

APRIL 2020, VOL. 4

ENRICH MONTHLY

MONTHLY BUSINESS & INNOVATION NEWS COMPILED BY ENRICH IN BRAZIL



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ENRICH Monthly Success Story: Diversity, Dialogue, and Innovation: Europe and Brazil are Stronger Together Dear Reader,

a warm welcome and thank you for your time and interest in our April edition of ENRICH Monthly.

As world is engaged with fighting the current COVID-19 pandemic, countries are continuing to invest millions into the research and innovation of vaccines, tests and other tools that would help eradicate the virus but also help prevent it in the future. Nations around the globe are injecting billions of their currency into the economy to avoid serious crises. Apex-Brasil released a report with responses to the effects of COVID-19 on foreign trade and investments in Brazil. The purpose of the publication was to provide entrepreneurs an accessible overview of these markets. The study is structured by geographic regions, starting with those that are, at the moment, the main focuses of the pandemic.

Some innovative technologies such as fintechs show their positive impact on the society especially on the livelihoods of poor. As governments struggle to curb the corona virus, fintech companies enable financially disadvantaged citizens to have access to financial support. From the side of the government, Brazil for instance opened a funding for fintechs through the State Development Bank BNDES as the usual financing channels of fintechs have dried up due the market tensions. The authorities also mentioned that fintechs will be allowed to issue credit cards as an alternative source of revenue.

For our monthly Success Story column, we have interviewed Mr Cassapo who is the director of the Senai Innovation Institute in Electrochemistry and who has been chosen as the first director of the ENRICH in Brazil Association. In this article, he shares with us the importance of cultural diversity and the multilateral networking ability for the success in research, innovation and entrepreneurship.

We thank you for reading our April edition and wish you to stay safe and healthy,

ENRICH in Brazil Team



ENRICH is an initiative of the European Union, executed in Brazil by the CEBRABIC project, that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 733531. Responsibility for the information and views set out in this publication lies entirely with the authors.



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BASF Strengthens Innovation to Bring Technologies to Contribute to the Farmer's Legacy

BASF will launch more than 30 key projects by 2029. New features include seeds and biotechnologies, chemical and biological pesticides for crop protection, digital tools and new formulations. The company will further expand the portfolio of solutions that contribute to the legacy of farmers.

With the launch of new technologies, BASF plans to increase its sales potential, which will reach more than EUR 7.5 billi (BRL 42.8 billion) on. The result must be obtained with the new structure of agricultural innovation.

In line with its new business strategy, the company increases its focus on solutions that help farmers achieve a balance between agricultural productivity, environmental protection and the needs of society. BASF will continue to invest in Research and Development (R&D) for agricultural solutions, with a strong investment planned for 2020.

BASF's leadership position in sustainable agriculture is based on its portfolio's focus on innovation and clear

sustainability criteria that are fully integrated throughout the process.

Farmers using BASF digital solutions marketed under the xarvio [™] brand can achieve higher yields using less natural resources and inputs. With BASF's latest resultsbased digital business model, xarvio [™] Healthy Fields, farmers benefit from a transparent crop protection service, with reduced workload on crops through spray service providers, real-time monitoring, as well as a guarantee for the longevity of crops.

For BASF, the potential of its innovation structure goes beyond the farm: with the e3[®] Cotton Sustainability Program, the company helps farmers in the United States to meet the demand for more traceable and sustainable supply chains from customers in the food industry. fashion. Collaborating with partners in the value chain, e3[®] cotton - with Fibermax[®] and Stoneville[®] cotton seeds BASF - can be traced from the farmer to the shopkeeper, and shows end consumers that their clothes were manufactured in a fair, economically viable and environmentally responsible manner. BASF is the only company that offers this level of traceability. This program has increased the demand for fibers that meet e3[®] standards , generating value for the production chain.

Read more at: Brazil-Germany Chamber

Switzerland and Brazil Double Taxation Agreement

On March 5, the Brazilian Chamber of Deputies approved Brazil's agreement with Switzerland for the elimination of double taxation with respect to taxes on income and the prevention of tax evasion and avoidance. The wording approved by the Brazilian government in 2018 was sent to Congress last year, and is now heading to the Senate.

According to a statement signed by the Minister of Economy, Paulo Guedes, and Foreign Affairs Minister, Ernesto Araújo, the agreement will "remove or reduce" double taxation and define the tax jurisdiction between the two countries regarding different types of income, "improving legal certainty and securing a favorable business environment".

The first step was taken back in 2018, at the Finance Ministry, in Brasília, where government representatives of the two countries signed the agreement. For its entry into force, the agreement requires approval by parliament in both countries.

According to the Finance Ministry, Switzerland invests around USD 22 billion (EUR 20.3 billion; BRL 115.5 billion) in Brazil. There are 370 Swiss companies operating in the Brazilian territory.

Read more at: Valor Econômico



European Commission Released the Final Report on Mutual Learning Exercise on "National Strategies and Roadmaps for International Cooperation in R&I"

Research and innovation are increasingly interlinked internationally, aided by rapidly developing information and communication technologies. The number of internationally co-authored scientific publications and the mobility of researchers are increasing. Research organisations are establishing offices abroad and companies are investing outside their home countries, in particular in the emerging economies.

The objective of the Mutual Learning Exercise (MLE) on National Strategies and Roadmaps for International Cooperation in Research and Innovation is to facilitate the exchange of information, experiences, and lessons learned, as well as to identify good practices, in relation to the various approaches at national level towards international cooperation in R&I and to the design of national roadmaps and frameworks.

Representatives of ministries for higher education and research and/or research and innovation funding agencies from the following EU Member States and Associated Countries participated in the MLE: Austria, Belgium/Flanders, Denmark, Finland, France, Greece, Hungary, Ireland, Moldova, Norway, Portugal, Romania, Slovenia, Sweden and Turkey.

The MLE constitutes an opportunity to take stock of current or planned policies and best practices at Member State level and beyond and to share experience among policy-makers and national authorities on the formulation and implementation of policies promoting international cooperation of R&I.

The MLE focused on the following topics:

- The design and development of national strategies for R&I international cooperation
- The design of the most relevant toolbox to be used in implementing national strategies for R&I international cooperation
- How framework conditions for R&I international cooperation are catered for within national strategies for R&I international cooperation

This Final Report of the MLE on "National Strategies and Roadmaps for International Cooperation in R&I" summarises findings from the workshops, discussions and thematic input papers produced during this exercise, the kick-off meeting of which was on March 2019. The report reflects the main threads of an intense policy exchange on the various national approaches towards international cooperation in research and innovation and highlights identified sustained challenges and new or upcoming developments.

The final report concludes that:

- The focus on 'design and development', 'tools' and 'framework conditions' for the formulation and implementation of national strategies and roadmaps for international cooperation in R&I filled an important knowledge gap and constituted a basis for enabling the MLE participants to gain information on good practices and priorities within areas of relevance for them.
- Most participants agreed that the experiences gained inspired them to rethink some aspects of their work within the area of international cooperation in R&I and to make attempts to further improve the basis for the production of new highquality knowledge, as well as for important innovation activities.
- There is considerable variation among European countries with regard to cultural. political, economic and other preconditions for international cooperation in R&I. The ambition to learn from each other as to how to cooperate territorial other across and borders easily accomplished. Although therefore not multilateral coordination and cooperation between Member States and Associated Countries is high on the agenda, it is difficult to realise due to these variations, but also because of insufficient support structures and policies.
- The results of this MLE, show that exchange of information and respectful dialogue makes it possible to gain insights that will increase the capacity to formulate and implement national strategies and roadmaps for international cooperation in R&I, and thereby strengthen the basis for multilateral cooperation and informed policy-making inside the participating countries—and probably also among their partners in Europe and beyond.

Read the full report <u>here</u>.



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Brazil Quietly Passes New 5G Regulations

Before the Covid-19 outbreak exploded, there was some hope that Brazil could hold its auction of 5G frequencies by the end of this year. On March 27th, however, President Jair Bolsonaro's chief security officer and retired Army General Augusto Heleno signed an ordinance. Its an important step into pushing Brazil to the next generation of internet connections.

What is interesting about this ordinance is that it places Brazil equidistant from its main trading partners: China and the U.S. The rules don't give Chinese behemoth Huawei a completely open market — making Brazil open to U.S.-supported companies, such as Cisco or Nordic firms Ericsson and Nokia.

A key point of the 5G ordinance is competition:

- The ordinance establishes the principle of "diversity." One of the practical consequences is that telecom operators must have different contractors, in a way that the same "geographical area" will have, at least, two operators using equipment from different suppliers.
- Another anti-monopoly rule is that the operator must guarantee quality and availability of data — and plan "alternative routes" for data traffic, if the infrastructure from a supplier is compromised for whatever reason.
- The rules also establish that there must be a diversity of operators per region and frequency band, "aiming at fostering competition, thus resulting in improved quality of service."

Telecom operators will be responsible for making sure that 5G infrastructure companies respect all protocols used by the National Telecoms Agency (Anatel). While the text is not crystal-clear on this issue, it leads to the interpretation that operators will be held accountable for compliance issues.

Data security and encryption:

In the case of security breaches, "intentional or otherwise," both operators and infrastructure suppliers will "answer in accordance with their liabilities."

Operators must also ensure that 5G data will be encrypted according to norms set up by regulators. Moreover, networks must support additional cryptography protocols added by users, especially in the case of "critical infrastructure," such as power plants.

All software used in infrastructure equipment can be audited for safety at any given point. These inspections shall, preferably, "encompass companies, consumers, partnerships, government bodies, and research institutions," in order to determine the viability of equipment being offered for use. Regulation on this aspect will be paramount, however.

Finally, telecom operations must implement protections that allow them to detect and mitigate "storm attacks," such as denial-of-service attacks (DDOS) — a malicious attempt to disrupt normal traffic of a targeted server, service or network by overwhelming the target or its surrounding infrastructure with a flood of Internet traffic. Companies will also be required to monitor network traffic, being able to identify anomalies.

Read more at: The Brazilian Report



Brazil & Technology

Brazilian Companies Create a Committee to Encourage the Use of Artificial Intelligence

Brazil now has an Industry Committee for Artificial Intelligence, with the participation of companies and organizations. The aim is to discuss the ethical and responsible use of AI in business.

The proposal is to hold a quarterly meeting to discuss challenges and opportunities with the use of technology. The first meeting was attended by executives from companies such as Microsoft, Bradesco, Vivo, Grupo Fleury, Sulamérica and Car10, in addition to the extraordinary participation of Miriam Wimmer, from the Ministry of Science, Technology, Innovations and Communications (MCTIC).

Representatives from the Competitive Brazil Movement (MBC), the Institute for Research in Technology and Innovation (IPTI) and the Institute of Social Technology (ITS) were also present at the online meeting.

The board will also be responsible for discussing the knowledge most demanded by the industry, in order to establish greater competitiveness and qualified labor, according to the needs of the sector. This is necessary to address growth in the creation of new jobs and the development of better trained professionals for the job market of the future. The intention is that companies can identify synergies and, in a second moment, align opportunities to improve the increase of initiatives already carried out individually; partner with the academy and also seek support from the public and private sectors for actions they consider relevant to expand the adoption of AI by the country and which should result in sustainable local development.

Read more at: Digital Convergence

Brazil Opens Funding for Fintechs through State Development Bank

Brazil's monetary council said the country's fintechs will be able to obtain funding from development bank BNDES, as their usual financing channels have dried up due to coronavirus-linked market tensions. The authority also said that fintechs will be allowed to issue credit cards as an alternative source of revenue.

Earlier, Reuters reported that fintechs were in talks to obtain funding and possibly new business from development bank BNDES or similar institutions.

The monetary council also said that private equity funds will now be allowed to control fintechs working as digital lenders but only indirectly. Brazil's central bank has traditionally restricted the ability of private equity funds to buy financial institutions.

Brazilian fintechs normally finance their businesses

mainly through securitization deals in the capital markets. But investors' retreat from risk following economic disruptions stemming from the coronavirus outbreak has mostly blocked those channels.

In a statement, the monetary council said that fintechs are able to reach small entrepreneurs, even unbanked individuals, and may help the government implement public policies. It did not specify which services fintechs may provide in partnership with the government.

Brazil's central bank has been working to promote more competition in the country's financial sector, in which the top five lenders hold 82 percent of total banking assets.

There were more than 600 fintechs in Brazil as of June 2019, according to a study by Fintechlab.

Read more at: Nasdaq



The Legal Ecosystem of Fintechs

The term "fintech" is the result of the combination of the words "finance" and "technology", in English. The term is used to designate companies, mostly startups, with a different business model from traditional institutions in the offer of financial products and services, which use technologies such as blockchain, cryptocurrencies, facial recognition, cryptography, artificial intelligence, etc. as inputs.

Fintechs can operate in several areas of the financial sector, offering solutions for means of payment, credit, providing cards and accounts completely online, in addition to distributing cryptocurrencies, among others.

There is no specific legislation for startups. Fintechs also do not have a single law that regulates them. In any case, it is possible to say that the existing rules, although sparse, contained, for example, in the Federal Constitution, Consumer Protection Code, Civil Code and Civil Marco of the Internet, among others, manage to accommodate the innovations brought by fintechs.

Recently, the Central Bank of Brazil issued Resolutions that discipline credit fintechs and means of payment, which are now recognized as financial institutions.

Regulation was necessary in view of the importance of credit for the country's economic health.

It is necessary to constantly improve the standards so that this sector is not vulnerable both to entrepreneurs, who take risks in this business model, and to consumers who enjoy the services of fintechs.

In Brazil, the Central Bank authorized the operation of two types of credit fintechs: the Direct Credit Society (SCD) and the People Loan Society (SEP), whose operations will be included in the Credit Information System (SCR), which are disciplined by Bacen Resolution No. 4,656 / 2018.

Credit fintechs, since 2018, started to rely on a set of complex and rigorous rules to regulate them, which inevitably guarantees greater legal security for the sector and consumers.

Sociedade de Crédito Direto (SCD) is a financial institution that makes loans, financing and acquires credit rights, through equity capital and exclusively through an online electronic platform.

The People's Loan Society (SEP) is a financial institution whose object is to carry out loan and financing operations and which performs credit analysis for customers and third parties, collecting credit from customers and third parties and acting as an insurance representative in the distribution of insurance related to credit and financing operations among people exclusively through an electronic platform.

In both fintechs, a credit analysis model with consistent, verifiable and transparent criteria must be used. According to data from the Central Bank, today there are 11 institutions that were recognized as SCD and four as SEP.

In the financial sector, credit analysis aims to assign a "score" to a potential credit borrower, using statistical methods that measure the risk of default. The system is known as a credit score.

According to the Superior Court of Justice (STJ), the companies that provide the score service do not have the duty to reveal the calculation formula or the mathematical method. However, they must inform the scoring holder the data so that such value would be reached in the credit risk assessment.

For the STJ, the use of the score does not depend on the consent of the holder, but the limits established by the consumer protection system in the sense of privacy and maximum transparency must be observed.

Despite decisions by the STJ, in practice, this type of credit analysis can be performed without clarity to the consumer. This lack of transparency brings uncertainties for the consumer and for the company that makes the credit analysis, which is subject to the risk of indemnifying, for moral damage, the consumer who feels harmed by the lack of clarity about the composition of his score, as occurred recently in a case tried by the 2nd class of the Special Courts of TJ / GO.

Therefore, it is important to regulate the activities of credit Fintech, since one of its activities is precisely the credit analysis.

Another sensitive point concerns the purpose of data analysis. At first, a credit Fintech may claim that its business model requires the processing of personal data. However, this does not prevent the collected data from receiving a function other than that of carrying out risk analysis.

In the case of fintechs, specifically, the sale of financial data can bring immeasurable losses to customers.

Thus, attention on the topic is extremely important to guarantee the holders' self-determination as to the use of their data, in addition to limits and principles that must be followed for such a model to survive.

Read more at: Swiss-Brazil Chamber of Commerce





Apex-Brasil Releases Report with Responses to the Effects of COVID-19 on Foreign Trade and Investments

Apex-Brasil launched the document Global Markets and Coronavirus -Market Intelligence Report - Edition 2, which addresses the countries' responses to COVID-19, the global economic effects of the coronavirus and the impacts on foreign trade and investments. The purpose of the publication is precisely to provide the entrepreneur with an accessible overview of these markets. The study is structured by geographic regions, starting with those that are, at the moment, the main focuses of the pandemic.

In each area, the main effects of COVID-19 in the selected countries are analyzed, through the following sections: (i) macroeconomic and commercial effects; (ii) effects on markets, by sector; and (iii) market access information, such as measures related to import taxes and export restrictions.

At the end, the foreign trade measures that are being adopted by the Brazilian government and hyperlinks to information on ports and their operations are presented in a complementary manner .

As it is a dynamic document, information on countries and their respective sections is being progressively updated, based on public and private sources. Third party information is not the responsibility of Apex-Brasil, nor does it represent any recommendation of a commercial or professional nature by the agency.

<u>Click here</u> to access the full document.

Read more at: Comex do Brasil

Coronavirus Advances and Apex-Brasil Grants Free Access to Passport to the World for 60 Days

Faced with the effects of the new coronavirus (COVID-19) on the Brazilian and world economies, the Brazilian Export and Investment Agency (Apex-Brasil) allowed access to the Passport to the World for all audiences, for a period of 60 days.

Passport to the World is an online platform that offers a wide base of information on international business. High quality content is produced by the Agency and its partners to support companies in three areas of international activity: exports, operations abroad and attraction of investments.

An innovative tool from Apex-Brasil, this online service offers entrepreneurs and their team a favorable environment for distance training on topics related to increasing international competitiveness and access to markets. There are more than 70 videos, including courses, lectures and success stories, and more than 200 files with specialized technical content in the system library.

<u>Click here</u> to access the Passport to the World.

Read more at: Comex do Brasil



Inova Simples: Simplified Procedure for Opening a Startup

In the middle of the COVID-19 pandemic, good news: the federal government regulated Inova Simples, which simplifies the procedures for opening, altering and closing startups. The initiative to reduce bureaucracy can not only improve the business environment in the country, but also encourage the development of innovative initiatives that generate value in the production chain, benefits that are especially important in the current situation of economic difficulties.

For the purposes of the new regime, startups are innovation companies that improve systems, methods or models of business, production, services or products, existing or designed to create something disruptive.

For the creation of these companies, the rite will be summary and automatic. Those who call themselves startups or innovation companies can automatically request and obtain the CNPJ on the National Portal of Redesim. The company will be registered in the legal nature "Simple Company of Innovation (Inova Simples)".

If the new company uses the CNPJ number followed by the term "Inova Simples (IS)", the name will be generated automatically. If it wishes to include a business name, the new company must sign a declaration stating that the business name must be changed, if eventually a similarity is found in the Single National Registry of Enterprises (BNE). It is permitted to request the transformation of the new company into an individual entrepreneur, EIRELI or business company, but not the other way around: the transformation of an existing legal nature to the Simple Innovation Company is prohibited.

If there are purposes of registering trademarks and patents, the new company will have the option of communicating the inventive content of the business initiative to INPI, via the Redesim National Portal, which will maintain a link to the solution in which the user will be able to apply for trademarks. and patents.

The INPI will also regulate and create a mechanism that covers everything from the receipt of data to the summary processing of trademark and patent applications from companies under the new Inova Simples.

The facilitated procedure also includes closing the company. The registration of the CNPJ of the new company is automatic, upon request in the National Portal of Redesim.

The new rules take effect in November this year.

Read more at: Swiss-Brazilian Chamber of Commerce



Covid-19: MCTIC Participates in UNESCO Meeting with 170 Countries on Open Science

The Ministry of Science, Technology, Innovations and Communications (MCTIC) participated in March in a meeting coordinated by the United Nations Educational, Scientific and Cultural Organization (UNESCO), with the theme "Covid-19 and Open Science". MCTIC Minister Marcos Pontes participated in the meeting that took place via videoconference, bringing together ministers of science and technology from more than 170 countries, and presented the government's actions in the fight against the pandemic.

Due to the large number of participants, some countries were selected to speak representing their regions. Brazil was chosen to represent the South American region. In his speech, the minister stressed that "science is the only weapon that can attack the source of the problem" and stated that "if there is anything positive about this virus, it is the opportunity to unite the planet, put differences aside and work together to find a solution." The minister's speech will be highlighted in the final document that will be distributed worldwide by UNESCO to the countries "We have rich countries and poor countries equally affected," said the minister. "Science is the key, the weapon we have to fight the virus and it shows us our importance as ministers of science and technology in this situation, to help our people". The minister updated the ministry's actions, citing the three fronts of activity: science, technology and production and communications.

In the area of science, the articulation with the crisis office of the Presidency of the Republic was highlighted, with actions to carry out research in the genetic sequencing of the virus, development and acquisition of rapid tests and reagents for tests and research in vaccines and medicines. In the area of technology and production, the development of technology for the manufacture of respirators and, in the area of communications, the minister highlighted the actions to bring connectivity to all health posts and infrastructures to allow distance learning.

Read more at: MCTIC





EMBRAPII and Innosuisse Announce a Joint Call to Support International Innovation Projects

EMBRAPII and Innosuisse are conducting a joint call for the first time. The call is open to innovations in all topics. The cooperation projects are focused in particular on applications from the following disciplines:

- Biotech and medtech
- Agriculture and food production
- Industry 4.0
- Advanced materials
- Information and communication technologies
- Clean energy & water
- Sustainable cities and communities
- Innovation and creativity (social, technical, cultural) und digitalization

The innovation promotion agencies of Brasil, Empresa Brasileira de Pesquisa e Inovação Industrial - EMBRAPII and Switzerland, Innosuisse, are announcing a bilateral call for joint R&D projects. The joint call focuses on research and development ranging from experimental proof of concept to technology demonstrated in relevant environment, leading to innovative solutions, which are considerably differentiated from comparable existing solutions in the market in terms of their functions, parameters or other features. They shall provide added economic, societal or environmental values, which have a significant market potential for Brasil and Switzerland. EMBRAPII and Innosuisse have opted for a two-stage evaluation process, to align the submitted applications with the common targets, synchronise the funding decision and allow for a fair chance of success.

Submission deadline for Pre-Proposals: 20 May 2020

Submission deadline for Proposals: 18 September 2020

Read more at: Innosuisse - Swiss Innovation Agency

Public Selection MCTIC / FINEP / FNDCT -Economic Subsidy for Innovation

This Public Selection aims to grant resources of economic subsidy for the development of innovative solutions, involving significant technological risk, for the development of Equipment and Systems of Individual Protection (EPI) and Collective (EPC), aiming at the biological security and the protection of teams the COVID-19 medical and hospital care chain.

Innovation projects in products and / or processes relevant to combating Covid-19 will be supported, in the following topics:

Personal protective equipment for health professionals, patients, crisis management teams and / or the general public;

Collective protective equipment aimed at the safety of health teams in clinical and hospital environments, including the transport of patients, including disinfection of environments and utensils.

Non-reimbursable resources from the National Fund for Scientific and Technological Development - FNDCT will be committed up to the limit of R \$ 5,000,000.00 (five million reais).

Deadline for sending proposals until: 22.04.2020

Read more at: FINEP





by the National Association of Research and Development of Innovative Companies (ANPEI)

São Paulo, based on an interview with Filipe Cassapo, for Enrich in Brazil.

This month, ENRICH in Brazil interview series brings the story of Filipe Miguel Cassapo, a French-Brazilian innovation expert, who is currently the director of the <u>Senai Innovation Institute in Electrochemistry</u>, in the city of Curitiba, south of Brazil, and is also the first president of the Association <u>Enrich in Brazil</u>.

Living in Brazil for 20 years and working as a knowledge and innovation manager in several European and Brazilian companies, such as Siemens or Votorantim, Mr Cassapo has shaped his career to become a bridge, a point of convergence between Europe and Brazil. He has been involved in several multinational projects which gave him an opportunity to be confronted with different cultures and to understand and value each one. Hence, he avidly advocates that innovation can only occur, when diversity is respected but also fully embraced and leveraged for creativity. This can only be achieved by promoting a respectful and humble dialogue among intercultural and interdisciplinary working groups. Personal interests need to be put aside to let the creative and innovative potential thrive from a mindful collaboration.

From a small town in the northeast of France to the heart of Latin America.

Filipe Cassapo likes to say that he is a world citizen. He was born in Gérardmer, a town with ten thousand inhabitants in the northeastern France, less than hundred kilometers from Germany. His parents are Portuguese citizens who moved to France in the 1970s. Since childhood, he was always immersed into a truly international environment. Every year he traveled to Portugal for the holidays.

When studying computer science engineering at the University of Technology of Compiègne, France, Mr Cassapo became an amid enthusiast of the Erasmus and student exchange programmes. These programmes allowed him to meet brilliant people from many European and other countries, leading him to develop a great fascination and life-philosophy that urged him to understand and value that diversity and international collaboration is a key-factor for science, technology, innovation and complex problem-solving.

At the final stage of his engineering studies, Mr Cassapo took what seemed to be at that time another step towards globalization, which however would actually be a life-turning-point. He made an academic exchange with the Federal University of Paraná, in the city of Curitiba, Brazil.





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Upon completing his engineering degree in France, he returned to Curitiba and started a master's degree in artificial intelligence at the Catholic University of Paraná (PUC-PR), also in Curitiba, and began his professional career at Siemens. At Siemens, he joined its knowledge and innovation management processes department.

For Mr Cassapo, it was always interesting to share his multicultural background, that he was a descendent of Portuguese, born and raised in France and working for a German company in Brazil. During the following years, he worked for other multinational companies' international projects of research, development and innovation until joining Senai's Institute of Innovation in Electrochemistry in Brazil as a director. At Senai he worked on the development and implementation of different research projects, including projects with European partners such as the German Fraunhofer Institutes. In 2020, he has also taken the presidency of the recently established association ENRICH in Brazil – a project initiated and funded by the European Union under the umbrella of Horizon 2020 project.

"The 21st century is when we will need to face our true unity, in order to address the most complex systemic challenges humanity has ever seen."

The recent worldwide spread of the COVID-19 virus made him once again realize and stress that the challenges of the 21st century are indeed global and complex. He points out that this pandemic shows us that the ability to overcome such crises is directly linked to how we shape and develop human civilization. Are we guiding our society into the "right" direction, where we foster and focus on balanced, responsible, and sustainable value creation. The only truly beneficial economic growth for the humankind is one that balances the risks and opportunities in all dimensions of human life. Businesses and organizations should develop business models that incorporate social value creation and environmental sustainability, says Mr Cassapo.

With rising world population that will reach almost 10 billion by 2050, the current time is a crucial phase that puts to the test the ability of humankind to unite against all odds. Are we capable of collaborating and cooperating to collectively survive and create an environment that contributes not only to the happiness and health of our generation but also the future generations? And this is where a true passion for diversity, and global collaboration does find its deepest meaning.

As a director of the ENRICH in Brazil, Mr Cassapo elaborates that the ENRICH centres is one of the many actions of the European Union that aims to strengthen the relationship in science, technology and innovation between Brazil and Europe but also between Europe and the United States of America as well as China. It is contribution to networking landscape of researchers, innovators and entrepreneurs from different cultures and continents, that have the power to shape the social life and the surrounding environment if fostered, given support and nurtured by such bilateral and multilateral projects as ENRICH centres.

"Innovation needs science, creativity, and entrepreneurship, and this is where diversity finds its true power and meaning."

In order to address complex issues, such as the COVID-19 global outbreak, Mr Cassapo advocates to use the most precious asset that belongs to humanity, the knowledge. He states that if knowledge is the asset, we should focus on global networking to instigate a true social innovation. Diversity, in its deepest sense, is a wonderful opportunity one can have. Thanks to international, intercultural and interdisciplinary dialogues and exchanges of knowledge and know-how, we are able to innovate by learning from each other. Whether incremental or disruptive innovation, it is based on past knowledge that comes from various sources around the globe. Nevertheless, science and creativity are the raw materials for shaping innovation, whereas entrepreneurship is the tool that puts the innovation into the use. The power of diversity capabilities of unleashes the science, but entrepreneurship is the catalyst that allows the conversion of new knowledge into products and services that add a value into the societal life.

As closing note for our interview, Mr Cassapo adds that ENRICH centres is as a multicultural project that seeks to join intellectual forces between Brazil and Europe to catalyze science, technology and innovation, and therefore give to all of us the strength and the power to shape the future we really desire.

We thank Mr Filipe Cassapo very much for sharing his thoughts and experiences on system thinking, complex problem-solving, innovation and entrepreneurship and being an "Ambassador" for increasing scientific and technological cooperation between Europe-Brazil.

