant impact on drafting and implementing digital policy but has gotten different interpretations is the concept of digital economy. The development of the concept of digital economy has evolved overtime and has been associated with many accolades like ‘e-commerce’, ‘e-trading’, ‘the new economy’, ‘creative economy’, ‘knowledge economy’, ‘virtual economy’,

'internet economy' etc [Tapscott, 1996; Bowman. 1996; Valenduc, 2016] The nature and meaning of digital economy vary with time and trends in the society and to a larger extent geographical factors [Bukht, 2017]. These subsequently dictate the policy formation and realisation of digitalisation of the economy. This is important to note because if the nature and scope of digital economy is not well defined, drafting comprehensive policy guidelines becomes complicated and implementing anything coming out of these complications will be haphazard. However, a consensus definition of digital economy is that it is a technology-driven economy with knowledge as a tool and information as resources. Thus, leveraging on the advancement of technology and the know-how, the digital economy aspect is measured through the prism of technology or ICT usage in the economy. Unlike the previous generally accepted interpretations, crammed mainly with technical and technological meaning, digital economy concept has evolved and as such must be re-defined to reflect the current challenges. The current challenges are such that technology have mixed and blurred a set of relationships between people regarding the production of material products and the provision of services based on digital technology or digitalization. Further, digitisation and digitalisation have made it possible for any economic activity to take place irrespective of individual status and in different forms.

This is because, with access to mobile phone any one could engage in creating wealth with the help of digitalisation but on most occasions, the device (mobile phone) is largely discounted in measuring or capturing the value in the value chain of digital production. Also, the technology that makes it possible; be it the hardware or the software [Brennen, 2016] is also mostly discounted leading to the erroneous conclusions that digitalisation solely facilitates digital economy therefore ignoring the bedrock of digitalisation or to be precise digital economy which is digitisation.

Due to these misconceptions, policymakers in developing country especially draft digitalisation policies which do not reflect the reality of the ever changing world and largely makes developing countries essential technology users in their quest to digitalise thereby leading to series of failures in implementation of digitalisation policies. Studies show that about 60%–80% of digitalisation policies

in developing countries meet failure whilst the global success rate of digitalisation is only about 32% based on time, cost and functions. Furthermore, a total of 44% digitalisation policies faces delays over cost and do not meet specifications and functions and a total of 24% fail in all perimeters (cost, time and functions) and are never realised as digital projects [Napitupulu, 2017]. This emphasizes the fact that, fundamental concepts are deeply misunderstood, and policies are drafted mostly on the wrong premise leading to mass failure at the implementation stage.

For digitalisation policy to be successful, it must consider all needed circumstances surrounding a specific situation. This is because, based on the differences in each unique economy and socio-culture setting, a universal policy cannot be shaped to fit all nations, however, the basics cannot be overlooked. Thus, the fundamental understanding of the various concepts within the scope of digital economy must be well defined. The culture setting must not be discarded, and the psychological condition of the society must be considered. This is because as the world is changing at an alarming rate as result of technological advancement, it becomes salient to psyche citizens and workers who are mostly the drivers of the economy to a new reality to soften internal resistance and encourage the embracement of the new phenomenon [Ukolov, 2019].

Moreover, with a precise understanding of the various concepts, it becomes easy to identify the needed resources and appropriate distribution and application of the available scarce resources. The type of education and skills needed are also easily identifiable and inculcated into the policy draft when the concepts are clear [Brazhnikova, 2019]. This makes the aim of the digitalisation policy unambiguous and implementation processes becomes more realistic. Legal and normative regulations are accordingly drafted to meet current challenges with projected future changes that may come as technology advances [Desai, 2013; Valenduc, 2016]. With the appropriate concepts well defined, legal and normative regulation could boost inter-country, regional, and inter-continental cooperation in implementing digitalisation policies. This could further foster inclusiveness within the country and improving the underserved in the digital economy. This inclusiveness includes, bridging the digital divide, encouraging financial inclusiveness and bridging socio-culture divide. This in the long

term improves the wellbeing of the citizens and promotes a secure society.

Conclusions

Drafting digitalisation policy is a complicated activity because it has a far-reaching effect on the lives of every individual. Implementing digitalisation policy is even more complex and needs some degree of sophistication since any crude method of implementing the policy could lead to eventual failure. Therefore, in drafting and implementing, a detail analysis is needed starting from the various concepts involved in digitalisation the economy. As evident, when a policy is drafted on a misconstrued concept, the policy implementation becomes haphazard and this ultimately leads to an increase in the rate of failure of the policy. In Russia, many literatures have proven that digitisation and digitalisation has been seen as one and the same. As a result, there is no clear-cut policy as to what to digitise and how to digitalise leading to stalling in the implementation process. Many countries fail in this policy framing because the two concepts are mostly conflated giving room to non-standardised implementation process. Meanwhile, developing countries as a result of the conflated concepts, hardly set priority goals in drafting digitalisation policy.

Hence it is paramount to understand the details especially the underlining concepts as the policy are being drafted.

Recommendation for future studies

As digitalisation of the economy has become the new normal, it is important that more researchers explore to understand the failures and the successes of its implementation. Thus, an empirical research could be done in Russia to understand to what degree has the concepts of digitisation and digitalisation impacted the drafting of policy directives of digitalising the economy. A research could help understand the level of digitisation in the economy and how it is boosting digitalisation in the economy or research could be done evaluating both concepts separately and how the understanding of these concepts influences the value capture or measurement in digital economy. Also, research can evaluate how open innovation could help developing countries acquire the know-how and bridge the disparities between the developed and the developing countries.

Conflict of interests

The author confirms that the submitted materials do not contain a conflict of interest.

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