



# JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

## DIGITAL ECONOMY: A DOUBLE-EDGED SWORD

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**Abstract:** The digital economy, characterized by the widespread adoption of digital technologies and the internet, has ushered in an era of unparalleled integration in the global economic landscape. It has revolutionized the way we conduct transactions, employs automation, and pursue convenience and economic growth. This remarkable transformation has, however, not been without its complexities and challenges, which this research paper endeavours to examine in depth.

While the digital economy offers numerous benefits, it also presents a double-edged sword of challenges that demand careful analysis. As businesses and individuals increasingly rely on digital platforms, they become vulnerable to cybersecurity threats, data breaches, and privacy concerns. The digital divide persists, leaving certain populations marginalized due to limited access to technology. Automation and artificial intelligence disrupt labour markets, raising questions about job displacement and skills gaps. Additionally, the dominance of tech giants in the digital ecosystem raises antitrust and regulatory issues, which certainly lack accountability for any tech mishaps. Lastly, the tech-oriented monetary system, which is now apparently irreversible, has given rise to hollow instruments like crypto-currency.

This research paper seeks to shed light on these challenges by conducting an in-depth examination of their significant impact. Moreover, it also aims to explain the alarming nature of digital issues to the audience which strives to come up with solutions for a safe and accountable economy tomorrow. Through rigorous qualitative analysis, the paper aims to provide a comprehensive understanding of the digital economy's dual nature – as a catalyst for progress and a source of intricate challenges.

**Key Words:** Digitization, Data, Safety, Privacy, Employment, Accountability, Taxation, Crypto

### DIGITAL ECONOMY: A DOUBLE-EDGED SWORD

#### BROAD OUTLINE

Some spheres wherein digitisation possesses challenges are as follows:

## Safety & Privacy Concerns

In an economy that runs its wheels on getting the work done, data is of primal importance as all work begins its chain from leadership and boils down to delegation with the help of accountability. In a wired global economy as interdependent as ours, are we safe from sensitive data leaks? And if endangered, who is accountable?

### Employment with Automation - A Necessary Change

A conflict between the two faces of employment with the advent of automation breaking down the concerns of a jobless future and posing a moral question by understanding trade-offs.

### Analysing the Taxation Muddle

What might appear as a solution to tax evasion, black marketing, unaccounted income and corruption, might actually turn out to be a potential loss to the direct tax revenue pocket of the government.

### Emergence of Hollow Currencies & their Accountability

Without Accountability, a man is as good as being stranded on a deserted island- with no sources to help him find his way home. Accountability is a tricky concept; it allows one to honour credit onto himself while at the same time take the fall for mishaps. So naturally, it begs the question: How does one take accountability for hollow currencies that have no paper trail, such as cryptocurrencies?

## SAFETY AND PRIVACY CONCERNS: CURRENT CHALLENGES

### I. Emerging Crimes: Loss of Privacy, Financial Fraud, Identity Theft

As the masses are adopting digital catalysts for a substantial number of purposes, the dependency on intangible and digital means of getting work done is inevitable. This has indeed led to the transformation of a traditional economy to a digital one, and the presence of corona virus has done nothing but oiled the engine of digital economics. Furthermore, leading to rise in worries of the public regarding Internet-based crimes. Security threats and data breaches have become a red flag to digital advancement.

The wave of digitization has flooded into human lives and touched sectors like communication and fintech. The data involved in these sectors is highly sensitive from a microscopic point of view. This has led to leaks of confidential items and rise in cybercrime. According to a crime worry report, “the number of data breaches in the United States in the year 2020, were 1001” (Joseph, 2021)<sup>[15]</sup>.

Distrust in the digital system has prevailed in the past decade, because of these obvious reasons. According to another report, the “share of Americans who worry about having their personal credit card or financial information stolen by computer hackers is 74%” (Statista Research Department, 2021)<sup>[18]</sup>.

### II. A choice between Innovation and Privacy

There is no doubt about the fact that data is the driving force for many of the essential conclusions we come up with today. This information can be accessed only if the boundaries of privacy are crossed. The choice between progress and respect has to be answered with logical reasoning and not diplomatic middle grounds. This dilemma of the digital economy will be the deciding factor on how our world can be shaped for the future generations to come.

### **III. Internet of Things: Ease over Risk?**

In the pursuit of ease, the human mind has created the Internet of Things, making the connection of machines with personal electronic items possible. High technology networks gave rise to inter-connectability and interoperability, the openness of which we now wish were not hackable. Such a network at a large scale means high stakes at risk. City networks and highly integrated servers of multinational corporations are at a major speculation because of this, thereby threatening public security on the level of the economy as a whole.

### **IV. A Debate on Confidentiality, Secrecy and Right to Privacy**

The fine difference between what is a secret and confidential has made the Information Technology corporations possess and process the information till date.

A secret must not be known to others and confidential information must be intended to be kept hidden. But the question of what is significant has always been behind the curtains when the importance of secrecy and classified information is concerned. And in the end, one could never figure out what information was actually necessary because of secrecy. This argument along with the right to privacy gives a cogent stand for restricting access to data, which is the grease driving the wheel of the digital economy.

### **V. Asymmetric Possession**

The possession of sensitive information of the public data has been restricted to either the tech giants or the government itself. The astonishment regarding the current scenario of this possession is that the information these entities hold is not of themselves, but of the population. The subject of this information is nowhere near in control of its data, therefore making the innocents vulnerable to persuasion. Moreover, the irresponsibility pertaining to the ownership and usage of personal data has been questioned from time to time now. The only lessons from past mishaps we can take is that it all happened because of this asymmetric possession of information.

The safety and privacy issues have become a burning issue in the digital world because of its easy traceability. The only solution for the vulnerable side is to either develop privacy enhancing mechanisms, minimise or eliminate the usefulness of personal data.

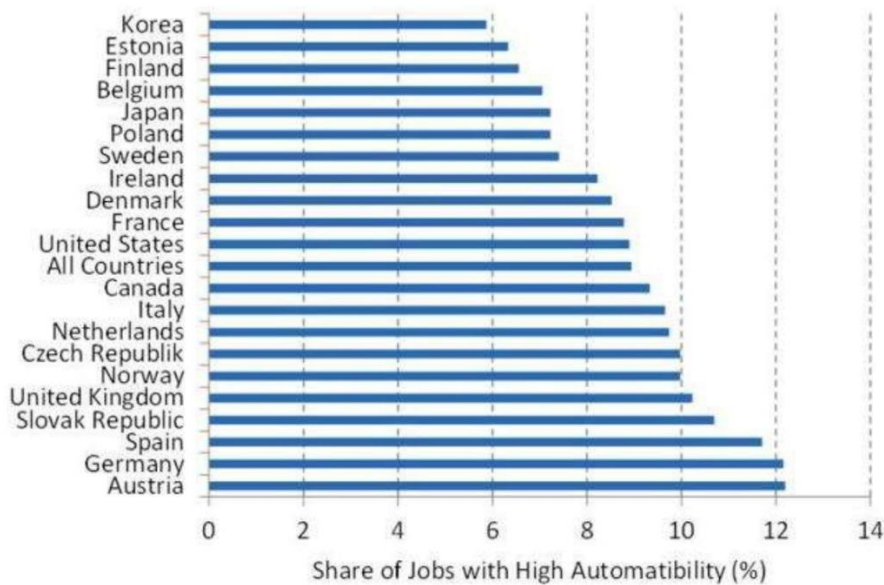
## **EMPLOYMENT WITH AUTOMATION - A NECESSARY CHANGE**

### **I. A Conflict between Black and White**

The boom of digitization has raised an equivocal view about the relationship of a digitalised technological economy with employment. Like the two sides of a coin, there are two broad faces to this; one face being that employment works complimentary to the technology growth and the other being that it results in massive unemployment.

### **II. The Language of the Data**

In a recent study, 21 OECD countries were compared and analysed to evaluate the percentage of expected automation shifts. Taking into consideration the heterogeneity of tasks, the statistics answered with a low but worrisome 9%. 9% of all jobs (independent and otherwise) have the likelihood to expose themselves to the “risk of computerization” (as termed by Carl Benedikt Frey and Michael A. Osborne). This data fluctuates between 6% for Estonia to 12% for Germany and an average of an estimated 9% for all the countries.



### III. A Prudent Outlook

Waves of public concern regarding a jobless end is logical, but it is of utmost importance to note that not all sectors and not all jobs face this imminent risk. Moreover, this contingency pertains more to the skill set of the workers and their adaptability to the ever-changing requirements of the world.

“In particular, lower educated workers face considerably larger automation potentials than low qualified workers across all countries ...” (Melanie, Terry & Ulrich 2016)<sup>[1]</sup>, indicating that the new technologies may substitute the manual labour but at the same time it may complement digitization by enabling the workers to make a transition of their work time from their daily grind to non-routine work (for eg: onto creative and cognitive areas) which are less likely to be susceptible at the hands of automation. In its entirety, it can be safe to say that- Digitization may not wipe out the jobs present in the economy, however it is plausible that it escalates the scale of inequalities.

“According to a report by the Pacific Economic Cooperation Council (PECC), advancements in technology will impact more than half of the workforce in Asia, and up until the year 2030, one can expect more losses than gains in employment opportunities. A good 64 per cent of the respondents expect a dip in the number of clerical roles, 59 per cent predict a reduction in plant and machine operations staff, 58 per cent believe that the number of labourers in mining, construction, manufacturing and transportation will go down, and 56 per cent think that there will be fewer employees in personal services and sales roles.” (Büchel, 2019)<sup>[2]</sup>

With a clear indication that the sector that will bear the brunt of automation will be in the areas of sedentary manual labour and primary desk jobs, the economy will plunge unless they are cushioned by some precautionary measures. Those measures can be in the form of a statutory requirement making companies mandatorily provide a significant level of social and/or financial safety and security to workers displaced by automation.

### IV. Employee Pushback

It must be noted that every trade-off or displacement has a level of cost attached to it. Prior evaluations and calculations must be done to ensure that the change an economy chooses to welcome is fruitful and not a harbinger of disparity and downfalls. Choosing to welcome digitization, it is essential to estimate whether the cost from displacing workers are covered by the constructive benefits of a digital economy. More often than not, new jobs and positions created with the arrival of automation are not retained fast enough by those workers who are displaced or those displaced workers who do not have the required skill set, thereby leaving potential workers stranded.

The relationship of employment pushback and automation puts itself on the table with a lone ask: Is the cost worth it?

## THE TAXATION MUDDLE

### A) CURRENT CHALLENGES

#### I. Inadequate International Taxation System

The old taxation “...rules provide that the profits of a foreign company can only be taxed in another country where the foreign company has a physical presence. One hundred years ago, when business revolved around factories, warehouses and physical goods, this made perfect sense. But in today’s digitalised world, MNEs often conduct large-scale business in a jurisdiction with little or no physical presence there” (OECD, 2021a, pg 13)<sup>[11]</sup>.

#### II. Rejecting the Compulsion of Making a Permanent Establishment

Thanks to globalisation, MNCs have become more integrated now than ever. The bilateral laws that govern their actions in the foreign jurisdiction have become liberal because of the obvious advancement. But with digitization, the compulsion of making a subsidiary in the target country has been eliminated. According to one of the advancements in BEPS report of OECD,

“.....problem is that most countries only tax domestic business income of their MNEs, but not foreign income, on the assumption that foreign business profits will be taxed where they are earned. The growth of intangibles, like brands, copyright and patents, and companies’ ability to shift profits to jurisdictions that impose little or no tax, means that MNE profits often escape taxation. This is further complicated by the fact that many jurisdictions are engaged in tax competition by offering reduced taxation – and often zero taxation – to attract foreign direct investment.”(OECD, 2021b, pg 13)<sup>[11]</sup>.

### B) STORY SO FAR

It is a renounced fact that a substantial number of economies in the global south offer tax haven privileges to MNCs, thereby diverting their income source to a less taxable country. This practice has so far led to a “corporate tax avoidance to the target countries from anywhere between USD 100 billion to USD 240 billion annually, which is equivalent to 4-10% of global corporate income tax revenues” (OECD, 2021c, pg 13)<sup>[11]</sup>. A loophole of such magnitude requires an immediate action, as digitisation is prevailing globally.

Given the fact that India is still in its developing stages of digitisation, keeping an eye on the potential tax collection of such quantum might be beneficial. Moreover, the two-pillar approach (discussed below in detail) might just be one of the most impactful tax reforms adopted globally.

### C) TWO-PILLAR POLICY

To address the international taxational negligence by the MNCs, OECD came up with a Two-Pillar Policy, which can very well serve as an international policy for the upcoming times.

Pillar-1: Broadly speaking, this pillar gives taxing rights to the target countries on the residual profits of MNCs. Thereby, giving a chance of tax collection to the countries in which there is no physical presence of the MNC.

Pillar-2: The second pillar states a global minimum tax of 15% for all MNCs with annual revenue over 750 million euros. This rule is termed as Global anti-Base Erosion Rules (GIBE). This approach most certainly appears to be an advancement in the international taxation domain and will most likely stop avoidance of global tax but the school of thought that it threatens the global fair play of markets cannot be ignored. Moreover, the Two-Pillar Taxation policy is a politically sensitive instrument which might lead to retaliation between nations, if not handled diplomatically. The digitised environments demand a more stable and concrete policy. How impactful such a

policy will be in the near future essentially depends on how the OECD executes what it has stated in its objectives, which for now, undoubtedly appears to be unsettled. A more stable and concrete policy formation is a must, as this policy was just one of the many feathers of the crown.

## EMERGENCE OF HOLLOW CURRENCIES & THEIR ACCOUNTABILITY

### A) SECOND THOUGHTS ON CRYPTO

Cryptocurrencies are a collection of binary data, simply used to perform the function of an “electronic cash” system. However, this is nothing akin to the currency we carry as it is not regulated by either the central bank or the government, making it a highly risky venture to yield.

Crypto is a product and an impact of the digital economy because without digitisation, a currency that is built on a series of programming data would never see the light of the day.

An intricate detail about cryptocurrencies that people tend to overlook is that although crypto may be recognised by some of the countries, it is not regulated by them. Moreover, the hollow nature of crypto encourages reluctance in its usage and makes it unsafe. This is because, the “crypto-assets have no underlying claim, such as the right to a future cash flow or to discharge any payment obligation, they lack fundamental value.”(ECB Economic Bulletin, 2019, para 15)<sup>[4]</sup>. In simpler terms, it does not have the same functions as those of a fiat currency. If your money got lost/stolen on the platform, there would be no plausible way you could get it back. Crypto has a high volatility attached to itself, one could never be sure of its authenticity because its grounds do not have a paper trail, thus leading to no accountability. Moreover, its spillover effects could leak into the real economy threatening the financial stability of the country.

### B) UNDERSTANDING THE EXCEPTION OF EL SALVADOR

On 7 September, 2021, El Salvador marked history as it became the first country to recognise and perceive Bitcoin as its legal tender. By taking a decision on a highly controversial topic, it is hopeful to solve two major financial problems:

1. Catering a wider reach by allowing citizens a magnanimous platform online to ease their banking access needs. A red-tape free platform such as Bitcoin is an independent station, not backed by the Central Bank or the Government, giving pure access to everyone and anyone.
2. “Another big factor that works in favour of El Salvador is that Bitcoin will help the country prevent the enormous fee on banking transactions when over 1.5 million citizens living in other countries send money home.” (Dogra, 2021 para 7)<sup>[3]</sup>.

In the highlighted case above, the purpose of introducing cryptocurrency was to give access to a free-flowing currency to the public, which was hindered from its legal tender by the accessibility issues and the only way through for El Salvador was to open its gates to a digital platform.

## CONCLUSION

Digitisation, a branded station of loaded benefits and unimaginable disadvantages in the hands of the unknown, has travelled between worlds and now stands as a virtual platform, dynamically changing how we look at the world. The doorway to the unknown has become more transparent, and with all the paper trails a digital economy manages to leave behind, there is some equivalent level of facade for mystery which we are ignorant of.

We are at a significant point in time where we can control the discoveries we find, by filling the loopholes with stringent policies. A rational approach to tackle the gaps must be adopted. Public welfare should be looked up as a priority and speculations should be kept at bay. If the challenges are not dealt with in a reasonable manner, digitization might act as a friction to global development. The solution is not to discard the settings of a digital economy but to play on its strengths and find ways to prevent spill overs from weaknesses. In order to turn the

upcoming decade into a period of exponential growth, the threats of digitization must be recognised and studied upon, or else, what appears to us as a catalyst might become a double-edged sword.

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