THE DIGITAL REVOLUTION: WHAT DIRECTIONS SHOULD WE STEER THIS VEHICLE

Written by **Dhwani Parekh**

Associate, Ikigai Law, Delhi, India

ABSTRACT

Digital transformation has become the word of the millennia with unimaginable technologies becoming a part of everyday life such as smartphones, smart-cars, smart-houses and mass consumption of online social media content. With this reimagining of the world, several scholars have deliberated on the reimagining of our political systems. We currently live in a nation-state framework where our basket of rights is predominantly determined by the territory we are born into. However, the internet herald's ideas of free choice and self-ownership and forces many to reimagine this imposition of citizenship. Keeping these ideals in mind, we cannot ignore the problems within the current nation-state framework such as inequality and illiteracy within and among nations which have the potential of further deepening due to technological advances. Digital divide and lack of uniform access to the internet or technology is a very big concern gripping nations across the globe. Therefore, looking for a complete shift to voluntary virtual nations is a dream only the developed country's rich can afford to have. This article seeks to highlight the current issues in the nation-state and what the ideal next steps can be for technological progress of a territory/nation. The article will use the example of Estonia's e-government developments to highlight realistic next steps of technology-driven innovation.

INTRODUCTION

With the end of feudal-absolutist state at the dawn of capitalist development, the nation state framework took over the political landscape of the world. The nation-state was marked by the emergence of independent states having a constitution, ruled in the name of equal citizens forming a nation.[i] The concept of a nation-state may have started as a mere cataloguing system but soon it transformed into a determinator of life chances. The nation-state assigns the individual a bundle of rights which may vary drastically among different nation-states. These bundle of rights control everything from a person's right to existence, to their freedoms and actions, all the while being involuntarily imposed by birth. Many believe that this inequality between citizenships can be bridged by technological progress, and many scholars have deliberated on what the future of our world will look like. Some have skipped several crucial steps and envisaged a cloud/virtual nation where all citizens are voluntarily joining together to create a new world and replace the arbitrariness of birth being the decider of a person's citizenship.[ii] As glorious and idealistic as it sounds, it would be hasty and ignorant to take our current systemic flaws and reproduce or even aggravate them in the hopes of creating a "better" world.

Dimitry Kochenov[iii] picks up on this concept of the reality of nation-states and argues that technological leaps can have two objectives. First being to improve the long-established state of affairs and second, to revolutionize the society.[iv] The first, is the creation of virtual political communities which will run alongside nation-states to act as a watch-dog and facilitate growth. [v] Amnesty International, for example, is a political community which exists independent of nation-states and makes the nation-states more robust. These communities do not intend to replace the nation-state.[vi] The second, is the creation of virtual nations which replace the nation-states and seek to establish voluntary political communities such as Bitnation.[vii]

What are cloud communities?

Liav Orgad imagines a world where every person is an international legal person having a digitalidentity.[viii] This digital identity will be a global citizenship. Global citizenship will lead to the creation of cloud communities- which are communities formed by like-minded people in the virtual plane. These cloud communities are decentralized associations, which people

consent to be members of, for the purpose of influencing decision-making internationally.[ix] He envisions a political community being created where members can collectively act in the decision-making of important international issues.

This would resonate with the many upper middle-class people living in developed countries as they are the advantageous side of global inequality. The gap between those who have access to theinternet and those who do not is commonly known as digital divide.[x]

FLAWS IN THE EXISTING POLITICAL SYSTEM

Lea Ypi asks us to consider the prospect of technologically enabled global interconnectedness from the perspective of a third world country or a "non-wealthy Western academic".[xi] Her objective is to highlight the digital gaps in the current world. There exist many parts of this world which lack internet access or mobile phones.

Digital divide can be used as a tool in accessing the role of race, income, ethnicity and geography to study the differences between groups and the inequalities in society.[xii] Thus, the gap cannot be overcome by mere access rather it demands public intervention.[xiii] The research on digital divide has found that citizens do not form a homogenous group and there cannot be one solution which will work for all.[xiv] This is one of the reasons e-governments are failing in many countries. Looking at people's needs and abilities is necessary for policy-making.

Dumbrava[xv] and Dimitry[xvi] agree with the need to recognize and deal with the digital divide before focusing on creating visions of a world dependent on technology.

While the gap in digital divide exists, there is a development of e-governments across the world which sort to digitalize the public sector and promote the use of technology.[xvii] According to the 2022 UN E-Government Survey report[xviii] (hereinafter referred to as the "**Report**"), while several governments are engaged in this process of digitalization, not all can achieve the same goal of e- government. The survey has reported that there are uneven benefits to marginalized and vulnerableparts of the population. This inequality within nation-states is one of the by-products of the currentpolitical system.

As per the Report, 45 percent of the population of all the United Nations Member States, which is approximately 3.5 billion people, still lag behind in digital rights. In Africa, out of the 54 countries, 50 countries have the e-government development index (EGDI) below the global average.[xix] The Report[xx] warns us that further advances in e-government initiatives will only widen the digital divide if there is no action taken to ensure that access is provided to all. For a digital government, the focus must be on human development where everyone is carried forward and no one is left behind. Moreover, any digital transformation without the support of institutions, funds, policies, regulations and strategies will inadvertently lead to job loss, an increase in inequality and security and privacy issues.[xxi]

Who holds the power?

When we speak of digital divide, it does not stop at the mere access to technology but it will also involve the extent of technological advancement available to one person over the other. The production and distribution of technological devices is in the hands of private players and is largely controlled by companies like Microsoft and Apple.[xxii] While the private sector is a competitive space which drives innovation, the basic rights to access the digital world cannot be in the hands of private players if it is to be a universal right. The State is an entity burdened with the role of welfare of its people, while the objective of a private company is profits. Thus, when one is to think of bridging the digital divide, the government must deliberate on the practical concerns of production and manufacturing of technology as well.

Inequal citizenship

The nation-state are not mere registries, there is an inequality of citizenship as explained by Audrey Macklin, where she states that citizenships are not equal, the bundle of political, social, cultural and economic rights and opportunities vary drastically between nations.[xxiii]

As Brubaker opined, there is an impact of territorial closure on non-citizens and for a non-citizen, their access to a territory will have a huge bearing on their life chances.[xxiv] Migration was the first consequence of the aforementioned inequality. Another way to bridge this gap on an individual level was to acquire multiple citizenships, and as long as there are asymmetries among the nation- states, the need for multiple citizenships will persist.[xxv] The next step would be the use of technology to bridge this gap.

Dimitry[xxvi] believes that virtual nations will deepen the existing global inequalities in this world as the 'global' citizen right now comprises those who live in places with high-speed internet and opportunities to interact online. The idealistic proposal created by writers like Liav can only be said to favour the rich who can afford a complete online presence.[xxvii] Virtual states will not create a deemed equality between someone from a democratic and noble state such as France, and any citizen holding a third world country passport such as the Central African Republic.[xxviii] The difference in the weightage and power that these two nation-states hold will be replicated into the virtual states. Citizenship by definition is not exclusive, but the differences between the bundle of rights and liabilities of different citizenships create inequality.[xxix] Until this gap is bridged, any virtual nation will only reinforce this gap.[xxx]

According to Dimitry, citizenship has become a justification and preservation of inequality across the world. Virtual nations would not render these identities powerless if life chances are so starkly different and dependent on the random legal status awarded at birth.[xxxi]

Escaping the inequality using cloud communities

To try and solve the problem, be it on the ground or in cloud communities, Robert Post is right to say that the life of someone in the place that they are in is more important than whatever their cloud identity will be.[xxxii] Using cloud communities to escape from your physical reality will not work. For example, a cloud community not saving a Saudi national from being beheaded if he confesses to atheism online. This is a realistic stance to take, it cannot be assumed that cloud communities or a virtual identity will protect the individual from their nation-state.

Dangers of technology

Even for people who have internet access, there are a lot of perils from identity theft to hacking. Another reason to take a breath before shifting citizenship into the virtual state is brought out by Costica Dumbrava's. [xxxiii] His main concern was the interlinking of citizenship with technology would make citizenship vulnerable to biases and failures prevalent in technology today.[xxxiv] Technology is not an objective program, it encapsulates various norms, expectations and values of the society. An example was the 2016 Microsoft created chatbot Tay that began posting Hitler-praises and sexist, racist remarks based on its learning from social media handles.[xxxv] Bitcoin has faced its own criticism of being a right-wing, anti-government and

liberation politics product.[xxxvi] As long as there are such biases in the system, it is dangerous to make it the source of democratic citizenship or the mediator of good or acceptable behaviour.[xxxvii] The other concern with technology today is its use by powerful groups or authoritarian governments which adversely affect the poor.[xxxviii] He gave the example of the Aadhaar in India which severely affected the poor in the country because of its security issues and rigidity.[xxxix] A particularly dystopic example is the Social Credit System which the Chinese government want to introduce, which will rate the trustworthiness of the citizens on the basis of its alignment with the government's ideology.[xl] Another example of technology failures is the DAO attack where a highly-secure blockchain was hacked into and 60 million USD was stolen.[xli] Thus, even blockchain networks are not completely safe from shutdown or hacking and then making citizenship susceptible to being shutdown would lead to dire consequences.[xlii] Dumbrava rightly observes that we are often unaware of who designs the system, who oversees it and whether we have the power to remove them from their position of power.[xliii] The risks she points out fall into the basket of problems that need to be addressed before any revolution can be hoped for.

REALISTIC NEXT STEPS

The COVID-19 pandemic has been a litmus test for various governments across the globe. The pandemic forced governments to reevaluate the role of their State and induced them to develop technological solutions to ensure that public services continue and the society does not lose stability. The pandemic tested the responsiveness, digital resilience and agility of government policies and provided the push to strengthen governance at all levels across local jurisdictions. It expanded the provisions of technology, information and services to all sections of society including small, micro and medium -sized organizations as well as vulnerable populations to guarantee that no one is left behind by the digital society. As per the Report, there have been setbacks and progress and the pace of such progress may vary from region to region but there has been a positive trend of e-government development overall.[xliv]

Estonia E-Residency Initiative

The e-Residency system created by Estonia is a good example of the first outcome of technological progress that Dimitry envisaged.[xlv]

Estonia launched a one-of-a-kind project in 2014 of issuing non-residents digital IDs.[xlvi] These IDs qualify a non-resident to become an e-resident. This e-residency is in no way a citizenship of Estonia, it is not even a step closer to getting citizenship.[xlvii] E-residency does not offer any right to travel to Estonia, or tax residency either. This scheme allows e-residents to gain remote access to the digital infrastructural services offered by Estonia.[xlviii] The e-residence card works similarly to the national ID card, which is the mandatory identity proof of all the citizens of Estonia.[xlix] Most of Estonia's services are available online, so the e-resident can open a bank account or run a location independent business by establishing it in Estonia and use the other public e-services offered by Estonia.[l] There are several advantages to becoming an e-resident such as access to the European Market[li] and also an escape from setting up a business in a country where the government do not possess comparable digital instruments, infrastructure or services.[lii] By July 2017, the number of e-residents was higher than the number of new-borns in Estonia, and Estonia plans to reach 10 million e-residents by 2025.[liii]

Estonia is just the beginning, several nations, including Denmark[liv] and France, are on their way to digitalizing their public services and coming out with digital services of their own.[lv]

This program is only a business model where the states are a nation-as-a-service with non-citizens as consumers.[lvi] This program introduced by Estonia is used as a compensatory tool for ineffective development in certain countries.[lvii] By being an e-resident, these non-citizens can compensate for what is lacking in their nation-state. Stefani Milan also supports the implementation of blockchain technology by Estonia which is on a small scale and by a committed state rather than leaping into a blockchain-based revolution.[lviii]

Recently, the "customer-driven" objective of e-governments has played a role in shaping the policy. The problem with this is that a government cannot act as a private entity because a government has to act to further principles of equality and fairness. They cannot curate services to what the customer wants. Digital divide is a hindrance to the growth of e-government due to the lack of access or use.[lix]

CONCLUSION

Instead of simply comparing a nation-state and a cloud community we should be comparing the reality of a nation state [which is only partially equipped with adequate technology] and the reality of a cloud community [which has limitations and risks of its own such as failing blockchain technologies]. With problems ranging from digital divide, lack of infrastructure, citizenship inequalities and cybersecurity concerns, it would be premature to imagine a revolution of the current political system. While concerns around statelessness and lack of basic human rights might the idea of a new plane where one can join communities voluntarily and be governed by principles of one's choosing might seem enticing, however, this solution would be similar to one proposed by a Marie Antoinette.

When we shifted from the feudal system to nation-states, we ended up creating several flaws in the system, jumping to an entirely new system would be akin to running away rather than staying and fixing the current problems. The focus of the state should be on using technology to bridge the digital divide and create a safe robust system of digital governance that would over time lead to fading of state boundaries.

ENDNOTES

i Andreas Wimmer & Yuval Feinstein, *The Rise of the Nation-State across the World, 1816 to 2001*, 75(5) AMERICAN S. R. 764, 765-790 (2010).

ii James Bridle, *The Rise of Virtual Citizenship*, THE ATLANTIC, (Nov. 14, 2022, 1:55 PM) https://www.theatlantic.com/technology/archive/2018/02/virtual-citizenship-for-sale/553733/.

iii DIMITRY KOCHENOV, *Escapist Technology in the Service of Neo-Feudalism, in* DEBATING TRANSFORMATIONS OF NATIONAL CITIZENSHIP 321 (Rainer Baubock 2018).
iv Id.
v MICHAEL BLAKE, *Virtual Politics, Real Guns: On Cloud Community, Violence, and Human Rights, in* DEBATING TRANSFORMATIONS OF NATIONAL CITIZENSHIP 289 (Rainer Baubock 2018)..

vi Id.
vii LIAV ORGAD, *Cloud Community: The Dawn of Global Citizenship?*, *in* DEBATING TRANSFORMATIONS OF NATIONAL CITIZENSHIP 251 (Rainer Baubock 2018).

viii Id.
ix Id.
x Natalie C. Helbig et al., *Understanding the Complexity in Electronic Government:Implications from the Digital Divide literature*, 26 GOVT. INF. Q. 89, 92 (2009).
xi LEA YPI, *Old Divides, New Devices: Global Citizenship for Only Half of the World, in* DEBATING TRANSFORMATIONS OF NATIONAL CITIZENSHIP 317 (Rainer Baubock 2018).

xii MANUEL CASTELLS., THE INTERNET GALAXY: REFLECTIONS ON THE INTERNET, BUSINESS, AND SOCIETY 247 (Oxford University Press 2002).

xiii NATALIE *supra* note 10, at 94.
xiv Id. at 95.
xv COSTICA DUMBRAVA, *Citizenship Forecast: Partly Cloudy and Chances of Algorithms, in* DEBATING TRANSFORMATIONS OF NATIONAL CITIZENSHIP 299 (Rainer Baubock 2018).

xvi KOCHENOV, *supra* note 3.
xvii Id. at 2.
xviii The Future of Digital Government, U. N. E-Gov Survey, U.N Department of Economic and Social Affairs (2022).
xix Id. at 30.
xx Id. at 31.
xxi Id. at 30.
xxii YPI *supra* note 11.
xxiii AUDREY MACKLIN, *Kick-Off Contribution, in* DEBATING TRANSFORMATIONS OF NATIONAL CITIZENSHIP 163 (Rainer Baubock 2018).

xxiv ROGERS BRUBAKER, CITIZENSHIP AND NATIONHOOD IN FRANCE AND GERMANY (Harvard University Press 1992).

xxv PETER SPIRO, *Multiple Citizenship*, in OXFORD HANDBOOK OF CITIZENSHIP, 621 (2019).
xxvi KOCHENOV, *supra* note 3.
xxvii Id.
xxviii Id.
xxix Id.
xxx Id. at 47.
xxxi Id. at 48.
xxxii Robert Post, *A World Without Law; A World Without Politics, in* DEBATING TRANSFORMATIONS OF NATIONAL CITIZENSHIP 289 (Rainer Baubock 2018).
xxxiii DUMBRAVA, *supra* note 15.

xxxiv Id.

xxxv Id. at 34.

xxxvi DAVID GOLUNBIA, *Bitcoin as Politics: Distributed Right-Wing Extremism*, *in* MONEYLAB READER: AN INTERVENTION IN DIGITAL ECONOMY, 117 (Geert Lovink).

xxxvii DUMBRAVA, *supra* note 15.

xxxviii Id.

xxxix Anumeha Yadav, *In Rajasthan, there is "unrest at the ration shop" because of error-ridden Aadhaar*, SCROLL.IN, (Nov. 15, 2022, 1:55 PM) http://scroll.in/article/805909/in-rajasthan-there-is-unrest-at-the-ration-shop-because-of- error-ridden-aadhaar.

xl Drew Donnelly, *China Social Credit System Explained – What is it & How Does it Work?*, HORIZON, (Nov. 15, 2022, 2:00 PM) https://nhglobalpartners.com/china-social-credit-system-explained/.

xli Muhammad Mehar, *Understanding a Revolutionary and Flawed Grand Experiment in Blockchain: The DAO Attack*, 21(1) JCIT 19, 32 (2019).

xlii DUMBRAVA, *supra* note 15.

xliii Id.

xliv The Future of Digital Government, U. N. E-Gov Survey, U.N Department of Economic and Social Affairs (2022).

xlv KOCHENOV, *supra* note 3.

xlvi Blessing Oyetunde, *The making of a giant: Estonia and its digital identity infrastructure*, E-ESTONIA, (Nov. 15, 2022, 11:55 PM) https://e-estonia.com/the-making-of-a-giant-estonia-and-its-digital-identity-infrastructure/.

xlvii Taavi Kotka et al., *Estonian e-Residency: Redefining the Nation-State in the DigitalEra*, 3 (U. Oxford, Working Paper No3. Sept. 2015).

xlviii Piia Tammpuu & Anu Masso, *Transnational Digital Identity as an Instrument for Global Digital Citizenship: TheCase of Estonia's E-Residency*, 21 INF SYST FRONT 621, 634 (2019).

xlix Id. at 621.

l Id. at 624.

li Kotka, *supra* note 47, at 7.

lii Tammpuu & Masso, *supra* note 48, at 622.

liii Id.

liv Ali Al-Sadiq, *How E-Government Services Can Pay Dividends,* IMF BLOG, (Nov. 15, 2022, 12:55 PM), https://www.imf.org/en/Blogs/Articles/2021/02/11/how-e-government-services-can-pay-dividends.

lv Marine Dupuis, *Transforming Public Action - eGovernment in France*, INST. FOR INT. & J. SOC.,(Nov. 15, 2022, 12:57 PM), https://www.internetjustsociety.org/cosmonaut/egovernment-in-france#:~:text=Transforming%20Public%20Action%20%2D%20eGovernment%20in%20France&text=An%20overview%20of%20the%20digital%20transformation%20of%20French%20public%20services.&text=E%2Dgovernment%20or%20digital%20government,simpler%20(OCDE%2C%202003).

lvi Scott Smith, *Citizenship in the Era of Nation-as-a-Service*, MEDIUM, (Nov. 15, 2022, 12:47 PM), https://medium.com/phase-change/citizenship-in-the-era-of-nation-as-a-service-2f126b9e331e.

lvii KOCHENO, *supra* note 3.

lviii BLAKE, *supra* note 5.

lix Id.