

## **Government discretion in digitizing public administration – the Brazilian perspective\***

SUMMARY: 1. Introduction. – 2. Time to change – public administration reform in Brazil. 2.1. Transparency. – 3. E-Government in Brazil. 3.1. E-Fiscal. 3.2. E-Banking. 3.3. E-Voting. – 4. Brazilian health system. 4.1. E-SUS. 4.2. Deficiencies of the Brazilian Healthcare System. 4.3. E-health card. 4.4. Medical E-files. 4.5. Civil engagement. 4.6. The protection of privacy. – 5. Chaos in the public healthcare system means increased litigation. – 6. Conclusion.

1. Since 2009, when the United States issued its Open Government Directive, improving public access to federal administration information, the world has seen a wave of transformation towards an open government philosophy, favoring transparency, efficiency, accountability, and public participation. In the sequence, the US issued the ‘Digital Accountability and Transparency Act of 2017’<sup>688</sup>, and, more recently, the ‘Providing Accountability Through Transparency Act of 2017’<sup>689</sup> prompting a worldwide proliferation of regulations that characterize a global trend towards Electronic Government.

These new winds quickly reached the Southern Hemisphere, bringing hope for improvement through an administration system less susceptible to fraud and corruption. Along with other American countries, Brazil has produced an incredible amount of legislation providing for the digitization of public proceedings and administrative procedures, enabling its entrance into the new digital era. However, some problems still have to be addressed.

First, one ought to consider whether this transition to a digitalized public administration is occurring horizontally or resulting in some sector being more favored than others, showing a government priority for strategic areas – such as the economic area –, causing the social area to lag way back. In fact, both the Brazilian Internal Revenue Service and the Brazilian Central Bank have long implemented the digitized process and completely integrated it within the realm of the ‘Smart Government’.

Nonetheless, in the public healthcare sector – which is vital to materialize fundamental rights – the information is either not digitized, or when it is, it is done so poorly that it fails to help improve transparency. It is almost impossible for an ordinary citizen to obtain information on his or her own treatment, or else to understand why disclosure takes so long – or the reasons for it not to be disclosed at all. Although countless data portals are available, there is no input of relevant data or else the available data outdated or inaccurate.

Secondly, the deficiency in digitizing data favors inefficiency and inequality. Considering that public healthcare in Brazil is subject to constitutional principles of equality, due process and universality – meaning that everyone is equally entitled to receive health assistance from the government through a regular administrative proceeding, with no preferences or privileges afforded to anyone – we wish to examine whether these constitutional mandates are actually being abided and whether the lack of transparency in the public healthcare system causes a high level of

688 Available from: <<https://www.congress.gov/113/plaws/publ101/PLAW-113publ101.pdf>>. Accessed on Aug 26 2018.

689 Available from: <<https://www.congress.gov/bill/115th-congress/senate-bill/577>>. Accessed on Aug 26 2018.

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dissatisfaction among users, forcing them to go to court seeking clarification as to their standing in the waiting lists for surgery, hospital entry, and provision of medicine by means of injunctions demanding expedited treatment.

In fact, within the enormous number of new lawsuits filed every year in Brazil, a major part concerns the deficiencies of public health services and the disrespect of fundamental rights. To deal with this phenomenon of judicialization, the new Code of Civil Procedure<sup>690</sup> mandates that all legal case records are to be digitized. Since 2015, much computer software has been developed to allow faster case resolution, improving the administration of justice. Nonetheless, one ought to enquire whether all efforts designed for judiciary digitization will have a positive effect in the improvement of the health system itself.

The big challenge that the digitized era imposes is the protection of privacy. One ought to consider whether the Brazilian government is taking appropriate action to protect privacy in all digitized data – which includes personal data –, especially under the due process law clause, which requires proper notification of parties involved. In fact, this massive amount of digitized data produced by the public health system and the judiciary system is now open to the public at large and is available for research and reuse anywhere in the world. It is thus important to develop measures to secure this BIG DATA as it is not bound by border or jurisdiction constraints.

Lastly, considering that Brazil has had a broad and successful experience with electronic elections for the executive and legislative branches of power since 1996 and that this expertise could easily be used to engage the civil society in the decision-making process, one ought to examine whether the Brazilian government intends to enable democratic participation in social issues by giving due notice on forthcoming policies and the opportunity for comments.

In conclusion, we intend to demonstrate that Brazil has all the means necessary to be integrated as an e-Government through digitization and integration of all areas in public administration. Fundamental constitutional principles on the rule of law and public interest urge the implementation of the healthcare system along with equality, universality and due process, devoid of any discretionary policies aiming only at specific areas – such as taxation and financing –, as has been the case during past decades.

The real issue will be to create institutional constraints and to ensure that political decisions upon implementing a high-quality e-healthcare system will apply efficiency, transparency and accountability principles to public action, thus meeting the expectations of Brazilian society.

2. It is common knowledge that Brazil is a huge country, it is the world's 5<sup>th</sup> largest country and has an estimated population of more than 206,1 million, an approved annual budget of R\$ 3,5 trillion in 2018<sup>691</sup>, and GDP [PPP] of \$ 3,1 trillion reais. Considered the world's largest rain forest, Brazil is extremely rich in many different natural resources<sup>692</sup>. Although it occupies the 8<sup>th</sup> position

690\*Paper prepared for presentation at the University of Milano Seminar“Big Data and Law: New challenges Beyond Protection”, in October 2018.

Law 13,015 of July, 21, 2014. New Brazilian Code of Civil Procedure, Articles 193 through 199. Available from: <[http://www.planalto.gov.br/ccivil\\_03/\\_Ato2015-2018/2015/Lei/L13105.htm](http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2015/Lei/L13105.htm)>. Accessed on Aug 26, 2018.

691 Available from: <<http://agenciabrasil.ebc.com.br/politica/noticia/2017-12/orcamento-de-2018-e-aprovado-com-previsao-de-gastos-de-r-357-trilhoes>>. Accessed on Aug 26, 2018.

692 Available from: <<https://www.heritage.org/index/country/brazil>>. Accessed on Aug 26, 2018.

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among the 10<sup>th</sup> largest economies in the world and a USD 1.8 economy<sup>693</sup>, there is great social inequality and poverty among its population<sup>694</sup>.

In addition, the Brazilian Constitution of 1988 expressly sets forth the Brazilian state's goals, namely: to build a free, just and equal society. This constitutes a major challenge as it requires that the government make social rights fully available for its population – which includes education, health, food, work, housing, leisure, security, social security, protection of motherhood and childhood, and assistance to the destitute<sup>695</sup>, establishing the grounds for a welfare State, a social state, as defined by the Brazilian Supreme Court<sup>696</sup>.

Such challenge and huge numbers called for a reform in the administrative branch. In 1996, the Brazilian government launched a Reform Plan<sup>697</sup>, starting with the 19<sup>th</sup> amendment to the Constitution – which imbedded the principle of efficiency into the administration principles listed in article 37<sup>698</sup>, all with a view to building a strong, social and democratic state. The Reform Plan was inspired by the New Public Management ideas, based on the principle that «governments could be managed like an enterprise»<sup>699</sup>, so as to modernize and improve Brazilian public administration.

The global financial and economic crises of 2008, however, marked the end, or at least the reinvention of the NPM, with profound changes to «the establishment of a Smarter State that is fiscally sustainable»<sup>700</sup> with an emphasis on fostering efficiency, accountability, and transparency in government action, as well as the introduction of anticorruption practices, through investments in modern technological tools, such as Information Technology [IT].

693 Available from: <<https://www.weforum.org/agenda/2017/03/worlds-biggest-economies-in-2017/>>. Accessed on Aug 26, 2018.

694 According to IBGE, 50 million Brazilian citizens live below the poverty line. Available from: <<http://agenciabrasil.ebc.com.br/economia/noticia/2017-12/ibge-brasil-tem-14-de-sua-populacao-vivendo-na-linha-de-pobreza>>. Accessed on Aug 26, 2018.

695 BRAZIL. Constitution of the Federative Republic of Brazil, 1988. Article 6. “Education, health, food, work, housing, leisure, security, social security, protection of motherhood and childhood, and assistance to the destitute are social rights, as set forth by this Constitution.” Available from: <[http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte\\_en\\_us/anexo/Constitution\\_2013.pdf](http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte_en_us/anexo/Constitution_2013.pdf)>. Accessed on Aug 26, 2018.

696 BRAZIL. Supreme Court (Ag. Reg. no RE) 1.101.106/DF. Reporter: Justice Celso de Mello. Brasília, August 9, 2018

697 Available from: <<http://www.bresserpereira.org.br/rgp.asp>>. Accessed on Aug 26, 2018.

698 BRAZIL, Federal Constitution, 1988. Article 37. “The governmental entities and entities owned by the Government in any of the powers of the Union, the states, the Federal District and the Municipalities shall obey the principles of lawfulness, impersonality, morality, publicity, and efficiency.” Available from: <[http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte\\_en\\_us/anexo/Constitution\\_2013.pdf](http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte_en_us/anexo/Constitution_2013.pdf)>. Accessed on Aug 26, 2018.

699 G. Napolitano, *Looking for a smarter government (and administrative law) in the age of uncertainty*, in S. Rose-Ackerman, P. Lindseth, B. Emerson, *Comparative Administrative Law*, Cheltenham, 2017, II ed., p. 358.

700 Ibidem, 2017, p. 359.

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Again, following the world openness trend inspired by the United States' Open Government Directive of 2009, Brazil launched the Transparency Act<sup>701</sup> – which provides on the access to public information and constitutes the framework for Brazilian E-government policies<sup>702</sup>.

**2.1.** One of the first requirements for a modern 'Smart State' is to ensure transparency and openness in governmental activities. It is not easy to define *transparency*, however, as its concept is «expanding, becoming larger and more diffuse by incorporating more ideas into it»<sup>703</sup>. It is true that «Transparency limits corruption, protects against opportunistic behavior by officials and encourages public participation»<sup>704</sup>.

Although many scholars define transparency simply as access to information, it surely encompasses much more than that.

«First, transparency is particularly about lowering the cost of physical access to information in real-time. «Transparency” or «access” does not really exist if obtaining and securing information is costly in either time or effort [...]

Second, «transparency» has a computational or complexity dimension»<sup>705</sup>

In order to be transparent, a government has to make information available at a low cost and in real time, which means online, in the Internet. The burden is now on the government to open data, in order to make information ready for public access. Also, it is not only about the data, but the quality, the complexity of the data made available – that is, data which will enable people to find the right answers to the questions asked.

On the other hand, transparency encourages public participation with a view «to improving the democratic process and more informed agency deliberation»<sup>706</sup>. Although transparency provisions do not define the standards of said participation [but, of course, the more direct it is, the better], they include the participation of individuals and non-governmental groups - «the groups that will be affected by the administrative decisions»<sup>707</sup>.

701 BRASIL. Law 12,527 of November 18, 2011. This law shall govern the access to information afforded by item XXXIII of Art. 5, item II of Paragraph Three of Art. 37, and Paragraph 2 of Art. 216 of the Federal Constitution; amends Law No. 8,112 of December 11, 1990; revokes Law No. 11,111 of May 5, 2005, as well as the provisions on Law No. 8,159 of January 8, 1991; and sets forth other actions that ought to be taken. Available from: <[http://www.planalto.gov.br/ccivil\\_03/ato2011-2014/2011/lei/112527.htm](http://www.planalto.gov.br/ccivil_03/ato2011-2014/2011/lei/112527.htm)>. Accessed on Aug 26, 2018.

702 F. S. O. S. Bonelli, *Administração pública contemporânea e Informática: o surgimento, os princípios administrativos envolvidos e os limites ao avanço do Governo Eletrônico no Brasil (e-Gov)*, in *Revista de Direito Administrativo contemporâneo: ReDAC*, 2014, II 2, 9, jun. 2014, p. 13.

703 R. G. Vaughn, *Transparency in the Administration of Laws: The Relationship between Differing Justification for Transparency and Differing Views of Administrative Law*. *American University International law review*, v. 26, Issue 4, Article 3. p. 969, 2011 - Provided by Harvard Law School Library. Available from: <<http://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1719&context=auilr>>. Accessed on Aug 26, 2018.

704 A. Candeb, *Transparency in the Administrative State*. 51 *Houston Law Review*, 2013, p. 386. Provided by Harvard Law School Library. Available from: <<http://www.houstonlawreview.org/2013/12/06/512-transparency-in-the-administrative-state/>>. Accessed on Aug 26, 2018.

705 *Ibidem*, 2013, p. 387.

706 *Ibidem*, 2013, p. 389.

707 R. G. Vaughn, *op. cit.*, 2011, p.981.

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Despite different doctrinal opinions, Bonelli argues that transparency has been incorporated into the Brazilian Constitution as a principle – when it refers to publicity and access to information – in article 5, XXXIII<sup>708</sup>, as well as in article 37 and II, and paragraphs 2 and 3 of art. 216<sup>709</sup>, which provides on the access to information concerning government actions<sup>710</sup>. The Brazilian Supreme Court has pointed in the same direction, stating that publicity is a «precept that recommends governmental transparent action»<sup>711</sup>; and transparency is a more specific aspect of the publicity principle<sup>712</sup>, which renders it more concrete and gives the citizen the possibility to be aware of governmental action.

Transparency demanded openness of governmental information. Starting with the federal statute that governs public management responsibility<sup>713</sup>, the federal government decided to implement transparency by issuing several acts which addressed its duty to disclose information on public finances [see the Transparency Federal Act<sup>714</sup>]. The Supreme Court, however, ruled that

708 BRAZIL. Federal Constitution, 1988. Art. 5. XXXIII – All individuals are entitled to obtain from public authorities any information of private interest to said individuals, or else of collective or general interest, and such information shall be disclosed within the timeframe provided by law, subject to liability penalties applicable to authorities addressed, except where such information is classified, as required by security concerns applying to society or the State. Available from:

<[http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte\\_en\\_us/anexo/Constitution\\_2013.pdf](http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte_en_us/anexo/Constitution_2013.pdf)>

. Accessed on Aug 26, 2018.

709 BRAZIL. Federal Constitution, 1988. Art. 216. [...] Paragraph Two. Public administration authorities shall manage government documents and afford consultation thereof to all who need it in the manner provided by law. Available from:

<[http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte\\_en\\_us/anexo/Constitution\\_2013.pdf](http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte_en_us/anexo/Constitution_2013.pdf)>

. Accessed on Aug 26, 2018.

710 BRAZIL. Federal Constitution 1988. Art. 37. All direct or indirect public administration authorities of any of the branches of power of the Union, the states, the Federal District and municipalities shall abide by the principles of legality, impersonality, morality, publicity and efficiency and, further, by the following: [...] Paragraph Three. The law shall provide as to the manner of user participation in direct or indirect public administration and shall specifically regulate: [...] II – User access to administrative records and information on government action, due observance to be given to the provisions of art. 5, X and XXXIII. (our emphasis) Available from:

<[http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte\\_en\\_us/anexo/Constitution\\_2013.pdf](http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte_en_us/anexo/Constitution_2013.pdf)>

. Accessed on Aug 26, 2018.

711 BRAZIL. Supreme Court. Writ of Mandamus (MS) No. 33,340/FD. Brasilia, May 26, 2015.

712 BRAZIL. Supreme Court. Direct Unconstitutionality Action (ADI) No. 2,444/RS. Brasilia, November 6, 2014.

713 BRASIL. Complementary Law No. 131 of May 27, 2009. Available from:

<[http://www.planalto.gov.br/ccivil\\_03/LEIS/LCP/Lcp131.htm](http://www.planalto.gov.br/ccivil_03/LEIS/LCP/Lcp131.htm)>. Accessed on Aug 26, 2018.

714 BRASIL. Law 12,527 of November 18, 2011. Available from: <[http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2011/lei/l12527.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2011/lei/l12527.htm)>. Accessed on Aug 26, 2018.

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ensuing regulation proved to be «insufficient to deal with the problem»<sup>715</sup>. Concrete action and a change of mentality were needed.

Transparency is crucial in contemporary administrative government in a democratic society, especially when most of the population have access to Internet<sup>716</sup> and this calls for more interaction with government action<sup>717</sup>.

It is important to mention that since 2004 the Federal Government has created a *Portal da Transparência*<sup>718</sup> that was totally renovated in 2018 – a cyberspace that should be able to «explain governmental action»<sup>719</sup>, aiming to provide tools for the citizen to know and to question government activities, acting as a state controller, enabling social control of public expenditure and public management [which should be guided by legality and ethics, mindful of public interest]<sup>720</sup>.

The *Portal da Transparência* is just the beginning. Nonetheless, recent studies show that the portal is deficient because transparency is only more accurate when it relates to the «organizational structure» and the «programs and actions» of public institutions [and this includes the easiest information to deliver]; nonetheless, when it gets to financial information, such as «public expenses» and «contracts», disclosures are neither accurate nor clear. The conclusion is that «it is clear that transparency is not among the priorities for [Information] law implementation»<sup>721</sup>. We know well that, as Vaugahn warned, «all governments and most organizations exercise some discretion in determining what will be known and what will be kept in secret»<sup>722</sup>.

3. As «[...] Governments around the world have realized the great potential of using Information and Communication Technologies [ICTs] to create so called «smart societies for social and economic development»<sup>723</sup>, in 2012, Brazil gave the first steps towards the regulation of public

715 BRAZIL. Supreme Court. Extraordinary Appeal (RE) No. 865,401/MG. Brasília, August 14, 2015. SUMMARY: Constitutional Law. Fundamental right to access information of collective or general interest. Extraordinary appeal grounded on infringement of art. 5, item XXXIII of the Federal Constitution. Application filed by a city council member as city representative and as citizen, directly with the chief of the Executive Branch, with a view to securing information and documents concerning municipal management. Application denied. Invocation of the fundamental right to access information, calling for compliance with the duty to ensure transparency by public authorities, as well as principles governing the republic and publicity. Thesis of municipality grounded on undue interference, the separation of the branches of power and the difference between congressional prerogatives and congressmen prerogatives. General repercussion not acknowledged. Available from: <<http://portal.stf.jus.br/processos/downloadPeca.asp?id=15338868743&ext=.pdf>>. Accessed on Aug 26, 2018.

716 According to IBGE, a Brazilian statistical data institute, 48,1 million households have access to internet, a figure that represents 69.3% of all households in Brazil. Available from: <<https://agenciadenoticias.ibge.gov.br/agencia-noticias/2013-agencia-de-noticias/releases/20073-pnad-continua-tic-2016-94-2-das-pessoas-que-utilizaram-a-internet-o-fizeram-para-trocar-mensagens.html>>. Accessed on Aug 26, 2018.

717 F. S. O. S. Bonelli, op. cit., 2014, p. 24-25. Author's translation

718 Available from: <<http://www.portaltransparencia.gov.br>>. Accessed on Aug 26, 2018.

719 R. G. Vaugahn, op. cit., 2011, p. 971.

720 M. M. Ribeiro, C. O. de A. Freitas, *Análise crítica do e-government como instrumento de eficiência da arrecadação tributária*, in *Revista de Direito Empresarial*, 2012, p. 10.

721 T. C. Marinho, *Saúde Transparente: uma análise do cumprimento da Lei de Acesso à Informação nas instituições públicas federais de saúde*, 2017, p. 85. Available from: <<http://bibliotecadigital.fgv.br/dspace/handle/10438/19480>>. Accessed on Aug 26, 2018.)

722 Ibidem, 2017, p. 971.

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record digitalization<sup>724</sup>. In 2000<sup>725</sup>, the Brazilian government created a special group to develop electronic policies of interaction in all branches and levels of government administration, aiming at providing the universalization of services, accessible government, and advanced infrastructure.

After the world crises of 2008, the Brazilian federal government finally launched a digital government policy, aiming to provide for more administrative efficiency, access, and transparency, enabling the proximity of the society with the public services that are available<sup>726</sup>.

The benefits of e-government by use of IT and technology are enormous as the latter increases popular participation, universalizes public services, and cuts costs<sup>727</sup> by focusing on basic principles such as equal access to social rights, openness and transparency, by favoring co-working, and by prioritizing digital services, security and privacy, social participation and control [as well as the government as a platform for innovation].

The power to define strategic goals for E-government [*Estratégia de Governança Digital – EGD*] was delegated to regulatory bodies of the Executive branch through the creation of the Governmental Digital Portal<sup>728</sup>, which aims at improving government action towards citizens and gathering information on federal public policy in such a way as to facilitate public participation devoid of barriers.

As we will demonstrate below, digitalization policies have not been uniform for all areas. Some areas that are considered more strategic and vital - such as taxation and fiscal – have been totally integrated into the digital era. Nonetheless, social areas are lagging far behind and remain on their implementation stage.

**3.1.** In 1964, the Fiscal Federal Department created the first Federal Tax Database<sup>729</sup> with a view to regulating and implementing fiscal policies and rendering all tax information in Brazil uniform. In 1968, the first electronic tax returns were filled and all Brazilian citizens, whether taxpayers or not were assigned both a taxpayer number [*CPF – Cadastro Pessoa Física*] and a taxpayer identification card [*CIC*]. Since then, the system has seen much improvement<sup>730</sup>.

723 M. I. Manda, J. Backhouse, *Towards a “Smart Society” Through a Connected and Smart Citizenry in South Africa: A Review of the National Broadband Strategic and Policy*, in H. J. Scholl, O. G. M. Janssen, B. K. Lindgren, I. Lindgren, P. P. E. Tambouris, M. A. W. T. Janowski, D. S. Soares. LENCC – Lecture Notes in Computer Science 9820 - Electronic Government – 15th IFIP-WG 8.5 International Conference, EGOV 2016, p.228, Guimaraes, Portugal, September 5-8, 2016 Proceedings. Switzerland, 2016- Provided by Harvard Law School Library.

724 Available from: <[http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2012/lei/112682.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/lei/112682.htm)>. Accessed on Aug 26, 2018.

725 Available from: <<https://www.governodigital.gov.br/EGD/historico-1/historico>>. Accessed on Aug 26, 2018.

726 Available form: <[http://www.planalto.gov.br/ccivil\\_03/\\_ato2015-2018/2016/decreto/d8638.htm](http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2016/decreto/d8638.htm)>. Accessed on Aug 26, 2018.

727 M. M. Ribeiro, C. O. de A. Freitas, op. cit., 2012, p. 3.

728 Available from: <<https://www.governodigital.gov.br/EGD>>. Accessed on Aug 26, 2018.

729 BRAZIL. Federal Law n°. 4,516 of December 1st, 1964. This law establishes the Federal Data Processing Service, an entity linked to the Brazilian Finance Ministry. Available from:

<[http://www.planalto.gov.br/ccivil\\_03/LEIS/L4516.htm](http://www.planalto.gov.br/ccivil_03/LEIS/L4516.htm)>. Accessed on Aug 26, 2018.

730 Available from: <[http://www.planalto.gov.br/ccivil\\_03/Decreto-Lei/Del0401.htm](http://www.planalto.gov.br/ccivil_03/Decreto-Lei/Del0401.htm)>

<<http://idg.receita.fazenda.gov.br/sobre/institucional/memoria/imposto-de-renda/historia/1968-a-1981-comeca-a-era-da-secretaria-da-receita-federal>>. Accessed on Aug 26, 2018.

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In 1997, the government created and implemented *Recetanet*, a web portal for individual taxpayers that afforded the electronic tax return filing option [no hard copy needed] to all. In 2013, the Brazilian Revenue Service processed more than 25,571,747 e-tax returns, and in 2017, the number of taxpayers rose to 29,269,987<sup>731</sup> and in less than three months 10% of all tax returns had already been processed, and taxpayers started to receive whatever tax refunds they were entitled to.

All this efficiency is also seen in all levels of government where e-filing is afforded to all other kinds of taxes - including state and local taxes, all of them completely integrated into sophisticated software. As Ribeiro recalls, «if there is an area where e-government is really advanced, that area is tax administration» because it is «vital for the State»<sup>732</sup>. Information cross-examination is swifter and more accurate, and control is made easier through the use of electronic book-keeping. The entire fiscal obligation can be fulfilled and controlled through the Internet, and this boosts tax revenue<sup>733</sup>.

**3.2.** Due to the inflation that plagued Brazil in the 80's – causing interest rates to rise to as high as 84% a month –, all efforts were focused on controlling the inflation rate [which reached more than a whopping 707.4 per cent in 1985-9 period]<sup>734</sup>. To face the challenges of its production and cope with financial market demands, the Brazilian banking and financial system entered the digital era in the mid 90', offering new digital services that conformed to federal regulations.

The Brazilian Central Bank developed a spectacular national payment system, which became one of the quickest fund-transfer, clearance and settlement systems in the world. «[...] Internet banking became widely used: by the end of 2009, some 35 million cashing accounts could be accessed remotely via Internet – a figure that accounted for some 48% of all banking transactions in terms of volume that year»<sup>735</sup>.

In 2016, Brazilian Central bank issued new regulations requiring digitalization of all banking transactions, even public banking institutions – such as Banco do Brasil, Caixa Econômica Federal, and BNDES, who are responsible for fostering public policies - are extremely efficient, offering the most sophisticated Internet sites, with total integration of products and services, with branches spread across almost every city in the country and overseas<sup>736</sup>.

As a result, the Brazilian Banking system ranks 32nd in efficiency in the world financial system according to a World Economic Forum study<sup>737</sup>, due to the fast digitalization of the financial system that started in the 80s.

In sum, a system that is totally integrated in the realm of the 'Smart Government' transition to a digitalized public administration.

731 Available from: <http://www.serpro.gov.br/menu/noticias/noticias-2018/mais-de-29-milhoes-de-declaracoes-do-irpf-2018-foram-entregues-no-prazo>>. Accessed on Aug 26, 2018.

732 M. M. Ribeiro, C. O. de A. Freitas, op. cit., 2012, p. 10.

733 M. M. Ribeiro, C. O. de A. Freitas, op. cit., 2012, p. 11.

734 Available from: <[https://www.jstor.org/stable/157697?seq=1#page\\_scan\\_tab\\_contents](https://www.jstor.org/stable/157697?seq=1#page_scan_tab_contents)>. Accessed on Aug 26, 2018.

735 Payment, clearing and settlement systems in Brazil, CPSS – Red Book – 2011. Available from:

<[https://www.bis.org/cpmi/publ/d97\\_br.pdf](https://www.bis.org/cpmi/publ/d97_br.pdf)>. Accessed on Aug 26, 2018.

736 Available from: <<https://www.export.gov/article?id=Brazil-Banking-Systems> Accessed on 08.26.2018>. Accessed on Jun 23, 2018

737 Available from: <<https://exame.abril.com.br/economia/os-paises-onde-o-sistema-financeiro-funciona-melhor/>>. Accessed on Jun 23, 2018.



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**3.3.** Another area that deserves attention is the electoral area, as the Brazilian Constitution mandates a direct voting is to be in place as of 1988<sup>738</sup>. Brazil has developed incredible know-how in direct electronic elections – with modern software – «to ensure more transparency in the electoral process [...] a symbol of credibility and democracy» [e-voting<sup>739</sup>], thus guaranteeing direct political participation for the citizen.

In 2014, more than 140 million citizens were able to use e-voting for presidential elections, and the results were disclosed in a matter of hours the very same day. The same happened throughout the country for governor and mayor election, along with all the legislative representatives.

This successful experience in electronic elections, with e-voting machines, for the executive and legislative branches could easily be used to obtain civil society participation in the decision-making process in the social areas as well.

**4.** The Brazilian Constitution promulgated in 1988 establishes that healthcare is a social right<sup>740</sup>, as well as «a right for all, and a duty for the State, and shall be guaranteed by means of social and economic policies», which means that all 200 million Brazilians should have equal access to the public healthcare system [ranking as the largest public health system in the world<sup>741</sup>].

The approved federal healthcare system budget for 2018 was R\$ 130 billion and is expected to service more than 60% of poor – which depends solely on the public system [*SUS*] for primary care, and 90% for secondary and tertiary care.

In order to cope with this enormous duty, constitutionalists conceived a unified healthcare system” [*Sistema Único de Saúde – SUS*] with a view to supervising and controlling medical procedures, products and substances of interest to healthcare and to participate in the production of drugs, equipment, personal and sanitation actions, among other things<sup>742</sup>. To achieve its objectives, several statutes were promulgated to regulate said unified healthcare system - *SUS*<sup>743</sup>.

738 BRAZIL. Federal Constitution, 1988. Article 14. The sovereignty of the people shall be exercised by universal suffrage and by the direct and secret voting, with equal value for all, and, according to the law. Available from: <[http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte\\_en\\_us/anexo/Constitution\\_2013.pdf](http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte_en_us/anexo/Constitution_2013.pdf)>. Accessed on Aug 26, 2018.

739 Available from: <<http://www.tse.jus.br/imprensa/noticias-tse/2014/Junho/conheca-a-historia-da-urna-eletronica-brasileira-que-completa-18-anos>>. Accessed on Aug 26, 2018.

740 Article 6. “Education, health, food, work, housing, leisure, security, social security, protection of motherhood and childhood, and assistance to the destitute are social rights, as set forth by this Constitution.” Available from: <[http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte\\_en\\_us/anexo/Constitution\\_2013.pdf](http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte_en_us/anexo/Constitution_2013.pdf)>. Accessed on Aug 20, 2018.

741 See: National Health Covenant. Available from: <[http://bvsm.s.saude.gov.br/bvs/publicacoes/pacto\\_nacional\\_saude\\_mais\\_medicos.pdf](http://bvsm.s.saude.gov.br/bvs/publicacoes/pacto_nacional_saude_mais_medicos.pdf)>. Accessed on Aug 26, 2018.

742 BRAZIL. Federal Constitution, 1988. Art. 200. [...] It shall be incumbent upon the Unified Healthcare System, among other duties and as provided by law, to: [...]. Available from: <[http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte\\_en\\_us/anexo/Constitution\\_2013.pdf](http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte_en_us/anexo/Constitution_2013.pdf)>. Accessed on Aug 26, 2018.

743 BRAZIL. Law No. 8,080 of September 19, 1990. This law provides on conditions necessary to promote, protect and recover health, as well as on the organization and the functioning of services applying thereto, and sets forth other actions that ought to be taken. Available from: <[http://www.planalto.gov.br/ccivil\\_03/leis/L8080.htm](http://www.planalto.gov.br/ccivil_03/leis/L8080.htm)>. Accessed on

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Although Brazil spends 9% of its GDP in public healthcare<sup>744</sup>, these funds made available seem to never be enough. The major obstacles for better healthcare – an area in which it can mean the difference between life or death – are the lack of information and corruption.<sup>745</sup> Currently, there are 5,530 public hospitals in Brazil, with 336,941 hospital beds, including intensive care, for hospital entry – a figure that includes all federal, state and municipal hospitals, as well as emergency care units<sup>746</sup>.

**4.1.** The Unified Healthcare System government portal enables access to e-SUS<sup>747</sup>, a kind of software that was developed to collect, simplify, manage and use healthcare information, aiming at the integration of healthcare professionals and the population. e-SUS includes e-SUS-AB<sup>748</sup>, which is an integrated system of primary healthcare for all the municipalities in Brazil that was developed to modernize and restructure all the information system, aiming at the improvement of healthcare provided to the population<sup>749</sup>.

The healthcare system includes a branch for the primary healthcare, family doctors, specialists, pharmacy, laboratories, home care, daycare, and Hospital Care with a Hospital Database – HIS – [Hospital Information System]. All units should be computerized to enable access to electronic medical records [*PEP – Prontuário Eletrônico do Paciente*].

Although e-SUS represents great improvement in the healthcare system, government investments in IT, equipment and training personnel have been neither sufficient nor proportional to the needs of the population. Despite the efforts to implement e-SUS, in reality the conclusion is dramatic: «Brazil is far from a true e-healthcare system, hence the importance of developing a clear and complete strategy for the sector»<sup>750</sup>.

Aug 26, 2018.

BRAZIL. Law No. 8,142 of December 28, 1990. This law provides on community participation in management of the Unified Healthcare System (SUS) and on intergovernmental transfer of funds intended for healthcare, and sets forth other actions that ought to be taken. Available from: <[http://www.planalto.gov.br/ccivil\\_03/LEIS/L8142.htm](http://www.planalto.gov.br/ccivil_03/LEIS/L8142.htm)>. Accessed on Aug 26, 2018.

BRAZIL. Decree No. 7,508 of June 28, 2011. This decree regulates Law No. 8,080 of September 19, 1990, so as to provide on the organization of the Unified Healthcare System (SUS), the planning of healthcare, the assistance to health and the inter-federal coordination, and sets forth other actions that ought to be taken. Available from: <[http://www.planalto.gov.br/ccivil\\_03/\\_Ato2011-2014/2011/Decreto/D7508.htm](http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2011/Decreto/D7508.htm)>. Accessed on Aug 26, 2018.

744 Available from: <<https://www.theatlantic.com/health/archive/2014/05/the-struggle-for-universal-healthcare/361854/>>. Accessed on Aug 26, 2018.

745 T. C. Marinho, op. cit., 2017, p. 14. Author's translation

746 Available from: <<http://www.conass.org.br/consensus/numero-de-hospitais-brasil-sus/>>. Accessed on Aug 26, 2018.

747 Available from: <<http://www2.datasus.gov.br/ESUSHOSP/>>. Accessed on Aug 26, 2018.

748 Available from: <[http://bvsmis.saude.gov.br/bvs/saudelegis/gm/2013/prt1412\\_10\\_07\\_2013.html](http://bvsmis.saude.gov.br/bvs/saudelegis/gm/2013/prt1412_10_07_2013.html)>. Accessed on Aug 26, 2018.

749 J. P. Alves, Í. V. A. Diniz, K. T. G. França, L. M. da Silva, C. S. Martiniano, *Avanços e Desafios na Implantação do e-SUS-Atenção básica*, 2018, p. 3. Available from: <[http://www.editorarealize.com.br/revistas/conbracis/trabalhos/TRABALHO\\_EV071\\_MD4\\_SA7\\_ID788\\_15052017202831.pdf](http://www.editorarealize.com.br/revistas/conbracis/trabalhos/TRABALHO_EV071_MD4_SA7_ID788_15052017202831.pdf)>. Accessed on Aug 26, 2018. Author's translation

750 R. M. E Sabbatini, *e-Saúde*, in P. T. Knight, C. C. C. Fernandes, M. A. Cunha, *E-Desenvolvimento no Brasil e no mundo – subsídios e programa e-Brasil*. Camara-e.net - Câmara Brasileira de Comércio Eletrônico - YENDIS, 2007, p.

751. Available from: <<http://www.sabbatini.com/renato/papers/e-saude.pdf>>. Accessed on Aug 26, 2018. Author's translation.

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4.2. Although Brazil spends more than 9% of its PPP in healthcare<sup>751</sup>, the level of dissatisfaction in its population is very high, and we can point out many reasons, starting with the size of the Brazilian territory and infrastructure deficiency, as well as a lack of trained healthcare professionals, «corruption and inefficiency»<sup>752</sup>, all of which could certainly be minimized through the effective implementation of e-health in the public sector<sup>753</sup>.

Implementation of e-healthcare through e-SUS would certainly help to improve the healthcare system, but «medical care has been one of the last areas to have adopted the modern ITC in its routines and proceedings. One of the main causes for this delay is the cultural obstacle represented by healthcare professionals, who until just recently still ignored or were refractory to such progress»<sup>754</sup>.

Another major problem for implementing e-health is the lack of a computerized structure in the healthcare system – only 52% of SUS units have computers and only 36,7% have access to the Internet<sup>755</sup>–, as well as hardware and software incompatibility. More investment in SUS unit computerization and proper personnel training [to ensure proper use of the new technology made available] is needed to overcome the first implementation stage of the process<sup>756</sup>.

Another challenge is to provide clear and accountable information, allowing its integration and sharing, which is the foundation for an efficient e-health system. Healthcare webportals do not provide objective data, and the information provided is not sufficient to make the population aware of its rights<sup>757</sup>.

One of the most common complaints of the population is the lack of primary assistance in public hospitals. Users of the healthcare system never know if or when the doctor will be there for assistance or surgery, and if or when they will receive treatment or prescribed medicine. There are never enough hospital beds for patients, and it is not uncommon to see people receiving medical treatment in chairs, at the hall entrance or corridors of the public hospitals. There is no therapy offered for terminal patients, who are invariably sent back home to die with their family, devoid of either assistance or dignity.

Moreover, the amount of waiting time prior to surgery is a serious complaint. According to the Federal Medical Council, in 2017, there were more than 900,000 Brazilians in the waiting list for

751 Available from: <<http://agenciabrasil.ebc.com.br/economia/noticia/2017-12/gastos-com-saude-crescem-mesmo-em-meio-crise-e-atingem-91-do-pib>>. Accessed on Aug 26, 2018.

752 T. C. Marinho, op. cit., 2017, p. 9. Author's translation

753 J. P. Alves, Í. V. A. Diniz, K. T. G. França, L. M. da Silva, C. S. Martiniano, op. cit., 2018, p. 5.

754 R. M. E Sabbatini, op. cit., 2007, p. 741. Author's translation

755 J. P. Alves, Í. V. A. Diniz, K. T. G. França, L. M. da Silva, C. S. Martiniano, op. cit., 2018, p. 3.

756 E.H. DINIZ, *O governo eletrônico no Brasil*, Revista de Administração Pública. Rio de Janeiro, 2009. Available from: <[http://www.scielo.br/scielo.php?pid=S0034-76122009000100003&script=sci\\_abstract&tlng=pt](http://www.scielo.br/scielo.php?pid=S0034-76122009000100003&script=sci_abstract&tlng=pt)>. Accessed on Aug 26, 2018.

757 There are many proposals under discussion to alter the law that regulates the health system, to open information concerning the lines for treatment. See: Projeto de Lei do Senado (PLS) nº 192, de 2018. Available from: <<https://www25.senado.leg.br/web/atividade/materias/-/materia/133007>>. Accessed on Aug 26, 2018.

See also Senate Bill (PLS) nº 393 of 2015. Available from: <<https://www12.senado.leg.br/noticias/audios/2017/08/transparencia-em-fila-de-cirurgia-vai-acabar-com-privilegios-no-sus-diz-otto-alencar>>. Accessed on Aug 26, 2018.

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different types of surgery with no expected date in sight. Although patient position in line can be known, the information provided by healthcare web portals is totally insufficient for it does not provide either clear information on the expected waiting time or scheduled medical procedures. People end up passing while still in the waiting list before getting to undergo the procedure needed<sup>758</sup>.

The Federal Government implemented a healthcare regulation system called *SISREG*<sup>759</sup> aiming to integrate, organize and discipline the waiting lines for primary assistance, hospital admission and surgeries [available in all three levels of health units]. The idea was that a patient would be able to keep track of their position in the line through an app [*Meu Digi SUS*]. However, in reality the system is not available for all units, as it covers less than 1/3 of all municipalities, with only 204 ambulatorial regulation centers and 19 hospital regulation centers – which is not enough to meet demand<sup>760</sup>. Furthermore, as there is no control or supervision, healthcare units do not respect the lines. The system ends being unreliable, as the number of lawsuits filed has shown.

Regulation should be more stringent specifically for cancer treatment, as federal Law 12,732/12 stipulates a 60-day deadline to start treatment<sup>761</sup>. However, in 2014, only in the state of Rio de Janeiro over 500 individuals had been waiting for more than a year for treatment. The Brazilian Department of Justice [*Ministério Público*] sued the federal, state and local governments seeking proper enforcement of the law and calling for organized waiting lines and proper treatment<sup>762</sup>.

It is also not clear why some surgery lines run faster than others. Sometimes patients in need of a knee surgery may wait longer than those who need backbone surgery, with neither explanation nor accurate information being given. This single example shows that the lines are not managed in a clear or transparent way, favoring corruption and fraud. Frequent scandals involving surgery lines, even in transplant lines, exposes the scenario<sup>763</sup>.

Another huge problem involves medicine procurement in public hospitals<sup>764</sup>, which involves a lack of transparency in the system. The Federal Government issues a list of medicines that are to be dispensed in public hospitals and public pharmacies. Until 2010, there were only 500 basic drugs in the list. In 2017, this number rose to 869 different drugs as included in the list<sup>765</sup>. It is not unusual to see lawsuits being filed in order to receive the medication prescribed by public hospital doctors

758 Available from: <[https://portal.cfm.org.br/index.php?option=com\\_content&view=article&id=27314:crise-no-sus-brasil-tem-mais-de-900-mil-cirurgias-eletivas-represas&catid=3](https://portal.cfm.org.br/index.php?option=com_content&view=article&id=27314:crise-no-sus-brasil-tem-mais-de-900-mil-cirurgias-eletivas-represas&catid=3)>. Accessed on Aug 26, 2018.

759 Available from: <<https://www.servicos.gov.br/servico/cadastrar-se-no-sistema-de-regulacao>>. Accessed on Aug 26, 2018.

760 Available from: <<http://www2.datasus.gov.br/DATASUS/index.php?acao=11&id=30430>>. Accessed on Aug 26, 2018.

761 Available from: <[http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2012/lei/112732.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/lei/112732.htm)>. Accessed on Aug 26, 2018.

762 See Public Civil Action. Case No. 00067445-1.2014.4.02.51.01. 15th Federal Court in Rio de Janeiro. Available from: <<http://proceweb.jfrj.jus.br/portal/consulta/resconsproc.asp>>. Accessed on Aug 26, 2018.

763 Available from: <<https://g1.globo.com/rj/rio-de-janeiro/noticia/desvio-de-dinheiro-do-into-prejudica-milhares-de-pacientes-que-esperam-por-uma-cirurgia-na-unidade-de-saude.ghtml>>. Accessed on Aug 26, 2018.

764 Available from: <<http://portalarquivos2.saude.gov.br/images/pdf/2017/maio/26/1.a-Banco-Mundial-Eficiencia-do-Gasto-com-Saude-CIT.pdf>>. Accessed on Aug 26, 2018.

765 Available from: <<http://portalfns.saude.gov.br/ultimas-noticias/1727-ministerio-da-saude-publica-nova-lista-de-medicamentos-essenciais-para-o-sus>>. Accessed on Aug 26, 2018.

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[medicine included in the list but not available to be delivered to patients, with no neither reasonable nor timely justification being given].

The implementation of e-health would help to improve the efficiency and transparency in the public healthcare system, but it would depend more than anything on political will to invest on IT and infrastructure<sup>766</sup>, as has already been done in other areas of government.

**4.3.** Albeit created in 2011 as an «ambitious project» to give each citizen a National Healthcare Card, a personal digital identification health card allowing identification and use of the healthcare system<sup>767</sup>, until today the population is not aware of the importance of the using the SUS-card.

The implementation of the e-health card would bring benefits in terms of management and planning to the whole healthcare system, allowing its reorganization, with more efficiency and accountability, permitting the interconnection of information on doctor appointments and surgery, as well as medication prescription and medical e-files.

Improvement of the healthcare system depends on total integration of the e-health card at all levels of healthcare: federal, state and municipal<sup>768</sup>. It is impossible to understand why a country that has had a taxpayer identification card [CPF] for each citizen since 1996 has so much difficulty in implementing a similar card in its healthcare system.

**4.4.** Medical e-files [*PEP – Prontuário Eletrônico do Paciente*] represent a major evolution in e-health as they can store all of a patient's medical data, laboratory tests, clinical assistance, diagnoses, and treatment; plus, they can be shared by doctors and hospitals, regardless of distance or patient location. Another advantage is that they prevent medical procedure and test result duplicity and are thus an excellent, cost-saving tool.

Although federal law mandates the use of electronic healthcare records, said use is still a dream in Brazil. Studies show that medical e-files are effectively used in «less than 1% of Brazilian hospitals»<sup>769</sup>.

Unbelievable as it may seem, in Brazil, in 2018, patient healthcare records are still hand written, unavailable, incomprehensible, and subject to fraudulent alterations. Just as is the case with hospital forms and medical prescriptions, both filled out on paper, by hand and subject to all sorts of damage and inaccuracy. Bills designed to improve the use of electronic files are still in Congress<sup>770</sup>, pending approval, without urgency, despite the fact that they would bring substantial benefits, affording quality, organization, safety, and efficiency to the whole system. Sabbatini believes that «In the future, we hope that the core for e-health development in Brazil will come with web-based medical e-files»<sup>771</sup>.

766 R. M. E. Sabbatini, op. cit., 2007, p. 752.

767 R. M. E. Sabbatini, op. cit., 2007, p. 747.

768 R. M. E. Sabbatini, op. cit., 2007, p. 757.

769 R. M. E. Sabbatini, op. cit., 2007, p. 743. Author's translation.

770 Available from: <<https://www12.senado.leg.br/noticias/materias/2018/04/03/aprovada-digitalizacao-de-prontuarios-medicos-em-hospitais>>. Accessed on Aug 26, 2018.

771 R. M. E. Sabbatini, op. cit., 2007, p. 755.

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4.5. As we mentioned above, most public healthcare users in Brazil are among the poor [invariably illiterate individuals, considering that more than 7% of the Brazilian population has no access elementary education, a percentage that rises to 13,8%<sup>772</sup> in the northeast region]. This factor contributes tremendously to the lack of civil engagement in the decision- making process. Poor people don't participate. They are either not heard or heard only when the consequences are serious and get the attention of big media – namely, when people die because of lack of assistance.

To make matters even worse, we now see the rise of a social phenomenon called «digital exclusion», which is the inability to access the Internet and digital technology due to the high cost of equipment<sup>773</sup> and to use sophisticated technology. As only 69,3% of households in Brazil have Internet access [roughly 48,1 million households], we can infer that the population has limited access to e-government web portals and will be even farther from any information at all, a fact that will cause even greater social exclusion.

This means that the e-Government project demands not only public investment in technology within the administrative branch but also the provision of public computers and Internet access to poor communities to make e-government accessible to the population<sup>774</sup>.

Popular participation could easily be achieved at all levels of government through direct participation in public hearings, referenda and plebiscites – tools already afforded by the Brazilian constitution<sup>775</sup>.

There is also a provision requiring popular participation in the *SUS* Management Board on federal Law 8,142/90<sup>776</sup>, a provision that could enable public policy control and supervision. Cruz emphasizes that reinforcing social participation in public healthcare policy-making will be valued as a political decision, affording power to allow growth in the universalization and equal access to healthcare, thus constituting a great opportunity for the active and creative insertion of the population in the promotion of public healthcare<sup>777</sup>.

The reality is that popular participation and control are not effective due to lack of information and multiple conflicting interests that subtract power from society.<sup>778</sup>

In short, we could conclude that it is urgent to find a way to give voice to the poor to improve citizen engagement, participation and community collaboration. The mechanisms for effective popular participation, whether legal or technological, already exists in Brazil, and it is now up to politicians to decide whether they want to enable democratic participation by disclosing forthcoming policies and giving the opportunity for comments.

772 Available from: <<http://agenciabrasil.etc.com.br/educacao/noticia/2017-12/taxa-de-analfabetismo-no-pais-na-faixa-de-15-anos-ou-mais-foi-de-72-em-2016>>. Accessed on Aug 26, 2018.

773 M. M. Ribeiro, C. O. de A. Freitas, op. cit., 2012, p.11.

774 F. S. O. S. Bonelli, op. cit., 2014, p. 33.

775 BRAZIL. Federal Constitution, 1988. Article 14. The sovereignty of the people shall be exercised by universal suffrage and by the direct and secret voting, with equal value for all, and, according to the law, by means of: I – plebiscite; II – referendum; III – people's initiative. Available from:

<[http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte\\_en\\_us/anexo/Constitution\\_2013.pdf](http://www.stf.jus.br/repositorio/cms/portalStfInternacional/portalStfSobreCorte_en_us/anexo/Constitution_2013.pdf)>. Accessed on Aug 26, 2018.

776 Available from: <[http://www.planalto.gov.br/ccivil\\_03/LEIS/L8142.htm](http://www.planalto.gov.br/ccivil_03/LEIS/L8142.htm)>. Accessed on Aug 26, 2018.

777 Available from: <<http://www.scielo.br/pdf/sausoc/v21n4/v21n4a25.pdf>>. Accessed on Aug 26, 2018.

778 Available from: <<http://www.scielo.br/pdf/sdeb/v37n96/16.pdf>>. Accessed on Aug 26, 2018.

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**4.6.** The big challenge imposed by digitization lies on the protection of privacy. It yet remains to see whether the Brazilian government is taking appropriate measures to protect the privacy of all digitized data [data that includes personal data, especially under the due process law clause, which requires that due notice to be given to parties involved].

In fact, there is a massive amount of digitized data – produced by the public health system and the judiciary system – that is currently available for public scrutiny, research and reuse all over the world. As BIG DATA is not subjected to either international border or jurisdiction limits, it is important to develop measures to ensure its confidentiality.

Medical e-files call for much attention, especially in terms of privacy, security and ethical issues involving the use of open data [just as is the case in any other field]. The basic precautions such as providing username and password to login into the system and have access to the health information ought to be taken.

**5.** Although the last decade has seen much improvement in government, the great deficit in the social area, especially in the healthcare system, where poor people have been suffering directly from the inefficiency and lack of transparency, has made it necessary for citizens to go to court to secure their rights through injunctions, orders and explanations for lack of treatment.

When the first cases reached the Supreme Court, the court held that fundamental rights had not been afforded to those entitled to them and that Government could refrain from meeting its obligation to provide healthcare to citizens, as mandated by article 196 of the Brazilian Constitution<sup>779</sup>. This reliance on courts and judicial means for addressing these matters became known as healthcare judicialization.

According to the National Board of Justice [*Conselho Nacional de Justiça*], in 2016, there were more than 1,346,931 pending cases involving healthcare. In 7 years, there was a 1.300% increase in the number of lawsuits of the cases involving drug dispensing, a situation that made it necessary for the government to create the National Health Forum in the Justice system<sup>780</sup> to monitor these lawsuits and diagnose the deficiencies in SUS through studies geared toward the development of solutions designed for improving the healthcare system. Healthcare committees were created, and federal courts have become specialized in healthcare cases<sup>781</sup>.

779 ‘This court has already ruled that, despite the merely programmatic nature of art. 196 of the Federal Constitution, the State cannot refrain from complying with its duty to make available the means necessary for full enjoyment of the right to healthcare by citizens. Accordingly, due attention ought to be given to the following summary of the individual ruling entered by Justice Celso de Mello in extraordinary appeal (RE) no. 271,286: ‘The right to healthcare is not only a fundamental right afforded to all individuals but also a constitutional consequence inseparable from the right to life. Public authorities, regardless of their institutional rank within the organization of the Federal Republic of Brazil, cannot ignore problems affecting an individual’s health without engaging – even through omission - in a shameful unconstitutional behavior.’ Available from: <http://redir.stf.jus.br/paginadorpub/paginador.jsp?docTP=AC&docID=335538>>. Accessed on Aug 26, 2018.

780 Available from: <http://www.cnj.jus.br/busca-atos-adm?documento=2831> <http://www.cnj.jus.br/programas-e-acoos/forum-da-saude>>. Accessed on Aug 26, 2018.

781 National Council of Law (BR). Resolution No. 238 of September 6, 2016. This law provides on the creation and maintenance of State Healthcare Councils by Trial Courts and Federal Regional Courts, as well as on the creation of specialized trial courts in cities having more than one tax court. Available from: <http://www.cnj.jus.br/busca-atos-adm?documento=3191>>. Accessed on Aug 26, 2018.

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Statistics show that the judicial branch of power has become the actual manager of public healthcare policies through the issuance of preliminary injunctions. Again, the Supreme Court ruled in favor of the citizens, holding that the judicial branch can rule on the implementation of the healthcare system, and that by doing so no infringement of the system of checks and balances results [separation of the branches of power clause]<sup>782</sup>.

The vast majority of cases involve individual rights and seek the provision of medicine or treatment by public hospitals. The endless lines for surgery and hospital admission are questioned. The scenario was so dramatic that the Supreme Court ruled that all the three levels of government, federal, state and municipal are jointly and severally liable for healthcare<sup>783</sup>.

Considering the tremendous quantity of individual healthcare cases and the collective interest involved, the Supreme Court is now deciding whether the Brazilian department of Justice has the standing to file class actions involving healthcare<sup>784</sup>. Said court is also deciding whether the judicial branch of power can or not control government expenditure on healthcare when the Constitution requires that state and local authorities allocate a minimum percentage of public funds<sup>785</sup> for public healthcare actions and services.

To deal with the judicialization phenomenon, the judicial branch had to readapt its systems, as the new code of civil procedure mandates all the judicial files are to be digitized. Since 2015, computer programs have been developed to improve the administration of justice.

782 BRAZIL. Supreme Court. Bill of Review on Suspension of a Preliminary Injunction (SL-AgR) No. 47/PE. Reporter: Justice Gilmar Mendes. Plenary. Brasilia, April 30, 2010. SUMMARY: Suspension of a Preliminary Injunction. Bill of Review. Public health. Fundamental social right. Art. 196 of the Federal Constitution. Public hearing. Unified Healthcare System (SUS). Public policies. Judicialization of the right to healthcare. Separation of the branches of power. Parameters for judicial resolution of concrete cases involving the right to healthcare. Joint responsibility of entities of the Federation in matters concerning health. Mandate to regularize the services provided by a public hospital. No evidence of serious lesion to public order, to the economy, to health and public security. Possible reverse damage. Bill of Review denied. Available from: <<http://redir.stf.jus.br/paginadorpub/paginador.jsp?docTP=AC&docID=610254>>. Accessed on Aug 26, 2018.

783 See the *leading case* (Theme 793 of STF decisions): EXTRAORDINARY APPEAL. CONSTITUTIONAL AND ADMINISTRATIVE SUBJECT MATTER. THE RIGHT TO HEALTHCARE. MEDICAL TREATMENT. JOINT RESPONSIBILITY OF ENTITIES OF THE FEDERATION. GENERAL REPERCUSSION ACKNOWLEDGED. REAFFIRMATION OF CASE LAW. Proper medical treatment for those who need it is one of the duties of the State, as it constitutes a responsibility for entities of the Federation. Defendants may be any one of such entities either severally or jointly. Available from: <<http://www.stf.jus.br/portal/jurisprudenciaRepercussao/verAndamentoProcesso.asp?incidente=4678356&numeroProcesso=855178&classeProcesso=RE&numeroTema=793>>. Accessed on Aug 26, 2018.

784 Available from: <<http://www.stf.jus.br/portal/jurisprudenciaRepercussao/verPronunciamento.asp?pronunciamento=3307461>> Accessed on Aug 26, 2018.

785 BRAZIL. Supreme Court. Extraordinary Appeal (RE) No. 858,075/RJ. Reporter: Justice Marco Aurelio. Brasilia, June 16, 2015. SUMMARY: BUDGET – PROVISION OF MINIMUM FUNDS FOR HEALTHCARE – JUDICIAL CONTROL – SEPARATION OF THE BRANCHES OF POWER – SCOPE OF ART. 2, ART. 160, SOLE PARAGRAPH, ITEM II, AND ART. 198, PARAGRAPHS TWO AND THREE OF THE PERMANENT TEXT, AND ART. 77, ITEM III, PARAGRAPHS THREE AND FOUR OF THE FINAL AND TRANSITIONAL PROVISIONS OF THE FEDERAL CONSTITUTION OF 1988 – EXTRAORDINARY APPEAL – GENERAL REPERCUSSION ACKNOWLEDGED. Available from: <<http://www.stf.jus.br/portal/jurisprudencia/listarJurisprudencia.asp?s1=%28RE%24%2ESCLA%2E+E+858075%2ENUME%2E%29+OU+%28RE%2EPRCR%2E+ADJ2+858075%2EPRCR%2E%29&base=baseRepercussao&url=http://tinyurl.com/q3nvgsn>>. Accessed on Aug 26, 2018.



### III.4

Nonetheless, whether judicial branch endeavors have a positive effect in improving the healthcare system itself is subject to debate. Perhaps, it would be simpler for administrative healthcare authorities to implement public healthcare policies themselves.

6. We hope that this paper contributes to the debate in two ways; first, by demonstrating the improvement of Brazilian public policies geared towards ‘Smart Government’ and our government’s entrance into the e-Government era; and, secondly, by demonstrating that legislative efforts are not enough if not coupled with concrete actions designed for improvement, especially in the healthcare area.

Brazil has established a reform plan to modernize its administration and its entrance in the E-Government era. Nonetheless, digitization of public administration is far from being uniform and has been more favorable to financial areas – such as taxation and banking, which nowadays are totally integrated and digitalized – and caused social areas to lag far behind.

As we have demonstrated, Brazil – a country currently managing the biggest public healthcare system in the world – now faces a huge challenge; namely, to ensure that all of its citizens get to fully enjoy their social rights, including the right to healthcare, under the principles of universality and equality.

The constant dissatisfaction of the population with the Brazilian healthcare system is visible. Many structural problems - such as the lack of transparency – remain unsolved. Individuals have the right to know when treatment will begin and when they will receive medicine; yet, in practical terms, healthcare records are inconsistent, and information is insufficient. The implementation of a digitized healthcare system is still in its inception, with medical records still being made in hard copy with no integration among healthcare units and no dissemination of the healthcare national card.

Furthermore, fundamental constitutional principles of rule of law and public interest require transparency in a modern administration. All the legislative efforts for fostering transparency and e-government will be worthless if data input is not accurate.

No technological tools will be enough if there is not a change in mindset, that is, one that favors disclosure of data on public spending and allows real participation of the population in the decision-making process and its control of government action with a view to achieving efficiency and curtailing corruption.

In short, e-government in Brazil can be successfully achieved if the government has the political will to prioritize social areas by integrating the poor – so that they may benefit from the use of electronic systems –, providing equipment and trained personnel to educate individuals, implementing the program and preventing further digital exclusion.

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