COMMENTS ABOUT AGROTECH, COMPLIANCE AND THE GENERAL DATA PROTECTION LAW (LGPD)

Thomas Law 1*

Abstract: This article makes a brief analysis of startups and also the commercial relations of Agribusiness in Brazil with the international market, that is, it demonstrates the importance of technology and innovation for the Brazilian agribusiness industry, therefore, the analysis of agrotechs. In addition, it investigates the legal and legislative instruments in data protection, since the LGPD and all the provisions determining penalties in companies for breach of the Law itself are in place. It also addresses data compliance and self-regulation, key tools for businesses, applications and startups.

KEYWORDS: Agrotechs - General Data Protection Law (LGPD) - Internet Civil Framework - Agribusiness - Commercial and International Relations

Introduction

Currently, Industry 4.0 is being experienced, a recent phenomenon, of global scope, which has been significantly altering both the forms of production and the work relationships existing within the industry, agriculture and services. The "internet of things", artificial intelligence, the 3D printer, the big data originating from the Fourth Industrial Revolution are the drivers of the entire production process, with the consequent reduction of live work, made possible by the replacement of traditional and more manual activities by automated and robotic tools, under informational-digital command.

At the other extreme, Brazil is one of the world's largest leaders in Agribusiness, being one of the great international references on this topic. It is considered the fourth country that produces the most food, and could become the world's leading country by 2050. The agribusiness can be understood as the total sum of the production and distribution operations of agricultural supplies, the production operations in the production unit, the storage, processing and distribution of agricultural products and the items produced through them. A prominent and relevant activity for Brazilian development throughout its history.

However, for large-scale production, a large area and maintenance are required to carry out all agribusiness-related activities. Thus, these activities must find a balance with sustainability, so that preservation and production do not collapse, that is, so that economic activities related to agribusiness do not use up available natural resources, as well as environmental degradation.

_

¹ Vice-President of CEDES – Center for Economic and Social Law Studies, Post-doctoral student at USP (University of São Paulo) Ribeirão Preto campus, PhD in Commercial Law from PUC/SP, Master in Law of International Economic Relations from PUC-SP, Specialist in Civil Law and Civil Procedure from FAAP, Specialist in Economic Criminal Law from GV-LAW, Coach and Arbitrator of the Willem C. Vis International Commercial Arbitration Moot, member of IASP, UIA, ICCA and managing partner of APECC; President of IBCJ, President of IBRACHINA- Brazil and China Socio-Cultural Institute, President of the National Coordination of Brazil and China Relations of the National OAB (CNRBC/CFOAB), full member of the Mato Grosso/China Thematic Sector Chamber, Consultant of the Brazil-China and BRICS Parliamentary Fronts of the National Congress. Attorney.

This article aims to unite both extremes, based on the agribusiness startups², as well as the legal instruments that regulate the internet and the protection of personal data in accordance with the new Brazilian legislation. Some questions of this study are: a) What are the startups focused on agribusiness? b) How important is Brazilian agribusiness to the international market, especially to the Asian giant - China? How to maintain sustainable development in agribusiness relationships? c) How important are data protection instruments (LGPD) in the 21st century for everyone living in society? What is the implication for agriculture startups if they do not act in accordance with the LGPD's national legislation?

Thus, the purpose of this research is to address completely innovative issues, based on laws, bills, traditional customs versus modernity, European Union guidelines and doctrines regarding data protection and situations arising from technology and innovation.

1.Startups, Agrotechs and Industry 4.0

Startup³ is an English word, the meaning of which is the act or process of initiating an operation or movement. For a few decades, however, it has been widely used to refer to newly established businesses, with low maintenance costs⁴ and a high degree of uncertainty of success, which seek to achieve rapid growth, relying on the offering of innovative products or services in the eyes of the market in which they operate and with high potential for scalability, generally using the internet or other innovative technologies.

Among the characteristics that these companies have in common, we can list: (i) they developed innovative products or services⁵, with intensive use of technology, especially information technologies and the internet; (ii) they have easily replicable business models, with the ability to scale quickly, without a proportional increase in costs; (iii) they were born in scenarios of extreme uncertainty regarding the feasibility of the business and the success of their products or services; and (iv) they raised funds to scale the business from investors willing to take extremely high risks, in search of aggressive returns.

² According to the KPMG survey, startups focused on agribusiness in Brazil operate in the areas of robotics and drones (11), animal management (14), pest control (16), e-commerce (18), reforestation (4), agricultural management (27), smart farms (7), data analysis and precision agriculture (38).(Available at:< Agronegócio já tem 'Tinder' de gado e 'Uber' de tratores> (Agribusiness already has 'Tinder' for cattle and 'Uber' for tractors) | O TEMPO>. Accessed on: 08/02/2021.)

³ Successful startups like Google, Facebook and many others have influenced and continue to influence the growth of entrepreneurial culture around the planet, including in Brazil. As a consequence, there is an entrepreneurial ecosystem in this country that has been developing rapidly in recent years, with the increase in investments (national and foreign), the support of large companies and the emergence of more and more aid organizations, in addition to the existence of different groups of entrepreneurs, which stimulates and enables the creation of new startups. (REIS, Edgar Vidigal de Andrade. *Startups. Análise de Estruturas Societárias e de Investimentos no Brasil* (Startups. Analysis of Corporate and Investment Structures in Brazil). São Paulo: Almedina, 2018, p. 21).

⁴ The individual in this new world starts to have a position as a collaborator of the business, including having their remuneration often related to the success of the business to be developed and a routine of time flexibility that does not justify the application of traditional labor legislation. It is worth noting, in this sense, that Brazilian legislation is very interventionist and, to a certain extent, archaic when dealing with startups, often making it difficult to develop innovative practices that are already used in different parts of the world. (FEIGELSON, Bruno et al. *Direito das Startups* (Startup Law). São Paulo: Saraiva, 2018, p. 211-ss).

⁵ According to Maria Eugênia Finkelstein, Fintechs are new products and services that are extremely specific in order to meet consumers' objectives, and not reproduce the Bank as a whole. (FINKELSTEIN, Maria Eugênia. Fintechs.In: CASADO FILHO, Napoleão, and others (orgs.) *Direito Internacional e Arbitragem Estudos em Homenagem ao Professor Cláudio Finkelstein* (International Law and Arbitration Studies in Homage to Professor Cláudio Finkelstein). São Paulo: Quartier Latin, 2019, p. 251-265).

Just like urban centers and industries, agribusiness is being invaded by technological innovations. Through an application, the startup Alluagro⁶ offers agricultural machinery and implements for rural producers. Renting, which involves the provision of services, including labor, is, in some cases, up to five times cheaper than purchasing the machinery.

It is highlighted that livestock farming is also in the sights of new technologies. In the UK, the app Tudder⁷ promotes cows and cattle for breeding through a platform that resembles the dating service Tinder. In it, the producer defines whether they are looking for a female or male animal and, with each image, they say "yes" by swiping to the right and "no" to the left, until they find a "match". The application brings a message right at the beginning of the screen: "welcome to Tudder, where you can find the perfect match for your livestock."

It is important to note that Tudder⁸ was launched on February 14 (Valentine's Day) by Hectare Agrotech, which is also responsible for the animal sales website ShellMyLivestock, on which a third of UK farmers are already registered. Tudder hasn't arrived in Brazil yet, but apps like Boi na Linha⁹ already sell cattle through smartphone, that is, a new process for purchasing cattle over the internet, on the electronic platform.

It is worth remembering that startups are enterprises organized differently from traditional businesses. Between the conception of the idea and its materialization for offering to the public, there is a phase of initial development, testing and continuous improvement, with reduced costs and high speed. The agile methodology for developing these businesses, as well as the level of assertiveness of the solutions, are as revolutionary as the solutions themselves, and have caught the attention of the traditional industry, which also seeks the accelerated development provided by startups: these are the so-called open innovation, with laboratories, challenges and programs¹⁰.

In turn, in Brazil, some unicorns¹¹ stand out, such as: 1) 99 - ride sharing company. First unicorn in the history of Brazil, which reached a market value of 1 billion dollars after the Chinese acquisition of the giant DiDi; 2) Nubank- digital bank founded by former partner Sequoia Capital - responsible for investments in Latin America. It received hundreds of millions of reais in investments from the Tencent Chinese; 3) Movile - Owner of iFood and several other companies; 4) Loggi - platform that connects more than 25 thousand motorcyclists for deliveries in more than 35 Brazilian cities; 5) Gympass – subscription service for access to gyms; 6) Quinto Andar – platform that offers more properties for rent that eliminate the requirement for a guarantor and surety bond.

⁶ Available at:<Agronegócio já tem 'Tinder' de gado e 'Uber' de tratores | O TEMPO>. Accessed on: 08/02/2021.

Available at:
 Agronegócio já tem 'Tinder' de gado e 'Uber' de tratores | O TEMPO >. Accessed on: 08/02/2021.
 Available at:
 Agronegócio já tem 'Tinder' de gado e 'Uber' de tratores | O TEMPO >. Accessed on: 08/03/2021).

⁹"There's no going back. Soon the majority of livestock sales will be made online. The producer sees a film of the animal and makes a bid", says the technical director of the Brazilian Association of Zebu Breeders (ABCZ), Valdecir Marin Júnior. (Available at: < Agronegócio já tem 'Tinder' de gado e 'Uber' de tratores | O TEMPO>. Accessed on: 08/02/2021.)

at:https://blog.aevo.com.br/o-que-e-open-innovation-ou-inovacao-aberta/>. Available 08/03/2021).

¹¹Unicorn startups are private technology companies valued at more than one billion dollars before going public on the stock exchanges, that is, before carrying out the IPO (Initial Public Offering).

The main characteristic of a unicorn startup is innovation in the market in which it belongs. (GEROMEL, Ricardo. O Poder da China. O que você deve saber sobre o país que mais cresce em bilionários e unicórnios. (The Power of China. What you should know about the country with the fastest growth in billionaires and unicorns). São Paulo: Editora Gente, 2019, p. 54-ss).

Regarding the Agrotech¹², although there is no unicorn yet, some Brazilian agrotechs deserve to be highlighted: 1) BovControl is an agrotech that is redefining the way of managing livestock activity in the world, that is, through an advanced tool for data collection and analysis, the company allows producers to monitor everything that happens in the field in real time; the result is a significant improvement in the production of meat, milk or genetics; 2) Strider was founded in 2013 with the mission of transforming agricultural management through technology; the company offers tailored solutions for the production of soybeans, coffee, sugarcane, cotton, citrus and HF. Among the resources offered are digital pest control, plantation monitoring and harvest optimization; 3) Aegro stands out for its innovative farm management software, which includes functions such as accounts payable, inventory and training. The company's solution allows for precise harvest planning, agile recording of crop activities and secure storage of production history. As a result, 87% of producers report superior business control, while 83% say they are managing livestock handling better; 4) Solinftec is a genuinely Brazilian startup that is among the top 50 agtechs in the world. Nominated for the "AgTech Oscar" in 2018 (AgFunderInnovationAwards), the company offers a complete solution in digital agriculture. Its platform allows real-time connection with the property, data collection and analysis, climate monitoring, activity management and much more; 5) Agronow is a crop monitoring and forecasting platform for agricultural management, recognized for its highly reliable results. The company's solution involves robust analysis of agricultural areas and the generation of valuable data, which can be monitored in real time. Currently, Agrotech serves the soybean, corn, eucalyptus, sugarcane and pasture segments.

In other words, the world is completely digital. It is structured on a global computer network, which allows individuals instant communication and a highly homogeneous, fluid, constant and complex exchange of information. Access to this information has gained significant value in the highly globalized market. We are certainly living in the information age, in which information, knowledge and high technology are essential types of capital for the success of companies.

2.Brazil and China Agribusiness Commercial Relations

According to the newspaper *Valor Econômico*, in the first quarter of 2020, Brazil obtained a surplus of USD 4.33 billion in its trade with China, which represents 77.9% of Brazil's total surplus and a deficit of USD 2.73 billion in its trade with the USA. In other words, even during the pandemic (Covid-19), it is worth highlighting that there was an increase in trade relations between Brazil and China. Exports to the country represented 29% of the total in the 1st quarter, compared to 26% in the same period of 2019. At the same time, the US participation fell from 13% to 11%, according to a report by Cláudia Trevisan¹³.

_

¹² Available at:<<u>Agrotechs No Radar: 5 Startups Brasileiras e Estrangeiras Para Ficar De Olho | ContaAzul Blog> (Agrotechs On Radar: 5 Brazilian and Foreign Startups to Keep an Eye on) | ContaAzul Blog. Accessed on: 08/02/2021).</u>

¹³ Available at: https://internacional.estadao.com.br/blogs/claudia-trevisan/mesmo-com-coronavirus-aumenta-a-dependencia-do-brasil-em-relacao-a-china/. Accessed on: 04/16/2020.

Furthermore, it is worth highlighting that China is the main destination for products such as: soybean oil, peanut oil, cotton, wood pulp and cellulose. However, it should be noted that soybean sales to China have already surpassed soybean sales to the rest of the world. While, in 2008, 48.6% of the total soy exported by Brazil went to China, in 2011, Chinese participation in soy sales grew to 67.1%¹⁴. Furthermore, in the food sector, we can analyze the current Purchasing Power Parity (PPP) numbers that China has and better understand the partnership with Brazil through the analysis of the balance sheet (04/09/2020) of the National Confederation of Agriculture (CNA). The following text, although longer, provides an essential notion to the points we are going to address:

"Brazilian agribusiness exports in the first quarter of 2020 totaled USD 21.4 billion and remained stable compared to the same period last year (slight drop of 0.4%), according to an assessment by the Brazilian Confederation of Agriculture and Livestock (CNA), based on trade balance data from the Secretariat of Foreign Trade (SECEX) of the Ministry of Economy.

China was the main destination for foreign sales. Shipments to the Asian country were USD 7.2 billion, equivalent to 34% of the total. During the period, there was great demand for products such as soybeans, beef, chicken and raw cotton. The European Union and the United States were the second and third largest buyers in Brazil in the first three months of the year.

Beef sales grew 29.9%, reaching USD 1.6 billion, while chicken had revenues of USD 1.5 billion, an increase of 7%. Chinese demand contributed to these results.

"In relation to beef, Chinese purchases increased 124.7% compared to the first quarter of 2019, reaching USD 767.5 million at the beginning of 2020. Chicken also made gains in China. The country purchased USD 123.3 million more compared to the first quarter of 2019, reaching the amount of USD 345.3 million", says the CNA document.

Another notable product was raw cotton, which recorded the second largest positive change in sales in the first quarter of 2020. According to CNA, the commodity was highly demanded in Asia, with China having the biggest increase in purchases of the product with a positive variation of 119.1%.¹⁵"

Furthermore, it is also worth highlighting the Sino-Brazilian High-Level Commission for Consultation and Cooperation (COSBAN ¹⁶), which is the highest-level

Accessed on: 04/29/2020).

¹⁴ Available at:< https://www.cebc.org.br/arquivos_cebc/carta-brasil-china/Ed_6.pdf> Accessed on: 06/03/2023.

¹⁵ Available at: http://brasilchinaplay.com/2020/04/16/china-x-eua-quem-e-o-verdadeiro-parceiro-do-brasil/>. Accessed on: 04/16/2020.

¹⁶ Established in 2004, COSBAN is the main mechanism for coordinating the bilateral relationship between Brazil and China and is commanded by the vice-presidents of both countries. Mourão highlighted that Brazil's objectives were achieved with the reactivation of COSBAN: the political message that Brazil sees China as a strategic global partner, that it wants to strengthen this position, and that COSBAN becomes the highest-level mechanism of consultation between the two countries. (Available at: https://agenciabrasil.ebc.com.br/politica/noticia/2019-05/na-china-mourao-preside-5a-reuniao-da-cosban.

permanent mechanism between the governments of Brazil and China, a framework in which the Joint Action Plan (2010-2014) and the Ten-Year Cooperation Plan (2012-2021) were drawn up. Within the scope of COSBAN, for example, a Working Group on Agricultural Biotechnology and Biosafety was created which, at the beginning of 2014, concluded a Protocol on Phytosanitary Requirements for the Export of Corn from Brazil to China; The feasibility of exporting corn to China is seen as a milestone in the definitive consolidation of Brazilian agribusiness.

Recently, the Federal Council of the Brazilian Bar Association (CFOAB), through the National Commission for International Relations and the National Coordination of Brazil-China Relations, promoted the event "Brazil China Legal Forum. Advocacy from an International Perspective - Special Edition - 19 years of COSBAN", that is, an event that was attended by the vice-president of the Republic and minister of Development, Industry, Commerce and Services, Geraldo Alckmin (president of COSBAN). He sent a message highlighting the need to further improve bilateral relations between Brazil and China and the preponderant role of the legal community. "Bilateral trade between Brazil and China is worth USD 150 billion, and we have a vision of broad cooperation in areas such as science, technology, infrastructure and health. In line with our project of neo-industrialization of the country, we remain open to the world and Cosban is one of the axes through which our bilateral relationship passes", stated Alckmin¹⁷.

On the same occasion, representing the embassy of the People's Republic of China in Brazil, Jin Hongjun highlighted that the global situation places nations and peoples facing profound and complex, unprecedented transformations. "The bilateral relationship between China and Brazil goes beyond the two countries, taking into account that both China and Brazil are large countries, part of the emerging countries, and China is the largest country in Asia and Brazil the largest of Latin America," he said¹⁸. Furthermore, he highlighted that, when Cosban was created, 19 years ago, the commercial and economic relationship between the two was not as significant as it is now. Since then, there has been continuous and rapid growth in trade between the two countries.

_

Available at:https://www.oab.org.br/noticia/61021/forum-brasil-china-debate-perspectivas-estrategicas-e-celebra-carta-de-cooperacao-juridica. Accessed on: 06/03/2023.

¹⁸ During the opening, the work "A Consolidação Legal das Relações entre China e Brasil" (The Legal Consolidation of Relations between China and Brazil) was also pre-launched. It is prefaced by the president of CFOAB, Beto Simonetti; and the director of the Law School at the Shanghai University of Finance and Economics, professor Song Xiaoyan. The publication is co-organized by the president of Ibrachina and the Brazil/China Coordination of the OAB Nacional, Thomas Law; by USP Associate Professor, Victor Gabriel Rodriguez; and Chinese professor at Shanghai University, Wu Wenfang; and has the collaboration of lawyers Sóstenes Marchezine, Luiz Eduardo Vidal Rodrigues and Lucas Fernandes. The Forum has the institutional support of the Brazil-China and BRICS Parliamentary Fronts of the National Congress; the Brazil-China Business Council (CEBC), a bilateral entity between the two countries, an integral part of Cosban; and the Brazil-China Sociocultural Institute (Ibrachina). Also present were the substitute Minister of Ports and Airports, Roberto Gusmão; the ambassador and secretary of Asia and the Pacific at Itamaraty, Eduardo Paes Saboia, representing the Brazilian chancellor, minister Mauro Vieira; the director of the Department of China, Russia and Central Asia of the Ministry of Foreign Affairs, Pedro Murilo Ortega Terra; the federal deputy and president of the Brazil-China and Brics Fronts in Congress, Fausto Pinato; the senator and president of the Brazil-China Parliamentary Group in the Senate, Nelsinho Trad; the federal deputy and president of the Brazil-China Parliamentary Group in the Chamber, Daniel Almeida; among society authorities and representatives of the business sector. Available https://www.oab.org.br/noticia/61021/forum-brasil-china-debate-perspectivas-estrategicas-e-celebra-carta-decooperacao-juridica>. Accessed on: 06/03/2023.

Furthermore, at this event, the Brazil and China Letter of Legal Cooperation for Sustainable Economic Development was signed. The document aims to make maximum institutional efforts to promote legal exchange and improve legal security in international and Sino-Brazilian relations.

At this event, the vice-president of the Federal Council of the OAB cited the importance of ensuring legal security for the improvement of Sino-Brazilian relations. "The exchange of experiences between Brazilian and Chinese law tends to enhance and improve our systems, as well as diversify legal culture. Proof of this is the letter of cooperation that we have signed. It aims not only to intensify legal cooperation between our countries, but also to establish an important guide for this relationship", said Horn¹⁹.

In addition, the Thematic Sectoral Chamber was installed in the Legislative Assembly of Mato Grosso for Mato-Grosso-China relations. The aforementioned thematic sectoral chamber is a mechanism for improving the Legislative Process, which provides for integration between public agents representing the Executive, Legislative, Judicial Powers, civil society, diplomatic corps and private initiative, academics, professionals and national and international experts. Its objective is to diagnose, study and debate topics of relevant interest to the State and discuss matters in progress, aiming for their improvement and safeguarding popular participation.

In this way, we increasingly highlight the importance of commercial and agribusiness relations between Brazil and China, demanding new academic, professional and cultural partnerships. Therefore, we highlight the fundamental importance of the work developed by the National Coordination of Brazil and China Relations of the Brazilian Bar Association²⁰, as well as other State Coordination Offices that deal with legal improvement, institutional dialogue and strengthening legal security in the business environment, including improvements in the issue of data protection.

3. Compliance and the Brazilian General Data Protection Law

The application of sanctions²¹ came into force on August 1, 2021 for anyone who fails to comply with the General Personal Data Protection Law (LGPD), Law No. 13,709. Institutions will be required to justify the collection of personal data and request authorization from the owner of the information. According to the standard, anyone can request the consultation of data, as well as its removal from the system. The General Personal Data Protection Law (LGPD)

²⁰ Available at:https://ibrachina.com.br/noticia/oab-recebe-artigos-sobre-relacoes-entre-brasil-e-china-ate-01-12/. Accessed on: 08/03/2021.

¹⁹ Available at: < https://www.oab.org.br/noticia/61021/forum-brasil-china-debate-perspectivas-estrategicas-e-celebra-carta-de-cooperacao-juridica>. Accessed on: 06/03/2023.

²¹ The LGPD provides for no less than eight different types of punishment: (i) warning; (ii) simple or daily fine of up to 2% of the revenue of the company, its group or conglomerate in Brazil in the last year, excluding taxes, limited, in total, to BRL 50 million per infraction; (iii) publicizing the infraction; (iv) blocking of personal data to which the infringement refers until its regularization; (v) deletion of personal data to which the infringement refers; (vi) partial suspension of the operation of the database to which the infraction refers for up to one year; (vii) suspension of the exercise of the personal data processing activity to which the infringement refers for up to one year; and (viii) partial or total prohibition to carry out activities related to data processing. (Available at:< Sanções administrativas da LGPD finalmente entrarão em vigor - Migalhas> (LGPD administrative sanctions will finally come into force - Migalhas). Accessed on: 08/02/2021).

seeks to establish rules for the collection, use, storage and sharing of a citizen's data by another natural or legal person.

3.1 Data compliance

Companies must take steps to comply with data privacy regulations. With the exception of data breach laws, compliance is not something they can do after the fact, but rather actions they must take to ensure they are in compliance. In this sense, we highlight the roles of people, processes and technology as essential for data compliance.²²

3.2.1 The role of people in data compliance

It is worth highlighting that the implementation of compliance requires a lot of knowledge because the ability to understand various regulations and interpret their implications is essential. Judgment and decision-making skills are equally critical in determining the necessary business rules that can be part of policy-driven processes to carry out the real business of compliance. Defining your own processes is also a challenge.²³

First, however, all the right players must be involved. The first essential element is internal knowledge workers who have the skills to deal with laws and regulations. This includes people from the compliance offices, who carry out data processing, dealing directly with privacy issues, general advice, risk management and internal auditing. These functions are actually roles, therefore, in smaller companies, a person takes on more than one, depending on their capabilities, skills and spectrum of responsibilities.²⁴

The second need is knowledge workers from functional business organizations such as, but definitely not limited to, human resources, finance, sales, and executive offices. These are the stakeholders who may be responsible for actually complying with regulations and therefore must know and understand what their responsibilities are with respect to specific regulations. Although the focus here is the data compliance in electronic systems, many of these people have to deal with non-IT compliance requirements. For example, human resources personnel understand the rules related to the hiring process, including questions that are prohibited in the interview portion of the hiring process.²⁵

The third important type of knowledge workers comes from chief information security officer (CISO) and chief information officer (CIO) in organizations. These are the technologists responsible for ensuring that electronic systems and the data associated with them that implement compliance processes perform the tasks that are required of them – not just in terms of functionality, but also in terms of monitoring and control.²⁶

_

²² JOHNSON, Christopher M.; GRANDISON, T. W. A. Compliance with data protection Laws using Hippocratic database active enforcement and auditing. IBM Systems Journal, v. 46, n. 2, 2007, p. 255-264.

²³ TALLBERG, Jonas. Paths to compliance: Enforcement, management, and the European Union. International organization, v. 56, n. 3, 2002, p. 609-643.

²⁴ OOSTHUIZEN, Adele; VAN VUUREN, Jurie; BOTHA, Melodi. Compliance or management: The benefits that small business owners gain from frequently sourcing accounting services. The Southern African Journal of Entrepreneurship and Small Business Management, v. 12, n. 1, p. 1-12, 2020.

²⁵ WAKHU, Wilfred Ombunya; OLEL, Maureen. THE COMPLIANCE OF MANAGEMENT ON REGISTRATION REQUIREMENTS IN REGARD TO PHYSICAL INFRASTRUCTURE OF PRIMARY TEACHER TRAINING COLLEGES IN BUNGOMA COUNTY, KENYA. European Journal of Education Studies, v. 7, n. 11, 2020.

²⁶ BOUAYNAYA, Wafa. Cloud computing in SMEs: towards delegation of the CIO role. Information & Computer Security, 2020.

These three types of knowledge workers are all internal to the organization. Two types of external knowledge workers also play a significant role. One is the regulator, who has the right to examine what is happening and check whether compliance is occurring on an ongoing basis. The second type is the external auditor, who acts as an independent safety valve to ensure that internal processes and systems are actually working as desired, so that the regulator finds everything as it should be.²⁷

3.2.2 The role of processes in data compliance

The process is essential for compliance. Remember the 4Ps – policy, processes, procedures and practices. Nowhere are they more important than in compliance. The problem is that compliance typically not only needs to develop new processes, but also integrate with existing processes. Adapting new processes to old ones can be quite challenging. Furthermore, the level of process maturity of companies varies considerably. What may be perfectly adequate for normal business operations may be unacceptable for meeting compliance regulations.

Keep in mind the data quality and auditing requirements that are necessary for Sarbanes-Oxley compliance (in addition to all other requirements). Successful processes require good policies, which are the essence of business rules. If existing business rules are incomplete, inaccurate or inconsistent, companies will have difficulty getting started on the right foot. Then, the processes that must implement these policies with the necessary procedures must be specified. Finally, practices (such as data auditing) may have to be implemented to ensure that appropriate procedures are carried out. And that can be difficult.²⁸

3.2.3. The role of technology in data compliance policy

Specific non-compliance processes in the area of data security (i.e. information security) gain greater prominence because compliance increases awareness of their importance, such as in access control and authentication procedures. It may be necessary to implement even more stringent requirements for compliance purposes, but non-compliant applications can benefit from more stringent application of sound security principles.²⁹

Today, processes are typically instantiated in information systems, which is also true for specific compliance processes. This instantiation includes software that executes compliance behaviors based on policies that have been defined by authorized individuals. One type of software directly enforces compliance. For example, active archive management software can enforce data retention policies to dispose of information on a legally defined schedule. Another type of software can enforce data privacy laws by preventing an email from being sent to a person who does not have the right to see specific sensitive information. This is an

²⁸ GUNNY, Katherine A.; HERMIS, Judith M. How busyness influences SEC compliance activities: Evidence from the filing review process and comment letters. Contemporary Accounting Research, v. 37, n. 1, 2020, p. 7-32.

²⁷ SAMONAS, Spyridon; DHILLON, Gurpreet; ALMUSHARRAF, Ahlam. Stakeholder perceptions of information security policy: Analyzing personal constructs. International Journal of Information Management, v. 50, 2020, p. 144-154.

²⁹ MAUNULA, Gail L. Advancing Technological State-of-the-Art for GDPR Compliance: Considering Technology Solutions for Data Protection Issues in the Sharing Economy. Journal of the Midwest Association for Information Systems (JMWAIS), v. 2020, n. 2, 2020, p.4.

implementation of data security technology, but it requires careful development of the necessary policies that the technology can automatically execute.³⁰

The other type of software actually helps manage the compliance process itself. This software is more than a set of policies executed by an automated software policy engine. Enforcing IT controls – such as monitoring, reporting and auditing – is essential. The software may be available as a package rather than requiring in-house software development, but implementing the package can still be time-consuming (as companies that have implemented enterprise resource planning systems can attest). Technology plays a key enabling role in compliance, but technology can only reflect the quality of work that has been done in the 4Ps.

4. General Data Protection Law Overview

Until 2018, personal data was not solidly protected by Brazilian legislation, being governed only by sparse, very restricted or generic laws. For example, article 21 of the 2002 Brazilian Civil Code, which deals with privacy protection in general terms, was almost a reproduction of what the Constitution itself provides, and did not mention the specific problem of protecting personal data. The Civil Rights Framework for the Internet (Law No. 12,965/14) provided for the protection of personal data as one of its principles in article 3, item III, but it also did not go into many details regarding the subject. The Brazilian Consumer Code (Law No. 8,078/90) provided for specific rules on consumer databases in its articles 43 and 44, but did not provide broad protection to personal data. The Habeas Data Law (Law No. 9,507/97) provided for a warrant for access to information, but dealt more specifically with the procedural rules applicable to this resource. Furthermore, Brazil signed the Declaration of Santa Cruz de la Sierra in 2003, which encourages the protection of personal data by its signatory countries.³²

Due to the notorious insufficiency of these legal provisions, the burden of building a personal data protection system in Brazil fell for several years on legal doctrine. Such efforts led to a bill that was discussed for a long time, finally resulting in Law No. 13,079/18, General Data Protection Law (LGPD).³³

The new Brazilian General Data Protection Law recognizes the specific right to the protection of personal data. Article 5, item I, of this Law defines personal data as data relating to an identified or identifiable individual. The limitation of protection to data relating to individuals confirms the close connection between data protection, privacy and human dignity, recommended by Brazilian legal doctrine.³⁴

The LGPD provides special protection for so-called sensitive data, that is, information related to the most intimate aspects of the human person, defined by law as personal data relating to racial or ethnic origin, religious beliefs, political opinions, membership of trade

³⁰ TSOHOU, Aggeliki et al. Privacy, security, legal and technology acceptancee licited and consolidated requirements for a GDPR compliance platform. Information & Computer Security, 2020.

³¹ SAPIR, Adi. Brokering knowledge, monitoring compliance: technology transfer professionals on the boundary between academy and industry. Journal of Higher Education Policy and Management, 2020, p. 1-16.

³² RAPÔSO, Cláudio Filipe Lima et al. LGPD-Lei Geral de Proteção de Dados Pessoais em Tecnologia da Informação: Revisão Sistemática (LGPD-General Law for the Protection of Personal Data in Information Technology: Systematic review). RACE- Revista de Administração do Cesmac, v. 4, 2019, p. 58-67.

³³ DE MORAES, Maria Celina Bodin. LGPD: um novo regime de responsabilização civil dito "proativo". (LGPD: a new "proactive" civil liability regime). civilistica. com: electronic civil law magazine, v. 8, no. 3, 2019, p. 1-6.
³⁴ ROQUE, Andre. A TUTELA COLETIVA DOS DADOS PESSOAIS NA LEI GERAL DE PROTEÇÃO DE DADOS PESSOAIS (LGPD). (THE COLLECTIVE PROTECTION OF PERSONAL DATA IN THE GENERAL PERSONAL DATA PROTECTION LAW (LGPD)). Electronic Journal of Procedural Law, v. 20, no. 2, 2019.

unions or religious organizations, philosophical and political data, data relating to health or sexual life and genetic or biometric data, when relating to an individual, in accordance with article 5, item II. The Law conditions the processing of this data to a specific and highlighted consent from the holder, linked to specific purposes. Such consent can only be waived in circumstances pre-established by the Law, such as when the data is essential for health protection or research institute studies, as noted in article 11.³⁵

The LGPD also provides another category of data called anonymous data, defined by law as data relating to an unidentified person, considering the use of reasonable technical means available at the time of its processing, in accordance with Article 5, item III. Personal data can be made anonymous through data anonymization, which is described in legislation as the use of reasonable technical means available at the time of processing, whereby data can no longer be directly or indirectly associated with an individual, observing Article 5, item XI. The law does not consider anonymous data as personal data, unless it is possible to reverse the anonymity of the data, in view of Article 12.³⁶

The legislation guarantees the anonymity of any excessive, unnecessary or inappropriately processed personal data, if requested by the holder at any time, in accordance with article 18, item IV. Furthermore, the Law guarantees the right to anonymity in some specific procedures, such as studies carried out by research institutes, in accordance with article 7, item IV. Anonymity is also a requirement if the person responsible for processing decides to keep personal data after the end of the processing operation, in the words of article 16, item IV.³⁷

The LGPD establishes the following principles on the subject: purpose, adequacy, necessity, free access, data quality, transparency, security, prevention, non-discrimination and responsibility, in its Article 6. In summary, it is necessary that: (1) data processing is always carried out for purposes in accordance with the legal system, (2) that the use of necessary data is limited to these purposes and (3) that the processing is secure and transparent.³⁸

The scope of the protection of personal data is defined in article 3 of the LGPD, which ensures protection against any processing operation carried out by an individual or legal entity governed by public or private law, regardless of the medium, in the country of its headquarters or the country where the data is located. It is established that protection against the processing of personal data is granted, provided that: (1) processing operations are carried out within national territory; (2) the purpose of the processing activities is to offer or provide goods or

n. 7, 2019.

³⁵ BRINGEL, Lara Livia; DA SILVA, Agilson Barbosa; DE MELO, Renelma Santos. A TECNOPOLÍTICA E ALIENAÇÃO EM MASSA DOS DADOS SENSÍVEIS: UMA ANÁLISE DA LEI GERAL DE PROTEÇÃO DE DADOS (TECHNOPOLICY AND MASS ALIENATION OF SENSITIVE DATA: AN ANALYSIS OF THE GENERAL DATA PROTECTION LAW). Research Week at Centro Universitário Tiradentes-SEMPES, Alagoas,

³⁶ BIONI, Bruno Ricardo. Compreendendo o conceito de anonimização e dado anonimizado (Understanding the concept of anonymization and anonymized data). Escola Paulista da Magistratura, Cadernos Jurídicas, n. 53, 2020. ³⁷ MORTE, Anderson Boa et al. Uma Análise Sobre o Uso de DLTs no Tratamento de Dados Pessoais: Aderência aos Princípios e Direitos elencados na LGPD (An Analysis of the Use of DLTs in the Processing of Personal Data: Adherence to the Principles and Rights listed in the LGPD). In: Proceedings of the III Workshop in Blockchain:

Theory, Technology and Applications. SBC, 2020. p. 74-8

³⁸ MORAES, CAROLINE; MOREIRA, João Padilha. LEI GERAL DE PROTEÇÃO DE DADOS: PRINCÍPIOS, AUTORIDADE NACIONAL E DPO. PROJETOS E RELATÓRIOS DE ESTÁGIOS (GENERAL DATA PROTECTION LAW: PRINCIPLES, NATIONAL AUTHORITY AND DPO. INTERNSHIP PROJECTS AND REPORTS), v. 2, no. 1, 2020.

services, or to process data from individuals located in national territory; (3) the personal data subject to processing were collected in national territory.³⁹

Public entities also have specific legislation applicable regarding public access to information (as in Law No. 12,527/11), which provides guidelines for the storage of data by Public Administration entities. Federal Law No. 12,527/11 does not exclude public entities from following the LGPD: both laws are applicable.⁴⁰

In 1995, the Brazilian Internet Steering Committee was created with the aim of coordinating and integrating all Internet service initiatives in Brazil. It is made up of representatives from civil society, the business sector and the Federal Government. The mission of the Internet Steering Committee in Brazil involves: proposing policies and procedures relating to the regulation of internet activities and promoting studies and technical standards for the security of networks and services in the country. Both activities can generally be related to the supervision and control of personal data shared on the internet.⁴¹

Furthermore, it is important to note that the LGPD suffered some vetoes from former President Michel Temer. The most significant of these was the veto on (a) the creation of the National Authority for the Protection of Personal Data, a regulatory agency that would have the task of guaranteeing the protection of personal data, and (b) the creation of the National Authority for the Protection of Personal Data and Privacy Council, an entity that would be responsible for suggesting data protection policies. Such vetoes were based on alleged formal unconstitutionality, since the Brazilian Constitution provides that regulatory agencies can only be created through laws proposed by the Federal Government. The law in question was, on the contrary, formally proposed by the National Congress.⁴²

To resolve this legal issue, the president passed Provisional Measure No. 869/2018, creating the two inspection bodies. The new measure offers almost identical powers as the original bill. The National Personal Data Protection Authority is responsible not only for monitoring infringements and applying sanctions, but also for establishing interpretations of data protection legislation, promoting cooperation with national and international authorities, among others, under the terms of article 55-J. On the other hand, the National Council for the Protection of Personal Data and Privacy has the power, for example, to provide subsidies for the development of the national policy for the protection of personal data and privacy, carry out studies and debates on these matters and prepare annual reports to evaluate the implementation of actions to comply with national policy, in compliance with Article 58-B.

The experience of other countries shows that the autonomy and independence of the supervisory body is essential for the protection of personal data, because public authorities are

³⁹ DE TEFFÉ, Chiara Spadaccini; VIOLA, Mario. Tratamento de dados pessoais na LGPD: estudo sobre as bases legais (Processing of personal data under the LGPD: study on the legal bases). civilistica. com: electronic civil law magazine, v. 9, no. 1, 2020, p.1-38.

⁴⁰ SILVA, Marcel Vilmar. LGPD a lei de proteção a dados e os impactos no setor público. Gestão da Segurança da Informação (LGPD the data protection law and its impacts on the public sector. Information Security Management) - Unisul Virtual, 2019.

⁴¹ ERICKSON, Abigayle. Comparative Analysis of the EU's GDPR and Brazil's LGPD: Enforcement Challenges with the LGPD. Brook. J. Int'l L., v. 44, 2018, p. 859.

⁴² GOMES, Eduardo Tourinho. PROTEÇÃO DE DADOS E A LGPD (DATA PROTECTION AND LGPD). Proceedings of EVINCI-UniBrasil, v. 5, no. 1, 2019, p. 211.

⁴³ VAINZOF, Roni. A prorrogação das sanções da LGPD e a relevância da ANPD (The extension of LGPD sanctions and the relevance of the ANPD). CONJUR. Published in, v. 12, no. 06, 2020.

often some of the biggest violators of citizens' privacy. However, the new Brazilian supervisory bodies did not have their full autonomy guaranteed by the Provisional Measure, since the National Authority for the Protection of Personal Data was created as a federal body integrated into the Presidency of the Republic (art. 55-A).⁴⁴

The LGPD can generally be applied to the protection of personal data in the context of services provided remotely by electronic means. The Internet Civil Framework (Law No. 12,965/14) can also be applied specifically in cases involving sharing of personal data on the internet. There is also a bill (PL No. 281/12) that specifically deals with consumer protection in electronic commerce. This bill is under analysis in the National Congress.⁴⁵

The aforementioned legislation generally requires the data subject's prior consent for the processing of personal data, including electronic processing. However, in some situations provided for in Brazilian legislation, especially those listed in items II to X of article 7 of the LGPD (such as protection of life, physical security or health), this processing can be done without any consent.⁴⁶

In electronic processing there are no limitations in terms of processing purposes or types of data. On the other hand, according to the Internet Civil Framework, more specifically in its Article 7, personal data shared over the internet can only be used for purposes that: (1) justified their collection, (2) are not prohibited by law, and (3) are specified in service contracts or terms of use.⁴⁷

Article 14 of the Brazilian Personal Data Protection Law establishes that the processing of personal data of children and adolescents must always meet their best interests. The authorization of at least one of the minor's parents or legal guardians is required if the minor is under 12 years old, in accordance with the Child and Adolescent Statute (Law No. 8,069/90). Parental authorization can only be waived if the collection of children's personal data is essential for their own protection or to contact their guardian, as established in article 14, §3.⁴⁸

Furthermore, data controllers have some additional obligations when processing the personal data of children and adolescents, such as: (1) maintain public information about the type of data collected, the manner of its use and the procedures applied, in accordance with

⁴⁵ LIMBERGER, Têmis; MORAES, Carla Andreatta Sobbé. Comércio eletrônico: a vulnerabilidade do consumidor pela (des) informação e a responsabilidade civil dos provedores na Internet. (E-commerce: consumer vulnerability due to (mis)information and the civil liability of Internet providers). Consumer Law Magazine, 2020, p. 255-270.

⁴⁴ CELIDONIO, Tiago; NEVES, Paulo Sergio; DONÁ, Claudio Melim. Metodologia para mapeamento dos requisitos listados na LGPD (Lei Geral de Proteção de Dados do Brasil número 13.709/18) e sua adequação perante a lei em uma instituição financeira-Um estudo de caso (Methodology for mapping adequacy of the requirements listed in LGPD (Brazil Data Protection General Law number 13,709/18) in a financial institution-A case study). Brazilian Journal of Business, v. 2, n. 4, 2020, p. 3626-3648.

⁴⁶ TRISTÃO, Manuela Albertoni; PEDROSO, Temis Chenso da Silva Rabelo. RESPONSABILIDADE CIVIL DOS AGENTES DE TRATAMENTO À LUZ DA LEI GERAL DE PROTEÇÃO DE DADO (CIVIL LIABILITY OF PROCESSING AGENTS IN LIGHT OF THE GENERAL DATA PROTECTION LAW). ETIC-SCIENTIFIC INITIATION MEETING, v. 16, no. 16, 2020.

⁴⁷ MENDES, Laura Schertel. O diálogo entre o Marco Civil da Internet e o Código de Defesa do Consumidor (The dialogue between the Internet Civil Framework and the Consumer Protection Code). Consumer Law Magazine, 2018, p.37-69.

⁴⁸ DA SILVA, Laura Regina Echeverria; MAZIN, Marcelo; DO CARMO, Valter Moura. O TRATAMENTO DE DADOS DAS CRIANÇAS E ADOLESCENTES CONFORME A LEI Nº 13.709/2018 E A PROBLEMÁTICA DOS BRINQUEDOS CONECTADOS (THE PROCESSING OF CHILDREN AND ADOLESCENT DATA IN ACCORDANCE WITH LAW NO. 13,709/2018 AND THE PROBLEMATICS OF CONNECTED TOYS). Journal of Law, Governance and New Technologies, v. 6, no. 1, 2020, p. 80-100.

Article 14, §4. (2) make all reasonable efforts to verify whether consent has actually been given by the child's guardian, according to Article 14, §5; and (3) adapt information about data processing so that it is suitable for children to understand, in compliance with Article 14, §6. Finally, Article 14 prohibits data controllers from making children's participation in games, Internet applications or other activities conditional on the provision of personal data beyond what is strictly necessary.⁴⁹

The LGPD does not use the expression "right to be forgotten", but provides some specific rules regarding the erasure of personal data after processing has ended. This right may be exercised when personal data are no longer necessary or relevant for the achievement of their specific purpose, in accordance with article 15, item I, or when consent is revoked by the holder, in the normative statement of article 15, item III. These cases, strictly speaking, do not constitute what is meant by the "right to be forgotten". The so-called "right to be forgotten" must be considered as the right of each human person to oppose the oppressive public memory of certain facts that prevent them from fully developing their personal identity, emphasizing to society aspects of their personality that no longer reflect reality. ⁵⁰

This right can be exercised, for example, by people who have transitioned their biological sex and do not wish that biological sex to be publicly remembered in newspapers or TV programs. Likewise, ex-convicts and former victims of brutal crimes can exercise their right to be forgotten to avoid the oppressive public association of their names with crimes committed, if the memory of such facts presents such people in a way that no longer reflects reality. As is the case in other parts of the world, the right to be forgotten is considered a very subtle and controversial issue in Brazil, which is currently awaiting a decision from the Federal Supreme Court.⁵¹

From the aspect of compliance, data compliance, the LGPD establishes that the data holder must be informed about any security incident that may cause relevant risk or damage to the holders of personal data and the national authority. The Law determines that the notification must be made within a reasonable time and must contain details about the incident, for example, the nature of the affected data, risks related to the breach, security measures adopted to protect the data, among others, in accordance with article 48.⁵²

Still, in terms of data compliance⁵³, the legislation assigns a relevant role to supervisory authorities in cases of security breaches. The supervisory board is responsible for verifying the

⁴⁹ BOTELHO, Marcos César. A LGPD E A PROTEÇÃO AO TRATAMENTO DE DADOS PESSOAIS DE CRIANÇAS E ADOLESCENTES (LGPD AND PROTECTION REGARDING THE PROCESSING OF PERSONAL DATA OF CHILDREN AND ADOLESCENTS). Social Rights and Public Policies Magazine (UNIFAFIBE), v. 8, no. 2, p. 197-231, 2020.

⁵⁰ MARTINI, Sandra Regina; BERGSTEIN, Laís. Aproximações entre o direito ao esquecimento e a lei geral de proteção de dados pessoais (LGPD) (Approximations between the right to be forgotten and the general personal data protection law (LGPD)). Disruptive Scientific Magazine, v. 1, no. 1 p. 160-176, 2019.

⁵¹ DE SOUZA, Jéssica Jane; RAMIDOFF, Mário Luiz. LGPD BRASILEIRA: EFICÁCIA DO DIREITO AO ESQUECIMENTO? (BRAZILIAN LGPD: EFFECTIVENESS OF THE RIGHT TO BE FORGOTTEN?) Percurso, v. 2, no. 33, 2020, p.404-407.

⁵² CAPANEMA, Walter Aranha. A responsabilidade civil na Lei Geral de Proteção de Dados. Direito digital e proteção de dados pessoais (Civil liability in the General Data Protection Law. Digital law and personal data protection), São Paulo, year, v. 21, p. 163-170.

⁵³Accountability is a very common term in the English language, with no exact translation into Portuguese. It is commonly translated as the responsibility of organizations and their members for the activities they carry out. It is an accounting of what they do, how they do it and the effects of these actions, not in numerical terms but with a

severity of the incident, guaranteeing the rights of the holder and determining measures to mitigate the damage, in accordance with article 48, §2.°.54

In Brazil, there is no specific legislation on the electronic communications sector. Therefore, this sector must comply with the general standards set out in the Internet Civil Framework and the LGPD. Consequently, all provisions regarding confidentiality, security measures and obligations in the event of a security breach are also applicable to electronic communications.⁵⁵

With regard to digital forensics, Brazilian legislation provides for specific legislation on two main topics: (a) crimes by electronic means and (b) interception of communication data for the purposes of investigating, detecting and prosecuting crimes.⁵⁶

With regard to crimes by electronic means, the Cybercrimes Law (Law No. 12,737/12) deserves to be highlighted. This law, as already mentioned in this work, typifies crimes such as hacking a computing device, providing for penalties of up to 2 years in prison.⁵⁷

With regard to the interception of communication data for the purposes of investigating, detecting and repressing crimes, the applicable legislation is Law No. 9,296/96. According to this law, interceptions can be ordered by a judge, ex officio or at the request of: (I) the police; and (II) the Public Prosecutor's Office, in accordance with article 3 of this normative document. The law, however, prohibits interceptions when: (1) there is no reasonable evidence of authorship or participation in a crime; (2) it is possible to produce probative evidence by other means; and (3) the fact investigated constitutes a criminal offense punishable, at most, with a custodial sentence, subject to article 2.⁵⁸

Currently, in Brazil, there are no specific rules on the electronic processing of personal data for national security and defense purposes. The LGPD does not apply to processing carried out for these purposes, pursuant to Article 4, item III. This Law establishes, however, that a specific law will be created regarding the processing of personal data for national security and defense purposes, in compliance with article 4, §1.⁵⁹

⁵⁴ DA ROCHA, Camila Pereira et al. Segurança da Informação: A ISO 27.001 como Ferramenta de Controle para LGPD (Information security: ISO 27.001 as a Control Tool for LGPD). Journal of Information and Communication Technology of Faculdade Estácio do Pará, v. 2, no. 3, 2019, p. 78-97.

focus on a performance bias related to governance. (Available at:https://en.wikipedia.org/wiki/Accountability>. Accessed on: 05/27/2021).

⁵⁵ DA SILVA, Joseane Suzart Lopes. TRATAMENTO DE DADOS PESSOAIS DOS CONSUMIDORES: UMA ANÁLISE CRÍTICA ACERCA DOS DIREITOS PREVISTOS NA LEI No 13.709/2018 E DA RESPONSABILIZAÇÃO DOS AGENTES PELA AUTORIDADE NACIONAL (PROCESSING OF CONSUMER PERSONAL DATA: A CRITICAL ANALYSIS OF THE RIGHTS PROVIDED BY LAW No. 13,709/2018 AND THE RESPONSIBILITY OF AGENTS BY THE NATIONAL AUTHORITY). Journal of Law, Globalization and Responsibility in Consumer Relations, v. 5, no. 1, 2019, p. 105-125.

⁵⁶ STRASSER, Francislaine de Almeida Coimbra; DE OLIVEIRA, Myllena Gonçalves. O ADVENTO DA INTERNET E SEUS DESAFIOS NO CAMPO JURÍDICO BRASILEIRO (THE ADVENT OF THE INTERNET AND ITS CHALLENGES IN THE BRAZILIAN LEGAL FIELD). In: Social conversation. 2019. p. 6-19.

⁵⁷ MELOTO, Guilherme José; SOARES, Anna Beatriz; CHAIA, Raphael Rios. CRIMES CIBERNÉTICOS: AS INVASÕES DE PRIVACIDADE MEDIANTE OS NOVOS MEIOS TECNOLÓGICOS (CYBER CRIMES: PRIVACY INVASIONS THROUGH NEW TECHNOLOGICAL MEANS). In: Proceedings of the 10th INTERNATIONAL CONGRESS OF CRIMINAL SCIENCES-PUCRS. P. 231.

⁵⁸ DE SOUSA, Rosilene Paiva Marinho; DA SILVA, Paulo Henrique Tavares. Proteção de dados pessoais e os contornos da Autodeterminação Informativa (Protection of personal data and the contours of Informational Self-Determination). Informação & Sociedade, v. 30, no. 2, 2020.

⁵⁹ RUARO, REGINA LINDEN. ALGUMAS REFLEXÕES EM TORNO DO RGPD COM ALUSÕES A LGPD (SOME REFLECTIONS ON THE GDPR WITH ALUSIONS TO LGPD). Brazilian Journal of Fundamental Rights & Justice, v. 14, no. 42, 2020, p. 219-249.

In Brazil, any violation of an individual's privacy is subject to civil liability in accordance with the Brazilian Civil Code. In other words, if an entity or individual uses another person's personal data without consent, that entity or individual must pay compensation for moral or material damages. This remedy is reinforced by the LGPD, which imposes joint and several liability between controllers and processors for damages caused by the processing of personal data, in accordance with Article 42. The new law does not make it clear whether such liability is culpable or should be understood as strict liability. This is one of the main issues that Brazilian legal doctrine is being called upon to address. The Law also provides for administrative penalties to be imposed by the supervisory authority, in accordance with article 52, such as warnings, fines and deletion of violated data, among others.⁶⁰

The LGPD applies to processing operations carried out by any entity as long as: (1) the processing operation is carried out in national territory; (2) the purpose of the processing activity is to offer or provide goods or services, or to process data located in national territory; and (3) the personal data for data processing were collected in Brazil, in accordance with article 3. In other words, the law is applicable to both national and international entities in the above cases, regardless of the medium, the country of its headquarters or the country where the data is located.⁶¹

Likewise, the Internet Civil Framework provides that any process of collection, storage, custody and processing of records, personal data or communications by connection providers and Internet application providers, in which at least one of these acts occurs in national territory, must respect Brazilian legislation, in the normative statement of its article 11.⁶²

The LGPD provides specific hypotheses in which international transfers of personal data are permitted, according to its Article 33. Some examples of authorized situations are: (1) when the transfer is to countries or international organizations that provide a degree of personal data protection appropriate to the provisions of national legislation; (2) when the holder has given specific consent and highlighted the transfer, with prior information about the international nature of the transaction; or (3) when the transfer is necessary for the execution of public order or the legal assignment of a public service, under the condition that it be publicized, among others.⁶³

As regards the law applicable to liability for damages, it is clear that if the damages are caused in Brazil then Brazilian law applies. Brazilian legislation, however, does not clarify where damages will be considered caused in the event of illegal processing of personal data

⁶⁰ CAPANEMA, Walter Aranha. A responsabilidade civil na Lei Geral de Proteção de Dados (Civil liability in the General Data Protection Law). Digital law and personal data protection, São Paulo, year, v. 21, p. 163-170.

⁶¹ DE MENDONÇA, Júlia Fernandes. A responsabilidade civil e penal dos envolvidos em sequestros digitais em face da legislação brasileira de proteção de dados pessoais (The civil and criminal liability of those involved in digital kidnappings in light of Brazilian personal data protection legislation). Revista do CEPEJ, n. 22, 2020.

⁶² ISRAEL, Carolina Batista. Território, Jurisdição e Ciberespaço: entre os contornos westfalianos e a qualidade transfronteiriça da Internet (Territory, Jurisdiction and Cyberspace: between Westphalian contours and the crossborder quality of the Internet). GEOUSP Space and Time (Online), v. 24, no. 1, 2020, p. 69-82.

⁶³ RUARO, Regina Linden; COELHO GLITZ, Gabriela Panfolfo. PANORAMA GERAL DA LEI GERAL DE PROTEÇÃO DE DADOS PESSOAIS NO BRASIL E A INSPIRAÇÃO NO REGULAMENTO GERAL DE PROTEÇÃO DE DADOS PESSOAIS EUROPEU (GENERAL OVERVIEW OF THE GENERAL PERSONAL DATA PROTECTION LAW IN BRAZIL AND THE INSPIRATION IN THE EUROPEAN GENERAL PERSONAL DATA PROTECTION REGULATION). Journal of Advanced Third Sector Studies and Research, v. 6, no. 2 JUL/DEC, 2020, p. 340-356.

involving systems located in different jurisdictions. Courts usually apply Brazilian law in these cases whenever the victim is living in Brazil at the time the damage is caused.⁶⁴

Conclusion

Thus, this article analyzed the phenomenon of Industry 4.0, based on the ecosystem of agribusiness startups, since Brazil is a leading country in agribusiness. Furthermore, we believe that technology and innovation are important factors for the sustainable growth of Brazilian agribusiness, that is, these activities must find balance with sustainability, so that preservation and production do not collapse and, so that economic activities related to agribusiness do not deplete available natural resources, as well as there is no environmental degradation, hence the importance of technology and innovation.

In addition to the fundamental highlight of agrotechs in this research, at the same time, we emphasize that companies and the agrotechs themselves must take measures to comply with data privacy regulations based on the new data protection law (LGPD), since the law is already in full force, including the Data Protection Agency is already formed and can begin to fine corporate vehicles through the sanctions of the aforementioned law.

Therefore, it is believed that there is an association between compliance and the LGPD, seeking to protect users against the dysfunctional use of their data or information. The Law, as seen, guarantees power to monitor and control personal information, and companies and institutions must promote updates to their codes of conduct, within the sphere of self-regulation, adapting their internal procedures to legal requirements aimed at data protection and information security. In this scenario, it is up to the relationship between the State and the private sector to develop strategies aimed at managing the dissemination and sharing of information of its collaborators and users.⁶⁵

Internally, it will be up to the compliance departments to promote regulations and compliance policies, as well as the retention of information, observing the institution's ability to carry out its corporate purpose without security and governance problems, meeting legal requirements. Cryptography, among other methods, is a control and governance mechanism for the private sector, in the virtual context of data collection and processing, taking into account the need for auditing in view of the risk of spoliation.

Under the LGPD, lack of compliance or non-compliance can bring institutional losses, ranging from damage to the image of companies, with the loss of investments and users, to the blocking of data processing and the imposition of large-scale sanctions and fines, without taking into account the basic losses in relation to society. In this sense, within the spectrum of corporate governance, risk management and compliance, the social responsibility of companies is questioned, having negative effects on the decisions of interested economic agents. In elastic markets, there is loss at competition level.

⁶⁴ LUGATI, Lys Nunes; DE ALMEIDA, Juliana Evangelista. Da evolução das legislações sobre proteção de dados: a necessidade de reavaliação do papel do consentimento como garantidor da autodeterminação informativa (The evolution of data protection legislation: the need to reassess the role of consent as a guarantor of informational self-determination). Law Magazine, v. 12, no. 02, 2020, p. 01-33.

⁶⁵ PEREIRA, Fernanda Maria; TORCHIA, Bruno. COMO O COMPLIANCE PODE SER UM DIFERENCIAL NA GESTÃO DAS ORGANIZAÇÕES (HOW COMPLIANCE CAN BE A DIFFERENTIAL IN THE MANAGEMENT OF ORGANIZATIONS). Faculdade Unimed Scientific Magazine, v. 1, no. 3, 2020, p. 11-14.

Bibliography

BIONI, Bruno Ricardo. Compreendendo o conceito de anonimização e dado anonimizado (Understanding the concept of anonymization and anonymized data). Escola Paulista da Magistratura, Cadernos Jurídicas, n. 53, 2020.

BOTELHO, Marcos César. A LGPD E A PROTEÇÃO AO TRATAMENTO DE DADOS PESSOAIS DE CRIANÇAS E ADOLESCENTES (LGPD AND PROTECTION REGARDING THE PROCESSING OF PERSONAL DATA OF CHILDREN AND ADOLESCENTS). Social Rights and Public Policies Magazine (UNIFAFIBE), v. 8, no. 2, 2020, p. 197-231.

BOUAYNAYA, Wafa. Cloud computing in SMEs: towards delegation of the CIO role. Information&Computer Security, 2020.

BRINGEL, Lara Livia; DA SILVA, Agilson Barbosa; DE MELO, Renelma Santos. A TECNOPOLÍTICA E ALIENAÇÃO EM MASSA DOS DADOS SENSÍVEIS: UMA ANÁLISE DA LEI GERAL DE PROTEÇÃO DE DADOS (TECHNOPOLICY AND MASS ALIENATION OF SENSITIVE DATA: AN ANALYSIS OF THE GENERAL DATA PROTECTION LAW). Research Week at Centro Universitário Tiradentes-SEMPESq-Alagoas, n. 7, 2019.

CAPANEMA, Walter Aranha. A responsabilidade civil na Lei Geral de Proteção de Dados. Direito digital e proteção de dados pessoais (Civil liability in the General Data Protection Law. Digital law and personal data protection), São Paulo, year, v. 21, p. 163-170.

CELIDONIO, Tiago; NEVES, Paulo Sergio; DONÁ, Claudio Melim. Metodologia para mapeamento dos requisitos listados na LGPD (Lei Geral de Proteção de Dados do Brasil número 13.709/18) e sua adequação perante a lei em uma instituição financeira-Um estudo de caso (Methodology for mapping adequacy of the requirements listed in LGPD (Brazil Data Protection General Law number 13 709/18) in a financial institution - A case study. Brazilian Journal of Business, v. 2, n. 4, 2020, p.3626-3648.

DA SILVA, Joseane Suzart Lopes. TRATAMENTO DE DADOS PESSOAIS DOS CONSUMIDORES: UMA ANÁLISE CRÍTICA ACERCA DOS DIREITOS PREVISTOS NA LEI No 13.709/2018 E DA RESPONSABILIZAÇÃO DOS AGENTES PELA AUTORIDADE NACIONAL (PROCESSING OF CONSUMER PERSONAL DATA: A CRITICAL ANALYSIS OF THE RIGHTS PROVIDED BY LAW No. 13,709/2018 AND THE RESPONSIBILITY OF AGENTS BY THE NATIONAL AUTHORITY). Journal of Law, Globalization and Responsibility in Consumer Relations, v. 5, no. 1, 2019, p.105-125.

DA SILVA, Laura Regina Echeverria; MAZIN, Marcelo; DO CARMO, Valter Moura. O TRATAMENTO DE DADOS DAS CRIANÇAS E ADOLESCENTES CONFORME A LEI Nº 13.709/2018 E A PROBLEMÁTICA DOS BRINQUEDOS CONECTADOS (THE PROCESSING OF CHILDREN AND ADOLESCENT DATA IN ACCORDANCE WITH LAW NO. 13,709/2018 AND THE PROBLEMATICS OF CONNECTED TOYS). Journal of Law, Governance and New Technologies, v. 6, no. 1, 2020, p. 80-100.

DE MORAES, Maria Celina Bodin. LGPD: um novo regime de responsabilização civil dito "proativo" (LGPD: a new "proactive" civil liability regime). civilistic. com: electronic civil law magazine, v. 8, no. 3, 2019, p.1-6.

DA ROCHA, Camila Pereira et al. Segurança da Informação: A ISO 27.001 como Ferramenta de Controle para LGPD (Information security: ISO 27.001 as a Control Tool for LGPD). Journal of Information and Communication Technology of Faculdade Estácio do Pará, v. 2, no. 3, 2019, p. 78-97.

DE SOUSA, Rosilene Paiva Marinho; DA SILVA, Paulo Henrique Tavares. Proteção de dados pessoais e os contornos da Autodeterminação Informativa (Protection of personal data and the contours of Informational Self-Determination). Information & Society, v. 30, no. 2, 2020.

DE SOUZA, Jéssica Jane; RAMIDOFF, Mário Luiz. LGPD BRASILEIRA: EFICÁCIA DO DIREITO AO ESQUECIMENTO? (BRAZILIAN LGPD: EFFECTIVENESS OF THE RIGHT TO BE FORGOTTEN?) Percurso, v. 2, no. 33, 2020, p. 404-407.

DE TEFFÉ, Chiara Spadaccini; VIOLA, Mario. Tratamento de dados pessoais na LGPD: estudo sobre as bases legais (Processing of personal data under the LGPD: study on the legal bases). civilistic. com: electronic civil law magazine, v. 9, no. 1, 2020, p.1-38.

ERICKSON, Abigayle. Comparative Analysis of the EU's GDPR and Brazil's LGPD: Enforcement Challenges with the LGPD. Brook. J. Int'l L., v. 44, 2018, p. 859.

FEIGELSON, Bruno et al. Direito das Startups (Startup Law). São Paulo: Saraiva, 2018, p. 211-ss

FINKELSTEIN, Maria Eugenia. Fintechs.In: CASADO FILHO, Napoleão and others (orgs.) Direito Internacional e Arbitragem Estudos em Homenagem ao Professor Cláudio Finkelstein (International Law and Arbitration Studies in Homage to Professor Cláudio Finkelstein). São Paulo: Quartier Latin, 2019, p. 251-265

FREUND, Gislaine Parra; FAGUNDES, Priscila Basto; DE MACEDO, Douglas Dyllon Jeronimo. Identification of the Relationships Between the Stages of the Data Life cycle and the Principles of the Brazilian General Data Protection Act. In: International Conference on Data and Information in Online. Springer, Cham, 2020. p. 79-88.

GEROMEL, Ricardo. O Poder da China. O que você deve saber sobre o país que mais cresce em bilionários e unicórnios (The Power of China. What you should know about the country with the fastest growth in billionaires and unicorns). São Paulo: Editora Gente, 2019.

GOMES, Eduardo Tourinho. PROTEÇÃO DE DADOS E A LGPD (DATA PROTECTION AND LGPD). Proceedings of EVINCI-UniBrasil, v. 5, no. 1, 2019.

GUNNY, Katherine A.; HERMIS, Judith M. How busyness influences SEC compliance activities: Evidence from the filing review process and comment letters. Contemporary Accounting Research, v. 37, n. 1, 2020, p. 7-32.

LIMBERGER, Têmis; MORAES, Carla Andreatta Sobbé. Comércio eletrônico: a vulnerabilidade do consumidor pela (des) informação e a responsabilidade civil dos provedores na Internet (E-commerce: consumer vulnerability due to (mis)information and the civil liability of Internet providers). Consumer Law Magazine, 2020, p. 255-270.

LUGATI, Lys Nunes; DE ALMEIDA, Juliana Evangelista. Da evolução das legislações sobre proteção de dados: a necessidade de reavaliação do papel do consentimento como garantidor da autodeterminação informativa (The evolution of data protection legislation: the need to reassess the role of consent as a guarantor of informational self-determination). Law Magazine, v. 12, no. 02, 2020, p. 01-33.

MARTINI, Sandra Regina; BERGSTEIN, Laís. Aproximações entre o direito ao esquecimento e a lei geral de proteção de dados pessoais (LGPD) (Approximations between the right to be

forgotten and the general personal data protection law (LGPD)). Disruptive Scientific Magazine, v. 1, no. 1, 2019, p. 160-176.

MAUNULA, Gail L. Advancing Technological State-of-the-Art for GDPR Compliance: Considering Technology Solutions for Data Protection Issues in the Sharing Economy. Journal of the Midwest Association for Information Systems (JMWAIS), v. 2020, n. 2, 2020, p. 4.

MELOTO, Guilherme José; SOARES, Anna Beatriz; CHAIA, Raphael Rios. CRIMES CIBERNÉTICOS: AS INVASÕES DE PRIVACIDA-DE MEDIANTE OS NOVOS MEIOS TECNOLÓGICOS (CYBER CRIMES: PRIVACY INVASIONS THROUGH NEW TECHNOLOGICAL MEANS). In: PROCEEDINGS OF THE 10th INTERNATIONAL CONGRESS OF CRIMINAL SCIENCES-PUCRS. P. 231.

MENDES, Laura Schertel. O diálogo entre o Marco Civil da Internet e o Código de Defesa do Consumidor (The dialogue between the Marco Civil da Internet and the Consumer Protection Code). Consumer Law Magazine, 2018, p. 37-69.

MORAES, CAROLINE; MOREIRA, João Padilha. LEI GERAL DE PROTEÇÃO DE DADOS: PRINCÍPIOS, AUTORIDADE NACIONAL E DPO. PROJETOS E RELATÓRIOS DE ESTÁGIOS (GENERAL DATA PROTECTION LAW: PRINCIPLES, NATIONAL AUTHORITY AND DPO. INTERNSHIP PROJECTS AND REPORTS), v. 2, no. 1, 2020.

MORTE, Anderson Boa et al. Uma Análise Sobre o Uso de DLTs no Tratamento de Dados Pessoais: Aderência aos Princípios e Direitos elencados na LGPD (An Analysis of the Use of DLTs in the Processing of Personal Data: Adherence to the Principles and Rights listed in the LGPD). In: Proceedings of the III Workshop in Blockchain: Theory, Technology and Applications. SBC, 2020. p. 74-8

OOSTHUIZEN, Adele; VAN VUUREN, Jurie; BOTHA, Melodi. Compliance or management: The benefits that small business owners gain from frequently sourcing accounting services. The Southern African Journal of Entrepreneurship and Small Business Management, v. 12, n. 1, 2020, p. 1-12.

PEREIRA, Fernanda Maria; TORCHIA, Bruno. COMO O COMPLIANCE PODE SER UM DIFERENCIAL NA GESTÃO DAS ORGANIZAÇÕES (HOW COMPLIANCE CAN BE A DIFFERENTIAL IN THE MANAGEMENT OF ORGANIZATIONS). Faculdade Unimed Scientific Magazine, v. 1, no. 3, 2020, p. 11-14.

RAPÔSO, Cláudio Filipe Lima et al. LGPD-Lei Geral de Proteção de Dados Pessoais em Tecnologia da Informação: Revisão Sistemática (LGPD-General Law for the Protection of Personal Data in Information Technology: Systematic review). RACE-Cesmac Administration Magazine, v. 4, 2019, p. 58-67.

REIS, Edgar Vidigal de Andrade. Startups. Análise de Estruturas Societárias e de Investimentos no Brasil (Startups. Analysis of Corporate and Investment Structures in Brazil). São Paulo: Almedina, 2018.

ROQUE, Andre. A TUTELA COLETIVA DOS DADOS PESSOAIS NA LEI GERAL DE PROTEÇÃO DE DADOS PESSOAIS (LGPD) (THE COLLECTIVE PROTECTION OF PERSONAL DATA IN THE GENERAL PERSONAL DATA PROTECTION LAW (LGPD)). Electronic Journal of Procedural Law, v. 20, no. 2, 2019.

RUARO, REGINA LINDEN. ALGUMAS REFLEXÕES EM TORNO DO RGPD COM ALUSÕES A LGPD (SOME REFLECTIONS ON THE GDPR WITH ALLUSIONS TO LGPD). Brazilian Journal of Fundamental Rights & Justice, v. 14, no. 42, 2020, p. 219-249.

SAMONAS, Spyridon; DHILLON, Gurpreet; ALMUSHARRAF, Ahlam. Stakeholder perceptions of information security policy: Analyzing personal constructs. International Journal of Information Management, v. 50, 2020, p. 144-154.

SAPIR, Adi. Brokering knowledge, monitoring compliance: technology transfer professionals on the boundary between academy and industry. Journal of Higher Education Policy and Management, 2020, p. 1-16.

SILVA, Marcel Vilmar. LGPD a lei de proteção a dados e os impactos no setor público (LGPD the data protection law and its impacts on the public sector). Information Security Management - Unisul Virtual, 2019.

SILVEIRA, Rafael Barros Bernardes da. Responsabilidade penal da pessoa jurídica e defeito de organização: da (ir)relevância da adesão a um programa de compliance para a aferição da responsabilização penal da pessoa jurídica no Brasil (Criminal liability of legal entities and organizational defect: the (ir)relevance of adhering to a compliance program for measuring the criminal liability of legal entities in Brazil). ROCHA, Fernando A.N. Galvão da (org.). Criminal Compliance Studies [electronic resource] / Fernando A.N. Galvão da Rocha (org.) -- Porto Alegre, RS: Editora Fi, 2020. p. 146-167.

STRASSER, Francislaine de Almeida Coimbra; DE OLIVEIRA, Myllena Gonçalves. O ADVENTO DA INTERNET E SEUS DESAFIOS NO CAMPO JURÍDICO BRASILEIRO (THE ADVENT OF THE INTERNET AND ITS CHALLENGES IN THE BRAZILIAN LEGAL FIELD). In: Colloquium Socialis. 2019. p. 6-19.

TALLBERG, Jonas. Paths to compliance: Enforcement, management, and the European Union. International organization, v. 56, n. 3, 2002, p. 609-643.

TRISTÃO, Manuela Albertoni; PEDROSO, TemisChenso da Silva Rabelo. RESPONSABILIDADE CIVIL DOS AGENTES DE TRATAMENTO À LUZ DA LEI GERAL DE PROTEÇÃO DE DADOS. ETIC-ENCONTRO DE INICIAÇÃO CIENTÍFICA (CIVIL LIABILITY OF PROCESSING AGENTS IN LIGHT OF THE GENERAL DATA PROTECTION LAW). ETIC-SCIENTIFIC INITIATION MEETING, v. 16, no. 16, 2020.

VAINZOF, Roni. A prorrogação das sanções da LGPD e a relevância da ANPD (The extension of LGPD sanctions and the relevance of the ANPD). CONJUR. Published in, v. 12, no. 06, 2020.

WAKHU, WilfredOmbunya; OLEL, Maureen. THE COMPLIANCE OF MANAGEMENT ON REGISTRATION REQUIREMENTS IN REGARD TO PHYSICAL INFRASTRUCTURE OF PRIMARY TEACHER TRAINING COLLEGES IN BUNGOMA COUNTY, KENYA. European Journal of Education Studies, v. 7, n. 11, 2020.