# The opposite route to a global digital inclusionary agenda through law and regulation: schisms of a neglected project in Brazil

A rota oposta de uma agenda global digital inclusiva a partir do Direito e regulação: cismas de um projeto negligenciado no Brasil

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**Abstract**: This article explores the existing interactions between digital inclusion, digital transformation and the opportunities that still exist in the field of digital inclusionary practices from the standpoint of law and regulation in Brazil. In Brazil, relevant policy formulations and programmes on digital inclusion go back to the first quarter of 2000s. During that period, governmental measures focused on the steps necessary to coordinate the integration of economic and social inclusionary goals, which were essentially supported by the chapters of the 1988 Constitution on the economic and social order, into digital inclusion. Such policies were gradually improved and followed the rapid expansion of the internet and the emergence of a vibrant digital environment in Brazil, and mirrored both concrete experiences at a national level and global standards in the area. The adoption of the new E-Digital Transformation Strategy in March 2018, however, involved turning to considerably contrasting policy options and legal institutional designs. The strategy collides with desirable formulations guided by a multi-dimensional approach to digital inclusionary practices. Departing from theoretical and comparative methods in legal experiments on digital inclusion, this article seeks to demonstrate to what extent the multidimensional approach may contest digital inclusionary policies purely guided by corporate interests and focused on the expansion of digital markets. Such policies require both the recognition of concrete manifestations of the digital imbalance in the Global South and a diversity of values and stakeholders for a 'sustainable global digital agenda'.

**Keywords:** Global digital agenda. Digital inclusion. Right to access the internet. Digital inclusionary practices. Digital inequalities

Resumo: O presente artigo explora as interações existentes entre inclusão digital, transformação digital e as oportunidades ainda existentes no campo das práticas digitais inclusivas no Brasil dentro da perspectiva do Direito e regulação. Políticas relevantes em matéria de inclusão digital datam da primeira metade da década de 2000 no Brasil. Naquele período, medidas governamentais se concentraram em etapas necessárias para coordenar objetivos de inclusão social e econômica, essencialmente baseados nos capítulos relativos às ordens econômica e social da Constituição de 1988, a objetivos de inclusão digital. Essas políticas foram gradualmente aprimoradas e acompanharam a rápida expansão da internet e o surgimento do vibrante ambiente digital no Brasil, espelhando experiências concretas em nível nacional e padrões globais na área. A adoção da nova Estratégia de Transformação Digital, em março de 2018, por sua vez, volta-se para uma opção política e desenho legal institucional consideravelmente opostos, colidindo com formulações guiadas por uma abordagem multidimensional das práticas digitalmente inclusivas. Partindo dos métodos teórico-investigativo e comparativo em experimentos jurídicos sobre inclusão digital, o artigo busca demonstrar como a abordagem multidimensional permite contestar políticas normativas de inclusão digital meramente ancoradas em interesses corporativos e orientadas para expansão de mercados digitais. Elas reclamam o reconhecimento das concretas manifestações da desigualdade digital no Sul Global e da diversidade de valores e atores para uma 'agenda digital global sustentável'.

**Palavras-chave:** Agenda Global Digital. Inclusão digital. Direito de acesso à internet. Práticas digitais inclusivas. Desigualdade digital

#### 1 Introduction: Digital inclusionary agenda and digital transformation in Brazil

Amidst political turmoil, radicalism, and a break with old expectations in Brazil, the Executive Branch launched a programme in March 2018 programme called the 'Strategy for Digital Transformation-E-Digital Transformation'2. At a first blush, it appeared to be one additional stratagem to implement a clean, palatial, politically correct and highlyattuned governmental plan to respond to the new demands of the growing digital economy in the country. Within the legal regulatory framework set forth by Decree No. 9.319/2018,3 enacted by President Michel Temer, which also creates a new bureaucratic body - the Inter-ministerial Committee for Digital Transformation<sup>4</sup> - the government intended to establish 'a renewed environment for promoting changes on agriculture, commerce, education and services in the country', against the backdrop of existing innovation structures in the IT sector and, more broadly, in different sectors of the digital economy.<sup>5</sup>

Full text of the document can be accessed here: http://www.mctic.gov.br/mctic/export/sites/institucional/estrategiadigital.pdf. Accessed on October 30, 2018. In this article, the 2018 Strategy will be referred to as 'E-Digital' or 'Digital Transformation Strategy'.

<sup>3</sup> Decree No. 9.319, of 21 March 2018, establishing the 'National System for Digital Transformation' and governance structure for the implementation of the Brazilian Strategy for Digital Transformation. Available at: <a href="https://www.planalto.gov.br/ccivil\_03/\_ato2015-2018/2018/decreto/d9319.htm">https://www.planalto.gov.br/ccivil\_03/\_ato2015-2018/2018/decreto/d9319.htm</a> Accessed: October 30, 2018. The E-Digital Strategy is fundamentally based on nine guiding principles: (i) infrastructure and access; (ii) research and development; (iii) trust; (iv) education; (v) the international dimension; (vi) data economy; (vii) devices' connectivity; (viii) new business models and (ix) citizenship.

<sup>4</sup> See info at: <a href="http://www.casacivil.gov.br/orgaos-vinculados/comite-interministerial-para-a-transformacao-digital-citdigital">http://www.casacivil.gov.br/orgaos-vinculados/comite-interministerial-para-a-transformacao-digital-citdigital</a>. Accessed on October 30, 2018.

<sup>5</sup> See, for instance, official news in <a href="http://agenciabrasil.ebc.com.br/politica/">http://agenciabrasil.ebc.com.br/politica/</a>

Even more curiously, perhaps, the race for the presidential elections in Brazil also generated enormous expectations around the topic of digital transformation. Candidates contemplated the concept of 'digital transformation' as a key campaign point, although most of them likely did not even know what digital transformation entailed, as is the case with many political talking points when the subject is related to history, society, economics, politics and culture. Essentially, the concept of digital transformation has been elaborated on for more than 30 years. It goes along with the idea of continuous technological phases of 'digitalisation' - roughly explained, the techniques by which analogical information is converted into digital and numerical formats and binary structures. Digitalisation allowed several domains of sciences and specialists to develop distinct views on the modern understanding of 'digitalisation'. Digitalisation, in turn, is referred to as the process of technologically induced and adjusted changes that affect a number of sectors and industries, such as finance, telecommunications, media, health and medicine, education and engineering.<sup>7</sup>

This shifting movement invariably also had impacts on business practices and on the performance of the

noticia/2018-03/decreto-preve-acoes-para-digitalizacao-de-processos-produtivos>. Accessed on October 30, 2018.

<sup>6</sup> See Convergência Digital, 'Digital transformation enters the agenda of the candidates for the presidency of Brazil' 20/08/2018. Available at: <a href="http://www.convergenciadigital.com.br/cgi/cgilua.exe/sys/start.htm?UserActiveTemplate=site&infoid=48747&sid=11">http://www.convergenciadigital.com.br/cgi/cgilua.exe/sys/start.htm?UserActiveTemplate=site&infoid=48747&sid=11</a>. Accessed on October 30, 2018.

<sup>7</sup> BRENNEN, J. Scott; KREISS, Daniel. Digitalization. In: *The international encyclopaedia of communication theory and philosophy,* 2016, p.1-11 (remarking that digitisation may be defined as 'the material process of converting analogic streams of information into digital bits', while digitalisation means 'the way many domains of social life are restructured around digital communication and media infrastructures').

economic agents competing in relevant markets of the digital economy. Much has already been said how digital transformation drives its multiple spin-offs today: the internet of things, industry 4.0, cloud computing, machine learning, blockchain, crypto-currency, etc. On a larger scale, digital transformation is a catalyst for the irreversible movement of Big Data, which brings together highly mechanised and computerised infrastructures and techniques for producing, processing, storing and analysing data, including usergenerated data.<sup>89</sup>

There are few doubts, however, that the executive branch's proposal in the so-called 'E-Digital Strategy' equally seeks to dig into the foundations of what already exists in the broader field of digital inclusion, which affects society daily and is theoretically so promising, in governmental programmes going back to the early 2000s in Brazil. According to Decree No. 9.319/2018, the E-Digital Strategy aims to harmonise initiatives related to the digital environment and 'employs the potential of digital technologies to promote sustainable and inclusive economic and social development, with innovation, increased competitiveness, productivity

<sup>8</sup> For an overview of this subject, for example, see studies by VAN DIJCK, J. Datafication, dataism and dataveillance: Big Data between scientific paradigm and ideology. In: *Surveillance & Society*, vol.12, 2014, p.197 et seq; KALLINIKOS, Jannis; CONSTANTIO, Ioanna D. Big data revisited: a rejoinder. In: *Journal of Information Technology*, vol. 30, 2015, p. 70 et seq.

Taken to a further step of analysis, one could remark that digital transformation is responsible for triggering distinct processes related to digital transition, with broad and deep societal impacts. It affects the structure and functioning of governmental and industry sectors, from health and legal services to tax reports and taxi rides. Digital transformation gives equal rise to a number of transversal policy issues, from the need to tackle the growing wave of precarious labour forces, to the need to regulate privacy concerns and market monopoly and to stop cybercrime. For a deep account of those topics, see collection of studies in OLLEROS, F. Xavier, and ZHEGU, Majlinda (eds.) *Research handbook on digital transformations*. Cheltenham: Edward Elgar Publishing, 2016.

and levels of employment and income in the country'.<sup>10</sup> Nevertheless, the narratives of both approaches – the Digital Transformation Strategy and the pre-existing Programme on Digital Inclusion – are different, in particular, with regard to the transformative impacts of technologies and digitalisation on social and economic inclusionary policies and on the legal and regulatory instruments used to make these policies effective and pervasive.

In fact, digital transformation may be conducive to new business environments in digital economic processes. It does not exclude digital inclusionary practices, as they have been conceived in international and domestic agendas throughout recent decades in Brazil. A main concern, however, relies on the overlapping trends and potential setbacks brought about by the 2018 E-Digital Strategy when it comes to ensuring the continuity and renewability of a long-term public policy articulating digital inclusionary practices with social and economic inclusionary goals.

This article constitutes an attempt to examine the interactions between Brazil's digital agenda and the opportunities that still exist in the field of digital inclusion and inclusionary practices from the standpoint of law and regulation. As further discussed in this article, the 2000s witnessed the emergence of public policies and programmes on digital inclusion in Brazil, when the Executive branch started to coordinate the integration of economic and social goals set forth by the Constitution into a range of digital inclusionary practices. Those policies were gradually accompanied by the rapid expansion of the internet, the adoption of incentives to technology industry (such as 'regulatory sandboxes' in taxation and public procurement) and and a rising digital environment in Brazil.

<sup>10</sup> See Art. 1 of Decree No. 9.318/2018.

Following those early initiatives, however, it remains hard to see how indicators of positive performance were attached to this movement, in particular, due to data inconsistencies reflecting digital inclusionary practices. Most of the existing indicators based on market-driven approaches to access to ICTs (such as internet penetration rates in households and access to ICT facilities) still fail to corroborate with the opportunities for integration between digital, social and economic inclusionary goals, despite the fact that laws and regulations have been adopted to foster digital inclusion, and despite the 2004 Programme. In other words, there is an intrinsic difficulty to establishing a correlation between such indicators, laws and policies in this realm. Furthermore, the recently adopted E-Digital Strategy came into existence as a benchmark and turning point for the modernisation goals of IT, internet industries in Brazil and diversification in the digital market at a national level. And yet, any industrial and technological policies in IT and internet fields cannot be detached from digital inclusionary policies, particularly where there are concrete risks of irreversible institutional backlashes

To support my arguments, I intend to explore the overlapping and conflicting trends of policies on digital inclusion and digital transformation, looking at specific laws and regulations in Brazil over the last two decades. In Section 2, I address the foundations of the existing Brazilian Digital Inclusion Programme, its major shifts with regards to legal and regulatory designs and some of the outcomes generated so far. I argue that the 2018 Digital Transformation Strategy has been incompatible with and inadequate for the aim of including Brazil in a sustainable 'global digital agenda' anchored in a multi-dimensional inclusionary approach. This is also true when it comes to digital transformation in the IT

and ICT industry sectors. In Section 3 of the article, I discuss the three-tied approach to digital inclusion, focused on social, economic and developmental inclusionary goals, which are constitutive to a multi-dimensional approach to digital inclusionary practices. Since the 2000s, digital inclusionary goals have become the leading features referred to in Brazilian social policies and programmes. As I contend in this article, such policies and programmes unquestionably served as catalysts for the further dissemination of a human rightsdriven agenda for digital inclusion at a domestic level. The truncated and embattled relationship between indicators on internet access, online human rights and digital inclusion are dealt with in Section 4. Gradual universalisation of internet access and its human rights-compliant approach appears to be essential for the effectiveness of laws and regulations in implementing social, economic, and digital inclusionary practices. Section 5 covers the interface between digital inclusion, digital transformation and narratives coming from the human rights-driven approach to the right to access to the internet, which has been considered and promoted by the United Nations. There is a strong concern in scholarly circles about the intersections of digital inequalities and digital inclusionary practices and their ties to the predominant, market-driven interests, which are centred on access to the internet infrastructure by users and citizens and on the expansion of broadband services, as evidenced in the current amendments to the Brazilian Telecommunications Act of 1997. Finally, Section 6 looks at the differential 'multidimensional approach to inclusion' that calls for the designing of minimally equitable structures of digital economy and bridging the apparent divide between digital inclusion and digital transformation. As was also confirmed by international and civil society organisations, social and

economic inclusionary goals, aligned with developmental goals, are inseparable from any policies and programmes focused on digital inclusion and transformation.

#### 2 The paths to digital inclusion, laws and regulations in Brazil

There is nothing new on economic jargons repeatedly invoked by the common wisdom to approach digital inclusion and digital transformation. When something about economics is invoked, such as market differentiation, digital efficiency, global value chains, there is no mystery on the air. Such expressions reproduce and incorporate certain mantras, formulated under the influence of international institutions, transnational corporate policies and even defunct economic lessons, into operative institutional policies in states and their domestic systems<sup>11</sup>.

In Brazil, digital inclusion and the transformation policies were present in previous governments since the end of the 1990s, in particular, by means of drafting regulatory and legislative proposals that later became statutory law. Under the presidency of Luiz Inacio Lula da Silva (2003–2011), such initiatives were developed and implemented in tune with the ongoing global agenda on ICTs, digital divides and digital inclusion debates. Much of the existing policies

<sup>11</sup> See WARSCHAUER, Mark, *Technology and social inclusion: Rethinking the digital divide.* Cambridge: MIT press 2004, p.7 ss; HAMMOND, Allen S. The Digital Divide in the New Millennium. In: *Cardozo Arts & Entertainment Law Journal*, vol. 20, n.1, 2002, p.135 et seq.; HELSPER, Ellen. Digital inclusion: an analysis of social disadvantage and the information society. London: Department for Communities and Local Government 2008, p.4 ss; and studies in OLLEROS, F. Xavier, and ZHEGU, Majlinda (eds.) *Research handbook on digital transformations*. Cheltenham: Edward Elgar Publishing, 2016.

were influenced by the strong involvement of Brazil in the diplomatic dialogues under the auspices of international organisations (for example, the World Bank, UNESCO, UNCTAD, the World Intellectual Property Organisation – [WIPO] and the International Telecommunication Union [ITU]), as well as expert circles formed by governmental bodies, NGOs and academic networks in different fields and industry sectors.

As a matter of institutional policy underlying relevant sectors and goals in the Constitution of Federal Republic of Brazil of 1988 (such as freedom of enterprise, consumer protection, freedom of competition, reduction of regional and social inequality, access to education and knowledge, social communication, science, technology and innovation),<sup>12</sup> the first legal and political initiatives in digital inclusion laid down the foundations of the Brazilian Digital Inclusion Programme. The preliminary attempt to set the legislative and regulatory framework for the Programme was established by Law No. 11.012, as of December 21, 2004 (further amended by Law No. 11.318, of 2006 <sup>13</sup>), which consisted of one of the

<sup>12</sup> For an overview of social and economic order in Brazilian Constitution, see seminal article of Professor Fabio COMPARATO. The Economic Order in the Brazilian Constitution of 1988. In: *The American Journal of Comparative Law*, Vol. 38, n.4, 1990, p.753 ss. In line with Art. 170 of the Constitution, the following principles are to be observed as the basis of the economic order: national sovereignty; private property; the social function of property; freedom of competition; consumer protection; environmental protection; reduction of regional and social inequality; the pursuit of full employment; and favourable treatment for small companies incorporated and existing under Brazilian laws and having their seat of administration based in the country. Arts. 193 et seq. establish the main constitutional provisions on social order, including the fields of education, social communication, culture, science, technology and innovation. For the full English text of the Brazilian Constitution, see: <a href="http://www2.senado.leg.br/bdsf/item/id/243334">http://www2.senado.leg.br/bdsf/item/id/243334</a>.

<sup>13</sup> https://www.planalto.gov.br/ccivil\_03/\_Ato2004-2006/2004/Lei/ L10.933c ompilado.htm. Access on 10 November 2018.

annexes to the Pluriannual Plan approved during the first presidential term of Luiz Inacio Lula da Silva. 14

Originally, the Programme was conceived to establish a balanced institutional framework for digital inclusionary practices and to respond to a more consistent perception of a multiplicity of interests advocated by a number of stakeholders in different sectors, such as education, science, technology and innovation and consumer protection. Furthermore, the Programme, invariably raised public awareness about the permanency and stability of a public policy for both the development and adoption of new communication and information technologies in Brazil. It paved the way for a better understanding of how digital inclusionary practices could better ensure the optimal attainment of sustainable developmental goals by means of complementary educational goals, particularly digital and computer literacy, either jointly or combined with social and economic inclusion.15

The Pluriannual Plan (PPA), governed by Article 165 of the Federal 14 Constitution and Decree No. 2.829 of October 29, 1998, is a comprehensive instrument that establishes governmental policies within a fixed period and lays down guidelines, objectives and targets for governments on all four levels (federal, state, municipal and federal district). The PPA is approved by a four-year law, subject to different terms and rites of procedure. It has a limited validity, comprising the second year of a presidential term until the end of the first year of the subsequent term. The PPA also provides guidance for the Government's implementation of programs and policies during the relevant four-year period. Upon the adoption of the PPA, any government is bound to carry out its activities within the scope of the plan, subject to budgetary limits. According to existing statutory law, therefore, governments shall not overstep the PPA's guidelines and may only invest in strategic programs foreseen in the drafting of the PPA for the current period. The initiative for drafting legislations establishing a PPA is made by the Executive Branch. See also Art.165, I, Constitution, Para.1 ('The law establishing the Pluriannual plan shall provide, on regional basis, the directives, objectives and targets of the federal public administration relating to capital expenditures and other expenses resulting therefrom and for those regarding continuous programmes').

<sup>15</sup> The Sustainable Development Goals - SDGs have been established by the

On one hand, the Brazilian experiments and initiatives on digital inclusion associated with the 2004 Programme partially evolved from a range of events deriving from the 'Reform of the Brazilian State'. Going back to the late 1990s, the reform constituted a package of governmental measures adopted under the mandate of former President Fernando Henrique Cardoso, and strengthened, inter alia, the universalisation policy of the telecommunications services sector. One of the initiatives for the early reform also offered the political, legal and technical grounds for the privatisation of the telecommunications industry in the country, initiated after the entry into force of the 1997 General Telecommunications Act (Law No. 9472/1997).<sup>16</sup>

During the subsequent mandates of President Lula da Silva, the digital inclusion movement was followed by a gradual exponential increase of internet penetration rates and broadband expansion in different regions across the country. Further events contributed to policy formulations in the field of digital inclusion, such as the dissemination of new information and communication technologies (ICTs) within industry and public spheres and the stabilisation of regulatory and competition policies at the domestic level. These policies were conceived, likewise, as instrumental goals for the functioning of markets involving public services, primarily in line with existing trends on law and regulation policies that influence the main law-making and decision-making processes in Brazil.<sup>17</sup>

United Nations General Assembly on Sep.2016 and reflect the broadening of scope of the existing 2000–2015 Millennium Development Goals. See: <a href="https://www.un.org/sustainabledevelopment/sustainable-development-goals/">https://www.un.org/sustainabledevelopment/sustainable-development-goals/</a> Accessed on October 30, 2018.

<sup>16</sup> Available at: http://www.planalto.gov.br/ccivil\_03/LEIS/L9472.htm. Access on November 10, 2018.

<sup>17</sup> For distinct perspectives, see FARACO, Alexandre D. Regulação e direito

With regard to the extensive bulk of laws and regulations, the Digital Inclusion Programme was boosted by several projects, such as the Connected Citizen Project – Computers-For-All,<sup>18</sup> the One Computer per Student Project (PROUCA),<sup>19</sup>; the Telecentros.br Programme; the Broadband for Schools Programme (PBLE), the National Broadband Programme (PNBL),<sup>20</sup> and the special taxation regime for the National Telecommunication Broadband Network Programme (REPNBL),<sup>21</sup>, most of them approved under Dilma Rousseff's mandate. Here, legislative and

- concorrencial: as telecomunicações. São Paulo: Livraria Paulista, 2003, p.25 et seq; COUTINHO, Diogo R. *Direito e economia política na regulação de serviços públicos*. Editora Saraiva, 2017, p. 11 et seq.
- 18 See Decree No. 5.542 of 2005, establishing the Connected Citizen Project

   Computers for All.
- 19 See Decree No. 7.750 of 2012, which establishes the legal framework for the 'One Computer Per Student Project - PROUCA, and the Special Taxation Framework on Incentives to Computers for Educational Use - REICOMP.
- 20 Brazilian Ministry of Communications, 'Programa Nacional de Banda Larga' (National Broadband Plan), News release, May 25, 2015 <a href="http://bit.ly/UJ4JY6">http://bit.ly/UJ4JY6</a>. Accessed October 30, 2018. See also article: 'Em 2018, 70% dos brasileiros terão acesso à banda larga' (In 2018, 70 percent of Brazilians will have access to broadband), Portal Brasil, October 22, 2015, Available at: <a href="http://bit.ly/2bPJzpi">http://bit.ly/2bPJzpi</a> Accessed: October 30, 2018.
- 21 Law No. 12.715 of September 17, 2012. Available at: http://bit.ly/2c61xA3. Accessed: September 30, 2018. The Special Taxation Regime for Broadband was sought to complement the PNBL by encouraging investment in existing telecommunications networks to expand broadband and mobile internet capabilities and offer internet access to the population at equitable prices, coverage and quality. In early 2017, the government announced its intention to launch a national internet expansion plan linked to REPNBL, with the aim of increasing internet penetration to 75% of Brazilian households within the next two years. The project would convert fines collected from those companies into investments to expand broadband in geographically remote areas. See Ministério das Comunicações, Ciência, Tecnologia e Inovação, 'REPNBL –Início,' News release, March 11, 2013, http://bit.ly/1PtY0bv. Accessed: September 30, 2018. See also article: http://www1.folha.uol.com. br/mercado/2017/01/1853870-governo-quer-usar-multa-de-teles-em-plano-de-expansao-da-internet.shtml. Accessed: September 30, 2018.

regulatory designs played a pivotal role in paving the way for several public policy experiments in digital inclusion, ranging from the supply of hardware, software and internet access, to measures aimed at providing educational and technical training for individuals and groups on how to use and interact with new ICT and the internet.<sup>22</sup>

One should note, however, that the Brazilian Digital Inclusion Programme originally agreed on important broader objectives, such as the promotion of access to knowledge in the interests of science and education and the protection of governmental and civil society stakes, all of them conducive to the expansion of the use of internet, free software and open licenses.<sup>23</sup> In addition, the Programme was launched at a time when Brazil and Argentina were firmly supporting multilateral negotiations for the establishment of the WIPO Development Agenda in 2004.<sup>24</sup>

Even today, the agenda symbolises a renewed design for a policy and norm-setting framework devoted to a balanced approach between IP rightsholders and users' interests within the international intellectual property system.<sup>25</sup> It is constantly highlighted as a crucial field within

<sup>22</sup> See, for instance, relevant literature on the interfaces between digital inclusion, democracy and the promotion of human rights in SILVA, Helena et al. Inclusão digital e educação para a competência informacional: uma questão de ética e cidadania e cidadania. In: *Ci. Inf*, vol. 34, n. 1, 2005, p. 28-36. Disponível em: <a href="http://www.scielo.br/pdf/ci/v34n1/a04v34n1.pdf">http://www.scielo.br/pdf/ci/v34n1/a04v34n1.pdf</a>.

<sup>23</sup> See POLIDO, Fabrício B P and ROSINA, Mônica S G. Free Open Source Software and Creative Commons in Brazil: Mapping the Legal Framework of Alternative Intellectual Property Licenses. In: METZGER, Axel et all (ed.). Free and Open Source Software (FOSS) and other Alternative License Models. New York: Springer, 2016. pp. 77 et seq.

See, for instance, SILVEIRA, Sérgio Amadeu da. Inclusão digital, software livre e globalisação contra-hegemônica. In: Software Livre e Inclusão Digital. Sao Paulo: Conrad, v. 7, 2003, p. 11 e ss. Disponível em: <a href="http://files.lnandrade.webnode.com/200000338-b6087b8f60/Inclusaodigital\_1.pdf">http://files.lnandrade.webnode.com/200000338-b6087b8f60/Inclusaodigital\_1.pdf</a>

<sup>25</sup> See SUTHERSANEN, Uma. A2K and the WIPO Development Agenda:

the global intellectual property regime and ensures that states have discretionary powers over the implementation of intellectual property flexibilities in their national legal systems. Since then, the evolving digital inclusion debate has been also largely influenced by initiatives aimed at strengthening transparency and access to information by citizens, in particular, with regard to public administration sectors.<sup>26</sup> That debate also emphasises the promotion of education in the name of citizenship and human rights for individuals and communities, to ensure they are digitally included.<sup>27</sup>

One should not go back in time to better capture the main changes through which the digital inclusionary movement in Brazil had further undergone. Along with Brazil's continuing participation in diplomatic multilateral negotiations and multi-stakeholder rounds (for example, the World Information Society Summit and the Internet Governance Forum), the phases of drafting, approval and enactment of the Civil Internet Framework Act of 2014 ('Marco Civil da Internet'28) were conceived as a result of

Time to List the 'Public Domain'. In: *UNCTAD-ICTSD Project on IPRs and Sustainable Development*, Policy Brief N.1, 2008, p.1 et seq, DINWOODIE, Graeme B., and DREYFUSS, Rochelle C.. Designing a Global Intellectual Property System Responsive to Change: The WTO, WIPO, and Beyond. In: *Houston Law Review*, vol.46, 2009, p.1187 et seq.

- 26 See MARQUES, Francisco. Debates políticos na internet: a perspectiva da conversação civil. In: *Opinião Pública*, vol. 12, n. 1, 2006, p.164 et seq.
- 27 The programmes adopted under the existing digital inclusion policies strengthened those features, such as the Initiative 'One Computer for Citizen', introduced by the Decree No. 5.542/2005. See: www.planalto. gov.br/ccivil\_03/\_Ato2004-2006/2005/Decreto/D5542.htm. Accessed: September 30, 2018.
- 28 Full version of Marco Civil da internet: <a href="http://www.planalto.gov.br/ccivil\_03/\_ato2011-2014/2014/lei/l12965.htm">http://www.planalto.gov.br/ccivil\_03/\_ato2011-2014/2014/lei/l12965.htm</a> For an English translation, see: <a href="https://www.publicknowledge.org/assets/uploads/documents/APPROVED-MARCO-CIVIL-MAY-2014.pdf">https://www.publicknowledge.org/assets/uploads/documents/APPROVED-MARCO-CIVIL-MAY-2014.pdf</a>. Accessed: September 30, 2018.

the democratic process that led to the formulation of a three-tiered approach for digital inclusion – social, economic and developmental – which will be examined next. In view of this landscape, cultural, educational, and technologically driven goals – all of them forming the social order chapters of the 1988 Constitution<sup>29</sup> – are functionalised in the norms and principles related to the use of the internet in Brazil.

Despite of the ongoing debate surrounding the interpretation and application of the 2014 Marco Civil Act in Brazilian legal scholarship and courts decisions,<sup>30</sup> certain provisions of the Law establish goals to be attained in future by means of state actions, policies or further legislative initiative and are equally anchored in an inclusionary rationality.

Articles 26 and 27 of the Marco Civil, for example, recognise state duties in providing integrated education to educational practices 'for the secure, conscious and responsible use of the internet as a tool for exercising citizenship, promoting culture and technological development', as well as initiatives to foster culture and the internet as social tools, based on the promotion of digital inclusion, the reduction of inequalities in terms of access to information and communication technologies (ICTs), the stimulation of the production and the dissemination of national, digitally related content.

Furthermore, the balance of interests in the multistakeholder processes that are widely associated with internet regulation in Brazil have previously appeared to be

<sup>29</sup> See specifically Arts. 205 et seq of the Brazilian Constitution.

<sup>30</sup> See MEDEIROS, Francis; BYGRAVE, Lee A. Brazil's Marco Civil da internet: Does it live up to the hype? In: Computer Law & Security Review vol. 31, n.1, 2015, p. 120 et seq. For a critique on Marco Civil's legislative design, see TOMASEVICIUS FILHO, Eduardo. Marco Civil da internet: uma lei sem conteúdo normativo. In: Estudos Avançados, vol. 30, n.86, 2016, p. 269 et seq.

a common feature of the 2004 Digital Inclusion Programme, which subsequently gained the status of a 'public policy'.<sup>31</sup> Thus, the Programme can be seen as authentic public policy, irrespective of the succession of different governments and any conflicting ideological-partisan interests. Various reasons could explain this. First, one should note that Brazil has been relevant actor among the largest economies of the globe<sup>32</sup> and represents the fifth largest digital community to be connected to the internet worldwide.<sup>33</sup> Secondly, and despite all of the challenges and political setbacks on the domestic level, the country is actively engaged in the articulation of

- 31 In line with existing literature on political science and public administration and its interplay with constitutional legal theory, one could highlight that public policies adopted by states under the rule of law, regardless of political models and partisan disputes, should be guided by longstanding projects on basic demands accruing from citizenship and state issues, such as education, infrastructure, health, security, full employment, public finances, promotion of human rights. Most of them are related to the different ways how welfare is allocated and distributed across communities, regions and countries and depend on predictability and social participation, as democratic standards still matter in implementation of those policies. In the literature, see for instance, HILL, Michael; HUPE, Peter. Implementing public policy: An introduction to the study of operational governance. London: Sage, 2014, p.26 et seq. In Brazil, see particularly FREY, Klaus. Políticas públicas: um debate conceitual e reflexões referentes à prática da análise de políticas públicas no Brasil. In: Planejamento e políticas públicas, vol. 21, 2009, p.212 et seq.
- 32 According to recent data gathered by the World Bank and the Intentional Economic Forum, Brazil ranks ninth among the 10 largest economies in the world:<a href="http://www.worldbank.org/en/publication/global-economic-prospects">http://www.worldbank.org/en/publication/global-economic-prospects</a> and https://www.internetworldstats.com/sa/br.htm. Accessed:

  October 30, 2018.
- 33 Recent statistics maintain the position of considerable Brazilian participation; it is the fourth country in the globe for numbers internet users, having reached an estimated 123.21 million users in 2018. View data from Statista (2018): <a href="https://www.statista.com/topics/2045/internet-usage-in-brazil/">https://www.statista.com/topics/2045/internet-usage-in-brazil/</a> and WIS, <a href="https://www.internetworldstats.com/sa/br">https://www.internetworldstats.com/sa/br</a>. htm>, produced from research submitted by national authorities to the International Telecommunication Union. Accessed on: October 30, 2018.

initiatives for social, economic and educational inclusionary goals and national programmes aimed at complying with the United Nations Development Millennium Goals.<sup>34</sup>

A programme of action and clustered initiatives in the field of digital inclusion should be accompanied by a series of ancillary objectives, such as the improvement of key indicators for socioeconomic development and human development, the promotion of human rights and the reduction of disparities amongst emerging countries. A brief example may corroborate this claim, which is the 2004 Digital Inclusion Programme. As part of the macro-goal of 'Social Inclusion and Reduction of Social Inequalities', Law No. 11.012/2004 established the following related objectives for digital inclusion associated with social and economic inclusion:

- (i) combating famine with the purpose of eradicating it and promoting food and nutritional security, as well as ensuring inclusion and citizenship;
- (ii) promoting universal access, with quality and equity, to social security (health, welfare and social assistance);
- (iii) increasing the level and quality of education of the population, promoting universal access to education and protecting the country's cultural heritage;

<sup>34</sup> See information in RONDÓ, P. H. Brazil's Progress in Achieving the Millennium Development Goals. In: Journal of Tropical Pediatrics, vol. 54, n. 4, 2008, pp. 217–219; UNPD, Millennium Development Goals: National Monitoring Report. Brasilia: UNPD, Institute for Applied Economic Research and Secretariat for Strategic Planning and Investment, 2007. Available at: www.undp.org/content/dam/undp/library/MDG/english/MDG%20 Country%20Reports/Brazil/Brazil\_MDGReport\_2007.pdf. Accessed: September 30, 2018.

- (iv) reducing the vulnerability of children and adolescents with respect to all forms of violence and enhancing mechanisms for the enforcement of social and cultural rights in childhood;
- (v) promoting the reduction of racial inequalities, with an emphasis on the cultural value of ethnic groups;
- (vi) promoting the reduction of gender inequalities, with an emphasis on the value of different gender identities; and
- (vii) increasing access to information and knowledge through new technologies, with the *promotion of digital inclusion and the guarantee of critical training for users.* (emphasis added)

As noted above with regard to one of the main goals set forth by the Brazilian Digital Inclusion Programme, digital literacy, as a component of digital inclusionary practices, was a public concern in the design and implementation of digital inclusionary policies in the early 2000s. As broadly understood, digital literacy is seen as the set of skills and capabilities that enable the appropriate use of information and communication technologies and the actual construction of knowledge arising from those technologies, including the internet, computer systems and digital networks.<sup>35</sup>

<sup>35</sup> In the literature review, different approaches point to digital literacy as a component of the theoretical framing of digital exclusion and digital inequalities. Digital literacy refers to people's abilities and knowledge related to ICTs, and also to the capacity of internet users to properly understand the nature, scope and applications of digital and information technologies as part of their educational skills. It refers to a set of knowledge and skills related to using new information and communication technologies applied in a conducive matter. See, for instance, JAEGER, Paul T., et al. For the intersection of public policy and public access, see: digital divides, digital literacy, digital inclusion and public libraries. In: Public

The Brazilian Digital Inclusion Programme is related to a public policy that presumably admits the pervasiveness of digital literacy as a key concept guiding the recognition of digital inclusion as a social right. It is seen as capable of promoting 'new public policies focused on the skills and social practices needed for the formation of autonomous citizens in contemporary society'.<sup>36</sup>

Statutory law, therefore, considers how any measure taken in the field of access to information and knowledge through new technologies also has to be associated with education and literacy for users of new technologies. More interestingly, however, is the extent to which an integrated approach to digital inclusion has emerged as a core element of the envisaged policy. It is followed by, and is attached to, further relevant inclusionary goals. In a country with far-reaching acute social and regional disparities, as is the case with Brazil, digital inclusion could not be handled as a separate technical cluster or in a watertight fashion for social and economic inclusion and developmental goals.

In addition, digital inclusion is connected to principles enshrined in the 'economic order' chapter of the Brazilian Constitution. Any initiative in the field of digital inclusion, either from the perspective of businesses or consumers/ users, has to cope with the principle targeting the 'reduction of regional and social inequality' (Art. 170, VII). This would

Library Quarterly vol. 31, n.1, 2012, p.2. Although concerns about digital literacy are a significant component of the bridging of the digital divide, it would not suffice to explain the inadequacy of digital divide discourse for the designing of digital inclusionary policies. Essentially, digital literacy may help governments and policy makers to better comprehend the negative externalities in digital inclusionary policies, leading to the notion of 'digital exclusion' and potential metrics for measuring digitally-excluded communities.

<sup>36</sup> ROSA, Fernanda R. Digital Inclusion as Public Policy: Disputes in the Human Rights Field. In: *Sur - International Journal on Human Rights*, vol. 18, 2013, p.35.

not be different with regard to the omnipresence of past and present ICT and internet-related indicators. For example, in the early 2000s, data gathered by 'Mapa da Inclusão Digital', an authoritative research project conducted by Fundação Getulio Vargas, suggested that the inextricable relationship between rural and urban disparities in terms of access to the internet was an important indicator for digital inclusionary practices in Brazil.

In 2003, according to Cabral, 'only 8.31% of Brazilians had internet access in their homes and these are concentrated in urban areas in upper-middle class neighbourhoods. This reflects the digital façade of digital inclusion'.<sup>37</sup> Within a decade, the situation had dramatically changed with regard to the overall expansion of internet access in Brazilian domiciles and its distribution amongst lower classes. In its most recent recast, the survey 'Mapa da Inclusão Digital' indicated that the rate changed from 8.3% (2003) to 33% (2012), which placed Brazil at the top of the list of emerging countries for that period.<sup>38</sup>

### 3 A Three-tiered approach to digital inclusion: Social, economic and beyond

Inclusionary goals, as leading features of Brazilian social policies and programmes adopted since the 2000s,

<sup>37</sup> Sociedade e tecnologia digital: entre incluir ou ser incluída. In: *LINC in Revista*, vol.2., n.2, 2006, p. 111. Available at: http://revista.ibict.br/liinc/article/view/3103. Free translation from the original excerpt in Portuguese: '[...]somente 8,31% dos brasileiros possuem acesso à internet em suas casas e estes se concentram em áreas urbanas, nos bairros de classe média alta.

Traduz-se na face digital da inclusão digital'.

<sup>38</sup> See: FGV, Mapa da Inclusão Digital. São Paulo: Centro de Políticas Sociais, 2012. Available: https://www.cps.fgv.br/cps/telefonica/. Access on October 30, 2018.

have unquestionably served as catalysts for the further dissemination of a human rights-driven agenda for digital inclusion at a domestic level, and in the related civil, political, social, economic and cultural domains. Following the enactment of the 1988 Constitution and the prominence of rule of law and democratic standards, Brazil undertook further commitments at an international level, either by the conclusion of multilateral and regional human rights treaties or by the late ratification of pre-existing instruments in that field.<sup>39</sup> Hence, any governmental action related to social and digital inclusion would invariably target policy issues guided by the real operation, effectiveness and enforcement of human rights norms in Brazil.

The same practical result occurred with the 2004 Digital Inclusion Programme, which envisaged a proper terrain for attaching policies related to information and communication technologies, education, science and technology to further

<sup>39</sup> For instance, see the American Convention on Human Rights, adopted at the Inter-American Specialised Conference on Human Rights, San José, Costa Rica, as of November 22, 1969, and incorporated into the Brazilian legal system by the Decree No 678, as of November 6, 1992; the International Covenant on Civil and Political Rights, adopted by

UN General Assembly Resolution N. 2.200 A (XXI), as of December 16, incorporated into the Brazilian legal system by Decree No 592, as of July 6, 1992. According to Art. 5(2) and 5(3) of the Constitution and the leading opinion based on Supreme Court case law and legal scholarship, Brazil has a dual hierarchical system for international instruments - treaties and conventions - dealing with human rights within municipal law. Human treaties ratified and subjected to the specific approval by 3/5 of the Members of the two Houses of the National Congress shall integrate domestic legal systems at the same level of amending constitutional rules. Further human rights treaties which are not subject to the special procedure set forth by Art. 5(3) of the Constitution (approval of 3/5 of Members of the two Houses) shall have supra-legal character, being placed between constitutional and infra-constitutional norms. See landmark decision of Brazilian STF in Albuquerque v. Bradesco S.A., RE 466.341-1-São Paulo, decision as December 6, 2008 (affirming generally the supra-legal character of human rights treaties).

goals that promote human rights and eradicate poverty and regional disparities. In its original formulation, the programme attempted to cope with the existing claims for social and economic inclusion advocated by neglected groups in Brazilian society, without itself constituting pure governmental aid or a subvention plan, and for which it could have been improperly criticised by adversarial politicalpartisan interests. Rather, the programme aligned itself with the goal of implementing social policies for broader coverage, in particular, in different regions across the country. Those policies have also been associated with the expansion of social care services, with quality and the guarantee of priority access for those segments traditionally excluded from the benefits of public actions or segments affected by social and racial discrimination. 40 According to the programme's main rationale, 'the effective universalisation of basic social rights requires the creative implementation of a set of measures aimed at: (...) (iv) promoting a differentiated service for the most vulnerable groups through income transfer, policies, urban and digital inclusion'.

One could argue, therefore, that a dual approach of inclusion – one that is both social and digital – could be derived from the progressive development of the Brazilian digital inclusionary policies. However, such policies are also of an economic nature. They are focused on developmental objectives, the gradual elimination of regional disparities and the stimulation of local industry. Digital inclusionary policies are also adopted as measures to foster domestic innovation systems by providing them with endogenous conditions to encourage industry sectors to supply products and services, such as in information and communication technologies sectors. In other words, digital inclusionary policies may

<sup>40</sup> See for instance, Annex I of Law 10,933 of August 11, 2004.

have the potential to induce innovation by recognising the existence of effective demand in neglected markets and social environments, particularly where access to information – or, broadly, knowledge goods – is lacking.

Once again, the rationale underlying the Programme, according to the provisions of Law No. 11.012/2004, contemplates complementary societal concerns embedded in public policies. The Programme conceives access to information as related to three different dimensions – technological, educational and cultural:

"(...) a public policy for social and digital inclusion should consider three distinct and complementary dimensions as essential aspects of access to information.

One is the technological dimension, according to which access to information means the availability of technologies and means of access. Digital television will allow technological convergence, virtually nullifying the differences between broadcasting and telecommunications.

Educational dimension must support and ensure people's skills to use the means and technologies and transform information into knowledge. The educational aspect covers basic educational issues – reading and writing – and the use of information technologies.

And the cultural dimension should be concerned with the content made available to ensure effective access to information – most of the content in internet is still in English – and shall guarantee the cultural preservation of local communities and of Brazilian society. The information covers different contents: economic, political, artistic-cultural, entertainment etc".<sup>41</sup>

This short excerpt, which appears to be a simple transcription of the annexes of the 2004 Act, actually reveals and revives a considerable sample of the contemporary debate on digital inclusionary policies. It articulates the

<sup>41</sup> Idem, Annex I, Law No. 10.933 of 2004.

several fronts and paths of investigation as to how digital inclusion, the digital divide and digital exclusion are intertwined.<sup>42</sup> Each of them may be relevant to the existing profiles of digital native communities across the globe, such as those flourishing in the Global South and structured among important global actors, such as Brazil, China and India. Nevertheless, they are confronted with striking asymmetries imposed on local communities and regions, mainly in those areas across the globe where digital illiteracy is still a common denominator, contrasting with existing indicators of digital literacy in the Northern Hemisphere, for instance.

The literature covering that topic specifically resorts to a recurrent reference to 'digital inequality'. 43 This term

<sup>42</sup> Once again, as to the rationale for the implementation of the Brazilian Digital Inclusion Programme (Annex II, Act 2004), digital literacy and digital exclusion related issues mirrored concerns raised by specialists and scholars, such as in the fields of political science, education, sociology, social communication and media. The text of Law No. 10.933 highlights 'increase[d] access to information and knowledge through new technologies, promoting digital inclusion and ensuring the critical training of users. Information is a strategic social resource to the creation of wealth and well-being. Access to information is an essential condition for the construction of democracy, the creation of opportunities, the production and distribution of wealth. The more universal and plural the access to information is, the more democratic the society, the more competitive the economy. Both universality and plurality of access to information correspond to the objective of providing suitable means for citizens, communities, institutions and businesses, cultural, economic and technical conditions for production and communication of information, ensuring the necessary return' [free translation].

<sup>43</sup> VERDEGEM, Pieter. Social media for digital and social inclusion: challenges for information society 2.0 research & policies. Triple C: Communication, Capitalism & Critique. In: Journal for the Global Sustainable Information Society, vol.9, n.1, 2011, p. 28 et seq.; RAGNEDDA, Massimo; MUSCHERT, Glenn W. (ed.). The digital divide: The internet and social inequality in international perspective. London: Routledge, 2013; NEMER, David; GROSS, Shad; TRUE, Nic. Materialising digital inequalities: the digital artefacts of the marginalised in Brazil. In: Proceedings of the Sixth International Conference

is deployed to (re)define asymmetries and disparities with regard to existing linkages between access to information, knowledge and digital literacy. One could argue that consensus surrounding digital inequality represents the improvement of the theoretical and empirical understanding of the gulf between citizens in and the exclusion of citizens from contemporary digital society. Digital inequality expresses nothing more than the very projection and reproduction of socioeconomic and regional inequalities in social spheres integrated by information and communication technologies, thus significantly affecting the actors and structures of the global knowledge society.

The 'digital unequal(s)', therefore, constitute the excluded, those who at the margins not only of technological and informational inclusion in a narrow sense, but who are also - - more intensively - deprived from educational opportunities and digital literacy, participation in economic life (for instance, the access to goods and services in the digital economy and the possibility of engaging in business activities or work in the area) and participation in political life. In sum, digital unequal(s) are those individuals and groups who encounter severe difficulties or barriers to the full enjoyment of the most basic civil and political rights or who are even constrained in terms of expressing their respective cultural identities in a networked society. And a networked society, today, is anchored in a set of knowledge arrangements, skills and applications of technologies by individuals and groups.

on Information and Communications Technologies and Development.Vol.2. ACM, 2013. p.108 et seq; ROBINSON, Laura, et al. Digital inequalities and why they matter. In: Information, communication & society, vol. 18, n. 5, 2015, p. 566 et seq. RAGNEDDA, Massimo. The third digital divide: a Weberian approach to digital inequalities. London: Routledge, 2017, p.15 et seq.

### 4 A universalist approach to internet access and digital inclusionary policies

The outline provided above may suggest, in very concise terms, how access to the internet and ICT tools, technical training and capacity-building courses, broadband expansion in households – either in rural or urban areas – do not suffice to bridge the digital divide or reduce digital imbalance. Governmental programmes based on the supply of subsidised personal computers, tablets or smartphones or differential pricing policies for the acquisition of ICT-related equipment would be merely palliative responses to the real demands that have originated from the neglected, excluded and marginalised parts of society.

The success of any set of digital inclusionary policies and practices depends more on the converging actions adopted within the fields of civil, political, social, economic and cultural inclusion. In addition, such policies would be suitable for addressing the narrowing of actual gaps that inexorably affect a variety of interactions among spaces, actors and institutions in unequal societal settings: from the centre to the periphery, from the administration and governmental bodies to the individuals and communities, from the rule of law to those who are entitled to human rights in relation to information and knowledge.

Should the above argument be taken to the extreme, then digital inclusionary policies could not be detached from ultimate goals related to the affirmation, enjoyment and enforcement of human rights, particularly in line with the roles played by the distinct actors (and distinct stakes) in a knowledge society. Few doubts appear to exist with regard to the evidence that a knowledge society, as a

conceptual framework and symbolic space for interaction, is unquestionably affected by profound inequality.<sup>44</sup>

The current debate on the validity and legitimacy of internet usage statistics and the universalisation of internet provision services in Brazil, either by fixed or mobile broadband, for example, also unfolds the opacities of digital inclusion/exclusion intersectionality. To a certain extent, statistics and indicators turn to the onslaught of lobbies and business interests of big telecommunication companies and internet giants, all of them focused on the expansion of business activities in markets for digital products and services. Some recurrent deadlocks at the national level, for instance, concern various political views and choices echoing the 'modernisation pattern' needed for the regulatory framework of telecommunications and internet services in Brazil. They represent what, precisely, is behind the current legislative process to amend the General Telecommunications Law of 1997 ('GTA'). As the contentious discussion stands today, the distinct approaches for the modernisation of regulatory policies coming from the government, companies and civil society organisations have been at the heart of the controversies surrounding the Bill No. 79/2016 amending the GTA.<sup>45</sup>

<sup>44</sup> RAGNEDDA, Massimo. *The third digital divide,* cit., p.15 ss., remarks that even from the standpoint of sociological analysis, existing conceptual frameworks on digital inequality identify the extremes and contrasts of social stratification. From this perspective, online inequalities may go beyond economic elements of inequality, such as access to credit, finance and consumer relations around the digital economy and in highly industrialised countries. Disparaging aspects, such as those of cultural and political natures, are also recurrent amongst certain digitally-excluded groups.

<sup>45</sup> Bill N. 79/2016 amending Law No. 9.472, as of July 16, 1997, to allow the adaptation of telecommunications concession services for authorisation regime, Law N. 9.998, as of August 17, 2000. Text available at: <a href="https://">https://</a>

One should look critically at the reform of the 1997 Act and its relationship with fundamental policies on digital inclusion. Existing statutory law in Brazil does not consider access to the internet as a telecommunications service, which would be susceptible to becoming universalised as an essential service or public utility service. In this sense, internet services would not fall within the scope of application of the General Telecommunications Act for the purpose of universalisation and regulatory goals.<sup>46</sup> Nevertheless, the advent of the internet as an actual essential service in the late 1990s turned out to be largely associated with the public demand and civil society engagement for the expansion and use of mobile broadband – for example, personal mobile service – and fixed broadband, as a way of increasing existing internet penetration rates across the country.

According to data gathered by the Brazilian Telecommunications Agency, Anatel, in its Annual Report 2017, 42% of Brazilian households have access to broadband.<sup>47</sup> For the same period, the Internet Steering

www25.senado.leg.br/web/atividade/materias/-/materia/127688>. Access on October 10, 2018. English Version provided by ANATEL at: http://www.anatel.gov.br/legislacao/en/laws/608-law-9472 (herein 'Bill No. 79/2016')

<sup>46</sup> See Law No. 9.472/1997, specially Art.60 et seq. The existing case law in Brazil refers to the internet as a value added service, falling within the scope of Art. 61 of the Law ('[A] value-added service is [an] activity that adds value to the telecommunications service that supports [the] same, and with which new features related to the access, storage, presentation, handling or recovery of information').

<sup>47</sup> ANATEL, RA17 – Annual Report 2017. Available: http://www.anatel.gov.br/institucional/noticias-destaque/2001-relatorio-anual-de-2017-esta-disponivel-no-portal-da-anatel. Last access: October 10, 2018. The Brazilian Federal Court of Accounts – TCU, by its turn, presented a preliminary study structured by reports and documents submitted by managers and specialists involved in a special research unit, with the purpose of knowing and selecting, in a more effective way, the related control actions to the digital inclusion policy at a federal level, also subject to further periodical audits ((in Portuguese *Digital public inclusion policy*: Brasilia:

Committee found that 69% of Brazilians had already accessed the web, but that there were major disparities regarding broadband expansion and internet penetration rates.<sup>48</sup> For instance, 72% and 49% urban and rural areas, respectively, have broadband subscriptions. Furthermore, social groups "DE" (lowest incomes) and "A" (highest incomes) amount, respectively, to 46% and 96%, which shows the considerable disparities in different social segments in Brazilian society. On the other hand, individuals with higher education are at 98% compared to 56% for those with only a basic education.<sup>49</sup>

There is another aspect related to internet penetration and internet expansion in the country that deserves attention. The counter movement to the universal service approach to access to the internet in Brazil - strengthened by the UN Human Rights Council and General Assembly resolutions on recognition of the access to internet as a human right in recent years (Section 5 below) - resulted in a significant pressure for structural and institutional changes in the domestic telecommunications sector, particularly in the second quarter of the 2000s. Basically, they claimed that internet services have to become universalised through broadband expansion and affordable broadband provision in all five of the macro-regions of the country. Corporate interests, in turn, have been largely opposed to the allegedly 'excessive' legal obligations established by the 1997 Act, most of which were considered vital for the successful universalisation of goals targeting telecommunication services in the last two decades.

TCU, 2015, p.1-76, available at: <a href="https://portal.tcu.gov.br/lumis/portal/file/fileDownload.jsp?fileId=8A8182A15005860201501F69C07E6B0A">https://portal.tcu.gov.br/lumis/portal/file/fileDownload.jsp?fileId=8A8182A15005860201501F69C07E6B0A</a> & inline = 1>. Accessed: October 30, 2018.

<sup>48</sup> TIC Domicílios 2017. Available at: <a href="https://cetic.br/pesquisa/domicilios/indicadores">https://cetic.br/pesquisa/domicilios/indicadores</a>. Accessed: October 30, 2018.

<sup>49</sup> Idem.

More recently, however, telecommunication companies have succeeded in lobbying the majority of the House of Representatives for a distinct approach to the modernisation of the 1997 General Telecommunications Act by the Bill No. 79/2016, which was considered extremely beneficial to Media and Telecommunication sectors in Brazil. Such companies avoided any policy design for universal access to the internet by obligation in respect to the expansion of broadband services<sup>50</sup>.

The pending legislative proposal before the Brazilian Senate is now surrounded in uncertainty. It has also been challenged by legal actions filed by some political parties before the Supreme Court based on the grounds of a violation of the rules of procedure in the legislative process. The Bill No. 79/2016 was subject to a preliminary motion issued by the Supreme Court ordering the Senate's in-house commissions to discuss the legislative matter again in the first session of 2018.<sup>51</sup> In its current iteration, however, the bill gives no sign of being responsive to the existing demands raised by internet users and civil society for the universalisation of internet access in Brazil.

The major carriers in Brazil are Oi, Vivo and Tim (thus, a notable oligopoly) and they recurrently go for large corporate transactions and restructuring plans, exchange of shares with foreign investors and companies and make further financial arrangements which are technically designed to rationalise operations and expand business units in Brazil. Critically, see ANASTACIO, Kimberly et al, Texto de posição sobre reforma da Lei Geral das Telecomunicações e o Projeto de Lei no 3.453/2015. Position Paper on Reform of Brazilian submitted by Beta Institute and the Brazilian Institute for Consumer Protection – IDEC, July 2016. Available: <a href="https://goo.gl/PexdHs">https://goo.gl/PexdHs</a>, Accessed: October 30, 2018.

<sup>51</sup> REUTERS, 'Brazil Supreme Court sends telecom bill back to Senate',
October 6, 2017, available:

<sup>&</sup>lt;a href="https://www.reuters.com/article/brazil-telecom-regulation/brazil-supreme-court-sends-telecom-bill-back-to-senate-idUSL2N1MH0P6">https://www.reuters.com/article/brazil-telecom-regulation/brazil-supreme-court-sends-telecom-bill-back-to-senate-idUSL2N1MH0P6</a> Accessed: October 30, 2018.

Although I strongly contend that internet access and internet penetration rates, alone, are not predominant indicators for tackling sensitive issues related to digital inequalities and digital imbalance in Brazil, the routes towards the gradual universalisation of internet access and its human rights-compliant approach may be essential for building what I call a 'sustainable global digital agenda'. It is firmly based on the effectiveness of laws and regulations in implementing social, economic and digital inclusionary practices, all of which are also related to the strict rule of law in the design of a set of rights and obligations for digital inclusionary stakeholders.<sup>52</sup>

In addition, in view of the opportunities unlocked by interdisciplinary legal studies and policy formulations, a global digital agenda shall not be framed by troublesome generalisations. Most of these opportunities may be obfuscated by traditional diplomatic or multi-stakeholder negotiations

<sup>52</sup> With regard to Brazilian law specifically, a number of rights and obligations related to those who I am here calling 'digital inclusionary stakeholders', for instance, were already established by Marco Civil da Internet of 2014. However, they refer primarily to the extreme poles of the economic chain in digital markets: civil rights for internet users, also taken as consumers in specific circumstances, and civil liabilities to internet providers and internet companies carrying out business activities within internet and IT markets. The 'infant' character of this important piece of statutory law for internet regulation in Brazil still pleads, however, for a deep, engaged and responsible scholarly debate at a domestic level, which is able to guide courts, legislators and governmental bodies in the necessary articulation of a public policy centred on digital inclusionary practices. For instance, how can we determine the internet user's right to informational autonomy vested in access, collaboration and freedom of expression (Arts. 2, 3, and 4 of Marco Civil), without the proper scale of digital inclusionary policies attached to social, economic and developmental concerns? How can we effectively ensure that courts will construe the Marco Civil's provisions in a manner that strikes a balance of interests between users and internet companies? What is a reasonable time frame for undertaking an exercise of reviewing the most controversial provisions of the law in their effectiveness and concrete application by domestic courts?

inside or outside intergovernmental organisations, such as often occurs in the realm of internet governance. The persuasive powers formally legitimised by most indicators as to universal approach on access to the internet may be hiding the actual needs of regions and countries which effectively lack the public policies and institutional designs devoted to bridging the so-called digital divide.<sup>53</sup>

## 5 Digital environments, digital inclusion and human rights

Apart from the current indicators and statistics on internet access, which show radical changes in the perception of the internet as an economically valuable good in digital markets in general, the emergence of a human rights-driven approach, as promoted by the United Nations since the World Summit of the Information Society in Geneva in 2003, has strengthened the ambiguities of the access narrative.<sup>54</sup> Indeed, the global movement that promotes the affirmation

<sup>53</sup> POLIDO, Fabrício B.P. Digital divide, digital inclusion and their hidden inconsistencies: How Big Data, laws and regulations can deepen the critique on the 'access to internet' discourse (forthcoming, 2020).

The most recent relevant normative instrument within the United Nations may be illustrated by the 2016 UN Human Rights Council Resolution which declares that online freedom is a human right and must be accorded a proper level of protection by UN Member States (see. A/HRC/32/L.20 -The promotion, protection and enjoyment of human rights on the internet, Resolution adopted on July 4, 2016, available at: <a href="http://digitallibrary.un.org/record/845728?ln=en">http://digitallibrary.un.org/record/845728?ln=en</a>). Basically, the Resolution follows the consistent approach taken by the United Nations in past years, condemning equally the intentional disruption of internet access or content filtering by governments and organisations. The Resolution points to the importance of 'applying a comprehensive human rights-based approach when providing and expanding access to the internet and for the internet to be open, accessible and nurtured'. Some countries, however, are strongly opposed the Resolution, such as Russia, China and South Africa.

of the right of access to the internet and to information as fundamental rights related to the online environment has gradually induced states to treat the subject with political and legal standards. That is to say, the internet is not purely a service to be offered collectively to individuals (the 'universalisation' approach). The human rights-driven approach has also paved the way for strengthening business strategies to expand and diversify business models related to ICT and internet industries and reinforce the reliance on global indicators, such as was expressed by the 2016 World Bank 'Digital Dividends' report.<sup>55</sup>

Internet industry-related outputs are highly valued commodities – goods and services – in a digital economy. As with the vast majority of social, economic and cultural rights that are related to information and knowledge, benefits may accrue from the expansion of internet usage worldwide, such as with regard to online educational platforms, the integration of libraries, the emergence of collaborative research networks and communities and access to public services in general.<sup>56</sup> Although one could contend

<sup>55</sup> WORLD BANK, World Development Report 2016: Digital Dividends – An overview. Washington, DC: International Bank for Reconstruction and Development, 2016. Available at: <a href="http://www.worldbank.org/en/publication/wdr2016">http://www.worldbank.org/en/publication/wdr2016</a>. Accessed: October 30, 2018. The report shares the view that digital dividends consist in the 'broader development benefits from using digital technologies'. In the report's executive summary, digital dividends are explained by the following entry: 'Growth, jobs, and services are the most important returns to digital investments. The first three chapters show how digital technologies help businesses become more productive; people find jobs and greater opportunities; and governments deliver better public services to all'.

<sup>56</sup> Idem, p.5 et seq. Also, according to the World Bank 2016 Report: 'the full benefits of the information and communications transformation will not be realised unless countries continue to improve their business climate, invest in people's education and health, and promote good governance. In countries where these fundamentals are weak, digital technologies have

that this was a natural movement in the digital economy, negative externalities are also derived from the service universalisation approach.

The recent Brazilian E-Digital Strategy is no different. As a governmental action targeting 'digital transformation', the recent plan does not withstand a certain degree of criticism and scrutiny. First, it fails to contemplate an integrated conception of structures that inform inclusionary practices in digital environments combined with entrepreneurial environment goals that are adjustable to the needs of the digital economy. The E-Digital Strategy seems to do little to review or add to past experiences of the national industrial and technology policies and the business pillars of the Brazilian Digital Inclusion Programme. It is not a policy aimed at strengthening a social-economic-developmental approach for a comprehensive national digital agenda.<sup>57</sup>

not boosted productivity or reduced inequality. Countries that complement technology investments with broader economic reforms reap digital dividends in the form of faster growth, more jobs and better services'.

The E-Digital Strategy points to the proposal of constitution of a 'single digital market' in Latin America, mirroring the similar process underway in the European Union, which are fundamentally anchored in a marker-oriented approach and supported by the existing EU rules and institutions. The Brazilian E-Digital, however, does not clarify whether a 'Latin American Single Digital Market' would be established without a comprehensive institutional regional economic integration framework, even though it is recognised that Brazilian companies, in particular, are suppliers of a significative portion of the digital consumer market in the region. The E-Digital Strategy reads: 'This [single digital market in L.A.] can be an exceptional economic opportunity for the country, opening markets to Brazilian products, projected through digital platforms and marketplaces, coupled with comparative advantages in delivery logistics in the region. One of the focuses of the Brazilian Strategy for Digital Transformation will be on digital platforms and marketplaces. Brazil is responsible for 39% of the volume of electronic commerce throughout Latin America. The importance of this segment of the digital platforms market for e-commerce tends to grow along with the integration and value chain processes in Latin America' (see. E-Digital Strategy, p.57, free translation). Although the basic document released by the Executive Branch in March 2018 sets out concerns about the E-Digital Strategy's potential for the exercise of civil and political rights (such as freedom of expression, freedom of the press, freedom of reunion and association and rights of access to information and non-discrimination), it does not cover the existing views on internet governance, as it occurs within the universalist and indivisible conceptions of human rights in terms of the right to internet access.<sup>58</sup>

Furthermore, the rationale underlying the Brazilian E-Digital Strategy overlooks other relevant fields which would also be combined with the broader goals of digital transformation micro-policies in terms of market structure and industrial organisation. To a certain extent, there are few doubts that the same lobbies that have prompted the majority of representatives in the National Congress to pass the bill for an amendment of the 1997 General Telecommunications Act<sup>59</sup> are now devoted to purely fostering corporate interests in the supply of digital services in ICTs and internet markets. However, such a compromise streamlined with universalisation goals in favour of access to the internet is quite uncertain. It fails to consider the balance of interests or address the demands of users and citizens.<sup>60</sup>

<sup>58</sup> E-Digital Strategy, p.34.

<sup>59</sup> Bill N. 79/2016 on the Amendment of the General Telecommunications Act of 1997.

<sup>60</sup> I am recalling here the internet governance approach supported, for instance, by the Electronic Frontier Foundation, which advocates that fair processes are embedded by 'the characteristics of inclusion, balance, and accountability', would lead to optimal outcomes for the norm-setting and policy formulation for the Net. See EEF, *Is Multi-Stakeholder internet Governance Dying?*. December 20, 2017. Available at: <a href="https://www.eff.org/deeplinks/2017/12/multi-stakeholder-internet-governance-dying">https://www.eff.org/deeplinks/2017/12/multi-stakeholder-internet-governance-dying</a>.

Accessed: October 30, 2018.

The new E-Digital Strategy could have enjoyed more success in terms of public appeal and could even have gone beyond a pro-OECD, norm-setting formulation aimed at boosting efficient structures for digital economic growth on a global scale. The drafters of the Brazilian document did not make clear, for example, which goals would be essential to the full meaning and achievement of the 'corporate success' of any digital transformation strategy in the country. Instead, they neglected the profound distinct views of a corporate innovative stimulus and expansion of strategic investments in the internet and IT industries. One could also highlight another distinctive aspect here. The document completely ignores the urgent need for eliminating the longstanding bureaucratic bottlenecks affecting the competition and performance of economic agents that are mostly interested in expanding the supply of digital products and services in profitable Brazilian markets.<sup>61</sup>

Such bottlenecks, I contend, are strongly attached to the complex institutional and legal frameworks on administrative, corporate and tax matters, most of which have been in existence and operation in Brazil since the 1960s and 1970s, and which were created by experts and jurists commissioned by the military regime (1964–1985). Subsequent governments simply adhered to those structures on all three levels of the federation (federal, state and municipal) and completely failed to change them, despite

<sup>61</sup> For instance, the Annual Report *Doing Business 2018*, produced by the World Bank, placed Brazil in at 125 out of 190 countries. The report evaluates the main requirements for starting a business, incorporating companies, dealing with administrative permits, registering property and paying taxes. According to the Report's recent figures, it takes 11 procedures and around 90 days of work to initiate a business in Brazil and construction permits demand an average 20 procedures and 404 days to finally get clearance. See: World Bank, Doing Business 2018. Available at: <a href="http://www.doingbusiness.org/en/data/exploreeconomies/brazil">http://www.doingbusiness.org/en/data/exploreeconomies/brazil</a>

the modernisation movement proposed by the 'Reform of State' in the 1990s. In sum, there is nothing more liberal, conservative, or socially regressive in Brazil than one could dream about, particularly when legal and cultural changes are at stake in the country.

Annex I of Decree No. 9.319/2018 establishing the goals of E-Digital Strategy highlights the desirability of governmental policies to 'reform, unlock and decrease' bureaucracy associated with the digital economy in Brazil. Nevertheless, the new policy targets sectors – IT and internet industries and consumer markets – could not be developed without the necessary articulation between public policies, administrative reforms and investments. Public investments, in particular, have significantly declined at a national level, especially after the implementation of the Constitutional Amendment No. 95 ('PEC 95'), leading to sensitive budgetary cuts in several areas, such as education, science, technology and innovation. 62

Designed based on no public debate, PEC 95 was passed by the National Congress in December 2016, as

<sup>62</sup> Full text of PEC 95/2017 available at: <a href="http://www.planalto.gov.br/ccivil\_03/">http://www.planalto.gov.br/ccivil\_03/</a> constituicao/emendas/emc/emc95.htm>. Accessed: October 30, 2018. According to an official note: '(...) The measure makes it possible to create the necessary conditions for Brazil to start growing and generate employment and income again. The new rules are in force for 20 years, with the possibility of a review after 10. With the spending cap, the government prevents the uncontrolled rise of public expenditures, reverts the rising deficit trend, generates credibility and trust in the Brazilian economy again and puts Brazil back on the path to growth. Beginning in 2018, federal expenditures will only be allowed to increase by the accumulated rate of inflation of the previous year, as informed by the National Consumer Price Index. Government agencies who spend above their established ceiling will not be able to increase wages, hire personnel. or create new expenditures or offer fiscal incentives (in the case of the Executive) in the subsequent years'. See: BrazilGovNews, National Congress promulgates spending cap amendment, December 18, 2016: <www.brazilgovnews.gov.br/news/2016/12/national-congress-promulgates-</p> spending-cap-amendment>. Accessed: October 30, 2018.

the last legislative event before the official holidays of the Senate and House of Representatives. As consistently publicised in different national and international platforms, the amendment was passed in an expedited fashion under a massive austerity campaign for budgetary cuts promoted and endorsed by the executive power, headed by Michel Temer. The changes in the Constitution then brought more uncertainty to the country's fragile economic agenda, with little evidence about the effectiveness of the adopted measures.<sup>63</sup> Furthermore, according to different expert views, PEC 95 induced a risky scenario for Brazil in terms of the non-compliance of existing obligations under international human rights law.<sup>64</sup> It appears, therefore, that

<sup>63</sup> Vox, Brazil just enacted the harshest austerity programme in the world, Dec 15, 2016. Available at: <a href="https://www.vox.com/world/2016/12/15/13957284/">https://www.vox.com/world/2016/12/15/13957284/</a> brazil-spending-cap-austerity> Accessed: October 30, 2018. Bárbara MENDONÇA, (Un) Constitutional Amendment No. 95/2016 and the Limit for Public Expenses in Brazil: Amendment or Dismemberment?: <a href="https://www.iconnectblog.com/2018/08/unconstitutional-amendment-no-95-2016-and-the-limit-for-public-expenses-in-brazil-amendment-or-dismemberment/">https://www.vox.com/world/2016/12/15/13957284/</a> brazil-spending-cap-austerity> Accessed: October 30, 2018.

For an overview of the topic, see the critical and illustrative note issued 64 by Prof. Philip ALSTON, Some reflections on Brazil's approach to promoting austerity through a constitutional amendment. Remarks prepared for presentation at Colloquium on Constitutional Austerity, Sao Paulo, 3 October 2017. Available at: https://www.ohchr.org/Documents/Issues/ Poverty/Austeritystatement\_Alston3Oct2017.pdf: In Brazil, see the comprehensive Report drafted by the National Network of Human Rights' Civil Society Organisations on the Impacts of Economic Austerity Policies on Human Rights. Full text: <a href="http://austeridade.plataformadh.org.br/">http://austeridade.plataformadh.org.br/</a> files/2017/11/publicacao\_dhesca\_baixa.pdf>. Accessed: October 30, 2018 ('While there is no specific limitation contained in EC-95 on spending on specific budget areas that are of most relevance from the perspective of economic and social rights, such as health care, education and social security, an overall federal spending cap will undoubtedly result in retrogression with regard to the realisation of economic and social rights. If the realisation of economic and social rights is reliant on public expenditure, and the size of the total public budget is not allowed to grow (except for inflation) for the next 20 years, logic dictates that it is virtually inevitable that the progressive realisation of economic and social rights becomes

even the main E-Digital Strategy goals, focused on 'data-driven economy', 'connectivity' 'new business models', will hardly be achieved in such a discouraging macro-economic environment.

Likewise, little attention has been paid to the reversibility of access and educational policies that allow Brazilian citizens to consistently engage in a movement for the full enjoyment of fundamental rights associated with information and knowledge about digital networks. Except for what is left from the 2004 Digital Inclusion Programme and proposals on access to physical internet infrastructure by broadband services, there are no current concrete plans or projects to reduce persistent 'digital inequalities' across the country.

Digital inequalities are actual representations of the asymmetric patterns in the Global South in terms of digital exclusion.<sup>65</sup> In the case of Brazil, digital inequalities correspond to those exemplified by the large digital native community, serving as providers of 'raw data' and informational resources for large companies and the government. Such patterns represent the best example of the hidden inconsistencies of Big Data processes and narratives in digital unequal societies.<sup>66</sup> The 2018 E-Digital

impossible. Only exceptional circumstances, such as a sudden and significant decrease in the size of the population or the complete elimination of the budget for non-social spending (such as military spending) would allow for progressive realisation of these rights'.)

<sup>65</sup> For distinct perspectives, see WARSCHAUER, Mark. *Technology and social inclusion: Rethinking the digital divide.* MIT Press, 2004, p. 36 et seq (contending that social and educational inequalities do matter in the case of digital inclusionary practices for developing and less developed countries, where digital literacy may not depend solely on access to computer or ICT tools).

<sup>66</sup> POLIDO, Fabricio B.P. Digital divide, digital inclusion and their hidden inconsistencies: How Big Data, laws and regulations can deepen the critique on the 'access to internet' discourse. (forthcoming, 2018)

Strategy, in turn, is based on simplistic goal targeting; for example, 'IT education in basic education', 'new technologies as educational tools' and 'skills for new careers and jobs of the future'. They lag behind a number of related digital inclusionary goals, which would be essential for a pervasive digital transformation.

Finally, Executive Decree No. 9.319/2018 clearly shifted the legal design for digital inclusion by removing any reference to the macro-objectives of social inclusion of the existing Program, as established by Law No. 11.012/2004. The main axis of the 2018 E-Digital Strategy is centred in 'infrastructure and access to information and communication technologies'. This major shift in policy may ultimately represents a setback. Digital inclusion and digital transformation by mere physical access to ICTs have been highly contested by international and domestic public policies and practices. The afore-mentioned concerns demonstrate that digital inclusion and related practices are hardly translated by indicators of connectivity, access to ICTs and digital product and service markets.

## 6 What does the Brazilian E-Digital Strategy mean and what are the opportunities ahead?

The Brazilian 2018 E-Digital Strategy came out with many promises but upheld few of them. This is likely due to both pessimistic and realistic scenarios in Brazil. The country has been experiencing economic setbacks related to a lack of public and private investments several fields and in infrastructure and society. In addition, the overall mistrust within society is reflected by the post-radical expenditure cuts imposed by governmental measures endorsed by Constitutional Amendment No. 95/2017. Such cuts strongly

affected basic sectors and resulted in the retraction of policies and governmental programmes in the fields of education, health, infrastructure, science, technology and innovation. In this sense, specialists in Brazil contend that the negative scenario also contributes to the demobilisation of civil, political and social engagement, with negative consequences for full citizenship prerogatives.

The situation is no different for other sectors in Brazil, which are constantly confronted with weak indicators to support sound innovative activities at a domestic level.<sup>67</sup> Aside from a few exceptions that could overcome the predominance of agribusiness-driven policies in the national economic landscape (largely characterised by oligopoly, the unlawful expropriation of genetic and natural resources, deforestation for the purposes of creating farms, and the attraction of speculative investments from Europe, the United States, Canada, China and South Korea<sup>68</sup>), there is

According to the last Global Innovation Index Report 2018, Brazil occupies the 64th position worldwide, lagging behind other Latin American countries such as Chile (47th), Costa Rica (54th), Mexico (56th), Uruguay (62<sup>nd</sup>) and Colombia (63<sup>rd</sup>). See for instance WIPO, Global Innovation Index 2018: Energising the World with Innovation. Available at: <a href="https://www. globalinnovationindex.org/gii-2018-report#>. Accessed: October 30, 2018. The Report highlights how Brazilian figures improved for the period comprised between 2015 and 2018, mainly thanks to expenditures in research and development (R&D), imports and exports of high technology goods and the quality of scientific publications made by public universities and research institutes. On the other hand, the country still reveals poor indicators in several clusters, such as the training of scientists and engineers, credit, investments, productivity and the development of new businesses. When comparing corporate and government investments in R&D, for instance, one can see that most of the investments come from the public sector, which amounts to 53%, compared to 47% of companies' expenditures. This situation is different, for example, from the situation observed in the main European countries, whose share of corporate R&D expenditures represent an average of 64% of the total, reaching over 70% in countries such as Korea (75.7%), Japan (75.5 %) and China (74.6 %).

<sup>68</sup> See, for instance, PITTA, Fabio, CERDAS, Gerardo e MENDONÇA, Maria

no way out for the development of the internet and the IT business environment in Brazilian markets, with the exception being large global corporations with business establishments in the country, mainly in Rio de Janeiro and São Paulo. Insofar as the technological base is concerned, the domestic industry in Brazil has been built on large dependency on public R&D structures (such as state-owned companies, laboratories, universities and research institutes). The country has done very little to build a multidimensional inclusionary agenda in terms of digital inclusion, such as by integrating new computer and information technologies, social and economic inclusionary practices and even human development-related goals.

A differential approach on 'multidimensional inclusion', unlike the flat formulation underlying the Brazilian E-Digital Strategy, should support minimally equitable structures of the digital economy. It potentially represents an alternative to reducing persistnt exclusion, poverty and inequalities,

Luisa. Transnational corporations and land speculation in Brazil. São Paulo: Outras Expressões, Grain, 2018, p.1 ss. Available at: <a href="https://www.social.">https://www.social.</a> org.br/files/pdf/ExecutiveSummary-LandSpeculation.pdf> Accessed: October 30, 2018; and FIAN, The Human and Environmental Cost of Land Business: The case of MATOPIBA, Brazil. FIAN International, Rede Social de Justiça & Direitos Humanos and Comissão Pastoral da Terra (CPT). 2018, Available at: <a href="https://www.fian.org/fileadmin/media/publications\_2018/">https://www.fian.org/fileadmin/media/publications\_2018/</a> Reports\_and\_guidelines/The\_Human\_and\_Environmental\_Cost\_of\_ Land\_Business-The\_case\_of\_MATOPIBA\_240818.pdf> Accessed: October 30, 2018. (highlighting the situation with regard to speculative investments, deforestation and farming: 'Land speculation in the region continued after the drop of commodity prices on the world market in the aftermath of the world financial crisis of 2007/08, and land has become a more profitable business than agricultural production. This has led to the creation of socalled land companies that are no longer directly linked to production and fully concentrate on acquiring, selling, leasing and/or managing land. The creation of new farms/'fazendas' usually takes place in lands that are formally owned by the state, by enclosing an area, violently driving out local people and clearing/deforesting it.').

as they are presently known by theoretical reflections and supported by empirical evidence and statistics in the field of socioeconomics. Despite concentrating much more on the discussion of structures and incentives for entrepreneurial environment, the OECD itself, a strong enthusiast of digital transformation, considers 'social inclusion' to be a goal inseparable from national strategies in IT and internet markets. In a document published in January 2017 entitled 'Key Issues for Digital Transformation in the G20',<sup>69</sup> the organisation highlights the correlations between technologies in the digital economy, social and economic inclusion and their effect on existing educational indicators and the United Nations Sustainable Development Goals.<sup>70</sup>

Based on the literature and previous experiences in different countries and regions, any approach to digital transformation cannot be separated from social inclusion and inclusionary practices by law and regulation.<sup>71</sup> Actions implemented since the adoption of the Brazilian Digital Inclusion Programme, in turn, demonstrated the shortcomings of a policy more focused on governmental aid, subsidies and tax incentives for manufacturers of computers and telephone inputs and less

<sup>69</sup> OECD, Key issues for digital transformation in the G20. Report prepared for a Joint G20 German Presidency/OECD Conference. Berlin, Germany, 12 January 2017. Available at: <a href="https://www.oecd.org/g20/key-issues-for-digital-transformation-in-the-g20.pdf">https://www.oecd.org/g20/key-issues-for-digital-transformation-in-the-g20.pdf</a> Accessed on: October 30, 2018.

<sup>70</sup> Idem (with regard to the following excerpt: 'ICTs, and especially through mobile-based services, can contribute to reducing inequality by drastically expanding access to information, hence contributing to individual empowerment and social inclusion of individuals, which is used to fall[ing] outside the reach of traditional services').

<sup>71</sup> MORRIS, Anne. E-literacy and the grey digital divide: a review with recommendations. In: *Journal of information literacy*, vol.1, no. 3, 2007, p.13 et seq; CHIKATI, Ronald et all. There is more to bridging digital divide than physical access to ICTs: advocacy for Botswana. In: *International Journal of Scientific & Technology Research*, vol. 2, n.8, 2013, p.267 et seq.

on specialised literacy in education for digital environments. The policy has been used to direct the supply infrastructure of computers, ICTS and internet access to users, without a steady counterpart policy aimed at providing or encouraging educational training, specific social inclusion policies in these areas and guaranteeing the promotion of human rights.<sup>72</sup>

Nevertheless, one could remark that not everything seems to be a waste of time or resources in a field that is capable of integrating longstanding goals of social and economic inclusion into multidimensional digital inclusionary practices. These practices must constitute a vibrant space for advancing public debate on issues of digital inclusion and transformation. This particular moment in time in Brazil may also be conducive to the rediscovery of the essence of one of the engines and foundations of the global knowledge society.

## **Conclusion**

There is still more to investigate about the prevailing interactions between digital inclusion, digital transformation and the multidimensional approach to inclusionary practices. There is a plausible argument that laws and regulations at the national and international levels do matter for the articulation of those clusters in a pervasive fashion. The Brazilian case may be illustrative of the central place occupied by constitutional rules for both social and economic ordering and their interplay with digital inclusion programmes.

<sup>72</sup> One may carefully assess the need for existing laws and regulations must go through an exercise of implementation and benchmarking, such Decree 5.542 / 2005, establishing the Connected Citizen Project - Computer for All, within the scope of the digital inclusion programme and Decree 7.750/2012 (regulating the One Computer Per Student Programme – PROUCA and the Special Regime for Computer Incentives for Use Educational – REICOMP.

As was noted in this article, digital inclusionary policies in Brazil have gradually improved since early 2000, thanks to actual development not merely based on the exponential expansion of internet penetration rates and a growing digital native community in the country. Rather, they relied on a particular understanding on the relevance of an amalgamation of broader inclusionary goals - social, economic and developmental - all of them also exposing the hurdles created by distinct patterns of digital inequality. The vast majority of the adopted indicators and statistics based on a market-driven approach to access to ICTs and the internet (such as internet penetration rates in households and physical access to ICT facilities) will be not enough to corroborate with the actual opportunities for integration of digital inclusionary policies to social, economic and developmental inclusionary goals. Laws and regulations, in turn, still lack reliable indicators of measurement in the short term, suggesting also the intrinsic difficulty of establishing correlations between most usual IT and internet indicators and the laws and policies in this realm.

On the other hand, the modest formulations of the 2018 E-Digital Strategy bring more uncertainty to the future role Brazil may play in the global digital agenda, although Brazil still remains a relevant actor amongst the most prominent actors in the world economy. The global digital economy, in turn, reveals enormous disparities in terms of the production, distribution and dissemination of digital goods and services. Any digital transformation strategy designed mainly for boosting the business environment, corporate results and innovative activities in realms of the internet and ICT industries will not bring promising outcomes, except where it is optimally guided by a multi-dimensional inclusionary approach. Those elements are

inherently decisive for integrating countries, in particular, those from the Global South, into a 'sustainable global digital agenda'. A global digital inclusionary agenda, based on its own characteristics, expectations and political compromises, cannot ignore human rights obligations and civilisational values, such as those already valid and operational in civil, political, social, economic and culturally related domains. All of them are immediately undetachable from both the formulation and implementation of digital inclusionary practices at national, regional and international levels. Brazil would still have chances to revert to the opposite route taken by misleading policies on digital transformation. The way out should definitely avoid any schism with the broader multidimensional approach to digital inclusionary policies.

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