### The Paradox of knowledge, Media and Innovation in the Era of the Fourth Revolution

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Abstract

The quick pace of technological advances accompanied by paradoxes at all levels characterizes the era of the Fourth Revolution in which we live, and knowledge, media, and innovation are unquestionably at the forefront. Unfortunately, keeping up with censorship by diverse parties has become challenging, resulting in several contradictions. Thus, humans must recognize what they are up against in all dimensions and the negatives that accompany it before moving on to the positives. Hence, this paper explores some of the paradoxes of knowledge, innovation, and media in the period of the Fourth Revolution. Generally, the literature review aims to shed light on the opposite side of the technological revolution, namely, the inconsistencies that must be addressed for it not to represent intellectual and societal limitations.

Keywords: Innovation. Fourth Revolution, Technological illiteracy, Paradox of Knowledge. Artificial intelligence.

#### Introduction:

Without a doubt, we are no longer on the cusp of the Fourth Industrial Revolution launched by Klaus Schwab, founder of the World Economic Forum, in his widely circulated book in 2016. Instead, we are in the midst of that revolution, whose repercussions will drastically affect countries' future, economies, and labor markets. Instead, it affects the quality of life in all aspects, and there will be a so-called "technological illiteracy" for those who cannot keep pace with this revolution. This is a real trend for governments and companies alike, as they will work to rehabilitate their societies and employees so that they do not fall into the darkness of ignorance of development but, the pace of technological development within the framework of the Fourth Revolution is so fast that keeping pace with censorship by various parties has become difficult, which has produced many paradoxes at the level of knowledge, innovation and media, and acumen always requires us to realize what we are facing in its various

dimensions and its negatives before its positives. It is a role that academics have always played before technicians, of course, which is what we are trying to do in this study.

#### Significance of the Study:

The importance of the research paper stems from the need to shed light on the other side of the technological revolution related to contradictions that must be confronted so that technology does not reflect intellectual and societal pests.

#### The study purpose:

The purpose of the study is to explore how to take advantage of the positives of the technological revolution away from its negatives related to those studied paradoxes.

#### **Methodology:**

In order to achieve the set objectives and the aim of this paper, a literature analysis method was applied.

#### The Paradox of Knowledge

The Fourth Generation paradox is whether knowledge and power are interrelated. Michel Foucault made the following significant and contentious remark in a 1977 interview, seven years before his death: "Truth is a thing of this world: it is produced only by multiple forms of constraint" (Foucault, 1980, p. 131). According to Hewet (2004), this line contains Foucault's most controversial claim that knowledge is a quality of assertions or beliefs constituted by power and discourses. Michel Foucault was a twentieth-century visionary, pragmatic, classicist, humanist, and astonishing turncoat who emphasized passion, work, history, devotion to learning, and application to social control. Foucault would not place the piece within a solicitation that was interested in, and as a result, was bound to a theoretical point of view, which would become apparent later in this review. Foucault re-defined knowing in a manner that people almost automatically find incorrect at first, an awareness that prompts many to feel that grasping information in this way is not comprehending knowledge whatsoever. Therefore, we ought to consider knowledge as a well-established set of standards based on a solid foundation.

The article "The Paradox of Knowledge Creation in a High-Reliability Organization: A Case Study" by Milosevic et al. analyzes how knowledge can be formulated in organizations to ensure success and the controversies accompanied by such. High-reliability firms have processes that align with the goals they aim to achieve, which are frequently related to higher efficiency, lower costs, and more revenue. Highly reliable organizations (HRO) are sensitive to operations, hesitant to accept straightforward explanations for problems, preoccupied with failure, defer to knowledge, and resilient. Milosevic et al. (2015) investigate how new information is formed in a world where mistakes can lead to ruin, catastrophic effects, and even human death. The data suggest that knowledge formation is multi-leveled, with three layers of Paradox: "paradox of knowing, the paradox of practice, and the paradox of organizing" (Milosevic et al., 2015, p. 1174). Individuals must struggle through various paradoxes to develop and articulate new knowledge due to the lack of potential for errors combined with the dynamic of the HRO situation. Therefore, the results add to the contextual knowledge production by elucidating the work practices related to issue identification, management, and improvement and establishing know-how in failure-intolerant businesses.

#### The Paradox of Knowledge (Wikipedia as an example):

The Fourth Revolution has taken humanity to the brink of some of the most challenging knowledge issues it has ever encountered. Knowledge is built on concepts, and each conception about reality is impacted by ambiguity (Burlando, 2017). According to Burlando (2017), this leads to a dilemma known as the Knowledge Paradox (KP). The Paradox lies in distinguishing

between two or more concepts, especially in the scientific field. In other words, humans require ideas to learn about the actual world, but each notion is a stride away from the truth (Burlando, 2017). Hence, any assertion about realities can be reduced to a lie, with the KP following its broadest version. The author attempts to derive KP by analyzing the scientific knowledge and how science, in general, has progressed despite the theoretical rearrangements. The purpose of Burlando's study was to determine the cognitive limits of information (knowledge) in the period of various contradictions. Knowledge is inherently inconclusive; hence, as much as we create new conceptions, the more ideas we generate, the more discrepancies we produce, and the worsening of the understanding of the universe. On the other hand, if we can reduce the number of theories by developing synthetic ones, we may minimize anomalies and, as a result, improve knowledge. Therefore, contrary to popular belief, the more conceptions, the less understanding, and vice versa.

Bill Gates says, "Strength does not come from knowledge, but from sharing knowledge." Hence the major developments brought about by the twenty-first century, as these qualitative shifts in the field of technology have resulted in exceptional mechanisms for sharing knowledge

In other words, although Wikipedia is considered the largest knowledge portal in human history, it depends in its mechanisms on what many call "the democracy of knowledge" and what I call "the creative chaos of knowledge," we're all volunteers, and even visitors cooperate They participate in content creation, editing, and verification, which enables the content to be manipulated according to various agendas, which calls it unreliable.

#### The modern media paradox (Tik Tok as an example):

One of the products of science and technology within the framework of the fourth revolution, which attracts large segments of children and adolescents related to social media and electronic games, and although it is a place for entertainment and fun, it is, in turn, the subject of addiction and danger. It can be said that it is an irresponsible technology like the games Blue Whale and Mary Momo and even Babji, which claimed the lives of many teenagers and children and contributed to many crises.

What concerns us here is social media platforms; the content of social networks is a controversial issue par excellence. On the one hand, it has undisputedly become one of the most prevalent means concerning knowledge sharing through technology that we talked about previously. It may be the Tik Tok platform running like wildfire since 2016. The most famous of these practices, and the most dangerous of all, is the spread of disregard for human beings and childhood, especially on the psychological and physical level, through the challenges that Tik Tok marketed within the framework of the limited culture of its pioneers (Pariser, 24 April 2012).

The world of social media is open and loose, and it is difficult to restrict or control itself and societally. To confront these technological pests that have plagued civilized development, it is necessary to legislate and legalize the developments of the technological age and what taints its practices.

The origin of legislation and regulation is regulation and restriction in the face of chaos, and we must realize here, or - at least - that we do not deny that although social media has provided a platform for those who do not have a platform, and thus contributed to stopping the tyranny of governments and classes, it is a platform It is very loose, and controls must be put in place for its working mechanisms, especially with the spread of the "filter bubble" that makes the Internet an authority - not a service - in the hands of governments and companies to program individuals and peoples in a systematic way.

But on the other hand, we do not want those laws and legislations to be an issue of the right to be false and used as tools to restrict freedoms and muzzle mouths. These technological laws can be read as a step in the right direction if they come in the right context and do not come or turn into sword-wielding freedom of expression and opinion.

More than that, history teaches us that the more new phenomena emerge, the more there is a need for legislation and legalization regarding them, for example, cloning, artificial intelligence, and genetic engineering. On this basis, it can be said that social media is also a relatively recent phenomenon, and regulation is an urgent need for it. Systematic regulation It does not mean unjust restrictions. There is a global tendency towards this, starting with governments, as happened in the UAE law, the race has always been, and the executive order of former US President Trump, and ending with the companies themselves that lie behind these platforms.

We are in front of two generations, Z and ALPHA, who constitute digital citizens, generations passionate about the virtual world, addicted to smartphones. The information is mainly drawn from social media platforms. "Social Media." There have been revolutions that have influenced the masses and mobilized them through social media. Breaking the barrier of governments' control and dominance over the electronic media space, on the other hand, the authority of those behind technology companies has become a matter of concern and concern through what can be called "people's programming."

It remains to reiterate that standing in front of the development is a losing battle, and as technology is a blessing, so comes a curse that we must confront intelligently.

#### The Paradox of innovation (artificial intelligence as a model):

Despite the exceptional importance of innovation in the march of science, especially its exceptional momentum in the era of the Fourth Revolution, the invention also has a face that results in paradoxes, as is the case with knowledge and the media, which need a great deal of attention.

And here we deal with artificial intelligence, for example, but not limited to, as one of the essential innovation products in the twenty-first century. However, there is no specific definition agreed upon among technology scholars. But we can say that artificial intelligence is "the ability of a machine to simulate mental skills and human behavior, especially in terms of thinking and decision-making. This has many caveats and risks that go hand in hand with exceptional gains, especially if we judiciously judge the opinions of many contemporary technology pioneers such as Alan Turing, Elon Musk, Bill Gates, and many others who have sparked controversy. About the dangers of giving machines this human privilege!

As Einstein says, we must realize that imagination is more significant than knowledge when we want to anticipate the future. The command may move us from one point to another, while imagination takes us to broader horizons (K.E.Kruse, 2014).

The greatest inventions came in the end as a natural result of science fiction that no one believed in at first, as was the case of the imagination or ambitions of Abbas Ibn Ibn Firnas about aviation

#### **The Paradox of Innovation**

#### **Impacts of Innovation on Knowledge Acquisition and Related Paradoxes**

Humankind is constantly learning, and that is what defines them. As contemporary society works beyond post-industrial aspects of knowledge intake and output without conquering the educational Paradoxes and inadequacies of the industrial age, what defines learning in the twenty-first era will be a contested territory (Warschauer, 2007). However, knowledge acquisition and related paradoxes have intensified in the Fourth Generation due to digital learning. Computers and networks are linked to form the global Internet, allowing people to connect with others and communicate. Essentially, all of the records, data, texts, and conversations may be easily transferred to other sites, which benefits humans by serving as a

the Internet.

tool for sharing valuable data and information with individuals worldwide. Nowadays, everybody may access the Internet, which is primarily helpful for communication and education. Therefore, because of the rapid internet improvements, its disadvantages have worsened to the point where people no longer fully trust the information and data obtained on

The primary Paradox relates to what students must learn in the digital classrooms. In most cases, instead of using the Internet to share expertise and beneficial information, some people spread false information. According to Warschauer (2017), although educational reformers claim that new technologies would drastically alter what individuals learn, studies of different learners' use of new media put uncertainty on the pace and scope of transformation. Action learning involves individuals in the stages of studying through their efforts to improve things. It is part of a family of action knowledge and educational methodologies in which information is developed and applied to action. While it is often thought of as a small group technique for strategic leadership, it aims to aid systemic change and creativity. Therefore, there are grounds to anticipate that digital technologies will have an equal impact on learning and comprehension in the long term.

#### The Paradoxes of Innovation on Organizations Success

For many businesses, innovation is a critical source of growth and a significant determinant of competitive advantage. To achieve innovation, many diverse actors must work together, and activities must be integrated across expert functions, knowledge areas, and implementation contexts. As a result, corporate creation is critical to the innovation process. Despite the enormous potential gains to innovation, developing countries innovate significantly less than advanced ones in various ways. According to studies, this is what we refer to as the "Innovation Paradox" (Cirera & Maloney, 2017, p. 1). Brenner (2021), in an article titled "The 21st Century Innovation Paradox", acknowledges that no matter what

industry is involved in the post-digital post-COVID era, the corporation is likely to be continually seeking inventive methods to apply new technology to enhance productivity. The difficulty is that nothing destroys the creative attitude required for invention more than most personnel's high-pressure atmosphere. Hence, this proves why the less developed nations find it difficult to catch up with emerging trends in technology compared to developed ones.

Strategies to Paradox have a longstanding history and experience. Lao Tzu and Confucius, for example, viewed the cosmos as a mystical entanglement of interrelated inconsistencies (Smith et al., 2017). Corporates need to allow space for spontaneity, originality, and ingenuity to bloom to grow a firm of inventive people. According to Lewis et al. (2014), organizational survival in hypercompetitive situations depends on strategic agility and adaptable, thoughtful reactions to continuously changing surroundings. Heracleous and Wirtz (2014) identified four paradoxes that need to be mastered to achieve sustainable success, including "cost-effective service excellence, simultaneous decentralized and centralized innovation, being simultaneously a follower and a leader in service development, and accomplishing standardization as well as personalization in customer interactions" (p. 150). Such ideas may have a particularly great potential in the overcoming of difficulties. Indeed, there has probably never been a greater need for leaders to comprehend the spectrum of pressures they face and learn how to respond in more nuanced and integrative ways.

#### The Paradox of the media

The contemporary mainstream media is frequently viewed as a waste of resources and a terribly subversive system that promotes social fragmentation and community dissolution. However, these unfavorable assessments are difficult to reconcile with the reality that the nations with the most influential and sophisticated media are also the most industrialized and powerful (Charlton, 2006). It appears more likely that the Fourth Generation media is performing some useful, if not critical, role. Media content is sometimes paradoxical, including provocative and even contentious information, because what piques the curiosity of some may offend or alienate others. For example, while young males are possibly the most aggressive social group, they should be actively engaged. Yet, their interests include content that the bulk of the public would deem highly violent, irreverent, rebellious, or obscene. Therefore, the current liberal democracies require a wide margin of tolerance and widespread psychological ability to withstand criticism and controversy if the popular culture effectively executes its critical duty of facilitating social cohesiveness among a diverse and varied populace.

Mjos' book "Music, social media and global mobility: MySpace, Facebook, YouTube" examines some of the relationships between corporate and social media networks and related paradoxes. Essentially, since worldwide social media platforms do not make money via subscription fees, these techniques rely on collecting and commercial utilization of user data to obtain revenue (Mjos, 2013). The active and networking capabilities that allow users to interact, produce, converse, and share material are usually referred to as social media (Kalsnes, 2016). Kalsnes (2016) unveils the contradictions of political parties' media use to pass their agenda. For example, discrepancies exist on the differences between actual face-to-face interactions with constituents and the use of modern technology. The platforms aim to establish an online environment where individuals and groups are marketed and targeted by advertising by deploying various surveillance technologies. Such attempts are mapped from an organizational standpoint and then from understanding such techniques and experience functioning in this commercialized setting. Generally, authority/influence and democratic representation are more crucial than ever in an interconnected world.

The media paradox also arises when journalism moves beyond what is intended. Journalism's evolution from a reasonably stable form of knowledge creation in the late nineteenth century towards a more free and contentious one in the early twenty-first has been a recurring issue in media studies (Hermida, 2018). According to the author, scholars have effectively, from blogging and citizen news to interactive reporting and social media, have influenced journalism during Fourth Generation (Hermida, 2018). Essentially, it is self-evident that the profession is in change. The utility of media in contemporary society is determined by how it facilitates the coexistence of order and disorder processes. Therefore, journalistic identification has been shaped by a continuous occupational attitude based on claims to reflect truth, facts, and realities.

#### Conclusion

Human civilization is founded on people putting technological advancement under the regulation of human logic as an unavoidable factor for "safe innovation," with the responsible human element serving as the guarantor always and forever. The tremendous civilizational advances of the Fourth Generation raise humanity's degree of complexity, prosperity, and wellbeing, but they also contain the seeds of humanity's extinction. The contentious question here remains about the Paradox of knowledge, media, and innovation in this era. Generally, to steer the country's wheel of knowledge, invention, and creativity toward development, there is a need to advance away from the times' paradoxes. Hence, the following recommendations can work in the 21<sup>st</sup> century: First, individual's upbringing and acquiring knowledge must emphasize the importance of integrating the dimensions of a balanced life to avoid becoming victims of irresponsible technology addiction, instilling awareness and guidance promptly, through suggestion rather than deprivation, and developing understanding rather than investing closure. In addition, there is a necessity to work on technology legalization and regulation, including creating legal entities that can keep up with the fast speed of technological change. Finally, for fear of deviations that could result in issues and calamities for humanity, technological innovation ought to be subjected to the scales of human thinking and objective trial.

Creativity is an advanced link in the innovation chain, an embodiment of it on the ground. The UAE abounds with initiatives such as the "launch of the National Innovation Strategy," the "Declaration of the UAE Innovation Month," and the establishment of the first Ministry of Artificial Intelligence in the world, among others, which translate the desire of decisionmakers. In the country to push the wheel of knowledge, innovation, and creativity towards development, development, and progress away from the paradoxes of the times.

#### **Recommendations:**

\* Upbringing and learning by example for children on the importance of integrating the four dimensions of a balanced life, so as not to leave a victim of irresponsible technology addiction, instilling awareness and guidance promptly, through advice and not deprivation, and developing understanding and not investing closure.

\* Work on the legalization and legislation of technology by establishing technological, legal bodies that can keep pace with the dynamic pace of technological development.

\* Subjecting technological innovation to the scales of human reasoning and objective trial for fear of deviations resulting in problems and disasters for humanity.

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