



Microsoft Mais Brasil

Real impact for a better future

Brazil Impact Report 2022 / 2023

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Letter from the GM at Microsoft Brazil

In an age of ongoing changes, technology is a tremendous innovation driver, and it must be actively connected to social justice and respect for the environment



For 34 years, Microsoft has offered solutions and its capacity to create innovative products and services to drive Brazil's economic development. Through technology, we seek to skill train every person and every organization on the planet to continuously accomplish more.

We live in a moment of intense changes in multiple sectors of society, in Brazil and across the world. The digital age is increasingly integrated into everyday life, both at work and in interpersonal relationships, changing habits and modifying perceptions of what is fast or slow, easy or difficult, possible or impossible. From the time we wake up until bedtime, we are connected to a broad universe, provided by the internet and cloud solutions, which grants information access to all individuals from any location.

It involves an unprecedented technology revolution, which affects all aspects of life on the planet. It is no longer possible to draw up strategies for technology advancements without considering, not only commercial values but also environmental and social aspects. Microsoft is aware of this scenario and leads its steps towards this direction. Microsoft's CEO Satya Nadella states that our technologies must be used to support solving society's key challenges. I agree with him: digital transformation must be inclusive. Bring opportunities to everyone. Change the world – yet always for the better.

A very clear example of this direction is how Microsoft has acted in relation to Artificial Intelligence (AI). Everyone is impressed by the capacity of its innovations and all the changes it can bring about. The stakes are high. AI may very well represent the most important technology advancement of our lifetime. It is a powerful tool for promoting critical thinking and encouraging creative

expression. It makes it possible not only to search for information, but also to search for answers to questions. It can help people unlock insights within complex data and processes, and it accelerates our ability to quickly express what we learn. Perhaps most importantly, AI will continuously improve performance of all these activities in the upcoming months and years. The industrial revolution is now reaching the field of knowledge, which is paramount for everything. It is an innovation as impactful as the internet and the personal computer.

As it often happens, Microsoft is at the forefront of this technology, working closely with customers and partners. This expands our responsibility. We have been working to build a responsible AI infrastructure since 2017. It all took place together with a similar initiative in the fields of cybersecurity, privacy, and digital security, which connected us to a larger risk management structure, helping us create principles, policies, processes, tools, and governance systems for responsible AI.

Now, we must once again commit to that responsibility and call upon the last six years of work to accomplish even more and move forward even faster. We recognize that technology will continue to evolve, and we are committed to continuously improve our processes.

For this reason, we are committed to ensuring that AI applications are used responsibly and ethically, with regulatory efforts paving the way for appropriate legislation. AI has to serve everyone, which involves skill training workers, guiding students, and including the most vulnerable population, in pursuit of fair and inclusive economic growth.

This comprehensive view, which includes those who need technology the most in order to grow, is crucial to expand the impact of our long-term partnership with Brazil. Launched in 2020, the Microsoft Mais Brasil initiative is increasingly mature, expanding its scope of action, reaching more and more people and companies, in full compliance with Microsoft's global strategy. Since then, over 7.8 million people have been reached and more than 1.9 million people have been skilled in our training programs.

One of the targets of the Microsoft Mais Brasil initiative is to combine inclusion with economic growth. Therefore, we encourage skill training for more and more professionals in

the technology market, a crucial requirement for promoting digital transformation in Brazilian companies. One of these programs is Conecta+, with over 300 hours of recorded skill training lectures and an additional 180 hours with live online classes in Portuguese. At the other end, we also encourage the outgrowth of new ideas in projects developed for startups and an international innovation competition for students which is the Imagine Cup. No one should be left out.

Concurrently, we seek to reduce differences with actions aimed at protecting fundamental rights, related to gender, race and accessibility. One of them is aimed at increasing female presence in the technology market, where we are still underrepresented. To achieve this goal, we promote specific training programs for women and partnerships with organizations such as WoMakersCode.

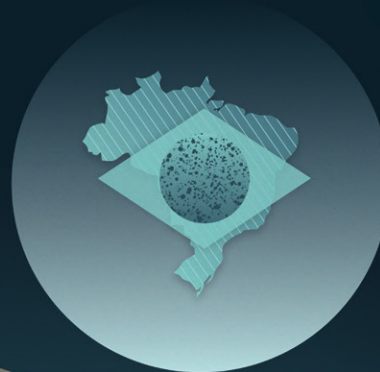
The environment also gets special attention as a means to create a sustainable future for all of us. Globally, Microsoft has established challenging goals such as being carbon negative by 2030 and by 2050 remove all historical emissions since we were founded in 1975. Here in Brazil, we have been using our technology to develop AI-based solutions to protect the Amazon Forest against deforestation and to identify climate vulnerabilities related to extreme weather events, in continuous partnership with our customers, partners and government authorities.

All of this is done along with a constant effort to make technology ever more reliable. Microsoft holds a solid structure which is fastened on data security of its partners and customers, with over 8,500 specialists, in 77 countries, dedicated to monitoring more than 65 trillion daily security signals. This entire framework provides security, for companies from multiple sectors, to use our products in order to seek innovative solutions for the benefit of their businesses.

This edition of the Brazil Impact Report 2022 / 2023 is much more than a compilation that collects top initiatives which we carried out in a year. It consolidates our commitment to the country – and helps us reflect on how our actions can support the construction of a more inclusive and innovative future for our nation.

Tânia Cosentino

GM Microsoft Brazil



Microsoft and its contribution to Brazil

Our priorities involve educating professionals for the digital economy, reducing inequalities, and promoting inclusion

Making technology accessible to everyone on the planet has been at the heart of Microsoft's strategy since its conception in 1975. Today, we are present in 190 countries, and we continue to lead the development of some of the most promising innovations, such as Artificial Intelligence (AI) and cloud applications.

Microsoft has been present in Brazil for 34 years and is among 122 subsidiaries of Microsoft Corporation, offering the world's top technology innovations, contributing to develop the economy and, above all, making life easier for people and companies. With offices in São Paulo, Brasília and Rio de Janeiro, and an ecosystem with over 25,000 partners, the organization in Brazil is comprised of high-level corporate units, such as the Transparency Center, dedicated to government agencies that rely on our Government Security Program – GSP, the Advanced Technology Lab – ATL, the first Microsoft research center in the southern hemisphere, and the Microsoft Technology

Center – MTC, one of more than 40 existing centers worldwide, operating in Brazil since January 2012.

We use this broad and highly efficient structure to, in addition to promote business activities, contribute with initiatives capable of changing the Brazilian reality for the better, with objectives that include educating professionals for the digital economy, reducing inequalities and promoting inclusion.

The Microsoft Mais Brasil Report points out top social impactful actions carried out by Microsoft in the country during the 2023 fiscal year, which involves the period from July 2022 to June 2023, organized into four Chapters: Support inclusive economic growth, Protect fundamental rights, Create a sustainable future and Earn trust.

On the following pages, you will learn more about what we have done to support the transformation of Brazilians' lives, with data that will help you understand the size and results of this effort during the above-mentioned period.



Learn more by accessing the online version of this report on our website: microsoft.com/pt-br/maisbrasil



Our impact in Brazil

Microsoft Brazil

+1,200 employees

34 years
present in Brazil

25,000 companies
among partners and resellers

Microsoft Conecta+

+7.8 million
people reached in our
training courses

+1.9 million
people skilled in our
training courses

+152,000
people newly employed

+4,700
teachers trained

From July 2020 to June 2023

PrevisIA

11,805 km²

is the forecasted deforestation of the Amazon in 2023, according to an estimate determined by the PrevisIA platform

The Philanthropy division invested over
\$16.7 million
in donations and purchase discounts for
non-profit organizations

Approximately
3,000 organizations
were impacted with software donation, purchase
discounts and support for skill training programs

From July 2022 to June 2023

Datacenters in Brazil are
dedicated to Office 365,
Azure, Power Platform and
Dynamics 365 operations,
which encompass two
regions: Brazil Southeast
and Brazil South.

Transparency Center

The fourth center to open among five in
operation worldwide

Reactor São Paulo

Microsoft hub which seeks to promote knowledge exchange between entrepreneurs
of the technology sector, developers, NGOs, and academia

MTC São Paulo – Microsoft Technology Center

Since 2012, it has supported over 50,000 engagements and took on more than
6,000 people, including customers and partners

Advanced Technology Lab (ATL)

The first Microsoft Research Center in the
southern hemisphere

Women Entrepreneurship (WE) Initiative

+2,000 women
impacted by events, content, and mentorship

+2,500 startups
with the participation of women entrepreneurs
who registered in calls for proposals

+70 startups
supported by development programs

+30 events with free
registration, 18 of which in partnership with Microsoft Reactor

+R\$30 million
invested

8 startups invested
(4 through WE Ventures and 4 through WE Impact)

Microsoft For Startups Founders Hub

We have supported thousands of startups in
Brazil since program launch

Microsoft offers free solutions for educational
institutions, teachers, and students, such as
Office 365 A1 online version, Hacking STEM
lecture programs and the Make Code and
Microsoft Learn platforms, for the development of
computational thinking and careers in technology.



Support inclusive economic growth

We promote social and economic development in Brazil by providing skill training and offering innovative tools, allowing them to thrive in the era of digital transformation

The acceleration of digital transformation of companies has increased demand for specialized professionals, pointing out the importance of attracting more people to the IT field and promoting professional reskilling, connecting the market to new job opportunities, and encouraging entrepreneurship. Our commitment to support inclusive social and economic growth points to this direction. Microsoft's success will only be complete if we also help the world around us succeed. Therefore, we believe that development needs to be broad, covering different layers of society: people, organizations, communities, and countries as nations. Everything is intertwined.

One of the ways to achieve this goal is to broaden the gateway to digital economy. Entrepreneurs, who are an abundant source of innovation, must have the necessary tools to put ideas into practice, contributing to job creation and professional qualification. The Microsoft platform for Startups Founders Hub and the new Microsoft Reactor headquarters in São Paulo are two initiatives that help drive this trajectory (*learn more on Page 16*).

People need to be skilled to succeed in an increasingly connected environment. Thus, another challenge addressed by the Microsoft Mais Brasil initiative in terms of expanding the economy in an inclusive way is to contribute to resolve the lack of skilled market professionals. Microsoft Conecta+ is one of the programs that pursues this mission, offering over 300 hours of recorded training programs and an additional 180 hours of live online classes in Portuguese (*learn more on Page 10*).

Furthermore, as a way to support the country's social and economic growth, Microsoft invests in offering a robust digital infrastructure and has expanded its network of datacenters, as well as its portfolio of services, accelerating access to Microsoft's cloud solutions with sustainability, security while providing low latency technology to customers (*learn more on Page 20*).

On the following pages, learn more about these and other actions that help make Brazil an increasingly innovative country.

A gateway to the digital economy

With expertise in professional skill training and partnerships, Microsoft implements actions to strengthen the IT ecosystem

A barrier to sustainable growth of the Brazilian economy is the lack of workforce with technology expertise. For every three job opportunities available on the market, colleges and technical courses certify only one individual. By 2025, demand will most likely be of 797,000 job openings, according to a survey by the Association of Information Technology and Communication Companies (Brasscom). To address this challenge, Microsoft carried out in 2022, a set of actions that are directly linked to the domestic development potential.

One of them is the **Microsoft Conecta+** program, in which the company offers free skill training and support to connect professionals with companies that have job openings in technology. While the program reduces the deficit of qualified professionals, it also contributes to further qualify those already working in the field and as a consequence, allows the domestic information technology ecosystem to become increasingly competitive within the global scenario.

Everyone, from anywhere in Brazil, can sign up at microsoft.com/pt-br/conecta/. There are opportunities for various knowledge profiles, and it suits everyone in

different life stages. Students can choose from digital literacy classes, for those just starting to master technology, to top skills required in today's market, such as cloud computing, AI, data science and cybersecurity.

Hilton Junior, a 61-year-old business manager, signed up at Conecta+ to obtain the Microsoft Cybersecurity certification (SC-900), offered in partnership with Womcy. The training lasted from October to December 2022. "The world today is in constant transformation with everything evolving very quickly", he states. This training helped him turn his career around. After the end of the pandemic, he founded the company DPO Saudável, switching from a role in solutions development within the financial field to a consulting role related to information, privacy, and data security. This extra knowledge made this professional from Porto Alegre expand his network beyond borders, with invitations to deliver lectures in Angola and the United States.

The hub also has specific content for those looking for a job, such as the track "How to Get a New Job", created in partnership with Ubá Gestão. In addition to being available on Conecta+, the track is also available at Escola do Trabalhador 4.0, which involves a partnership with the Ministry of Labor and Employment; it has the mission of promoting professional qualification and enabling access to employment within the technology market. The course features four modules with video classes and support material, which can be accessed through Microsoft Brazil's YouTube channel and will be made available by other partners who work with digital skilling for employability on their e-learning platforms.

Conecta+ skill trains new professionals and expands the knowledge of those who are already working in the field



Hilton Junior, 61, obtained the Microsoft Cybersecurity certification at Conecta+: "The world is in constant transformation"

Photo: Diego Vara

Since July 2020, over 7.8 million people have been reached and more than 1.9 million people have been skilled in our training programs. Through these initiatives, over 152,000 people were employed, outplaced, or promoted six months after completing at least one of the training courses.

In Brazil and across the world

Another important initiative that contributes to professional qualification and employability is the **#JornadaTech**, dedicated to professionals looking for a career transition into technology, it is organized by Microsoft Reactor São Paulo. The program promoted an entire week of free online lectures on careers and innovation, involving specialists from Microsoft and companies such as Banco Itaú, PicPay and others. Every month, #JornadaTech offers content on the development of personal skills (soft skills), career counseling and employability. Participants also have access to the Conecta+ web portal.

Within the same objective, Microsoft joined LinkedIn – the largest professional social network in the world – to effectively put into action the **Caminhos Para Aprender Habilidades para o Emprego** (Paths to Learn Skills for Employment)

program, providing free access to 350 courses and six new Microsoft Introductory Certifications required for careers in high demand in the digital economy. The target is bold: globally improve and certify 10 million professionals by 2025.

There are several digital training courses in Portuguese on Digital Literacy and Microsoft 365, which include topics such as Work Optimization, Project Management and Data Analysis. In addition to the latter, other training programs were also created for a few careers in-demand within market, such as Commercial Analyst, Software Developer, Administrative Assistant, among others. All courses are available on LinkedIn at opportunity.linkedin.com.

The courses on Digital Literacy and Microsoft 365 are also available and can be uploaded at no cost on e-learning platforms (LMS) of Microsoft partners, who develop digital skill training programs for vulnerable populations. In addition, Microsoft also launched the course "Dicas para conseguir um emprego" (Tips for finding a job), with classes on how to write a resume, how to prepare for an interview, the best ways to use LinkedIn, and much more, and it is available on the digital skill training platforms of our top partners and also on Microsoft Brazil's YouTube channel.



Partnership network

Microsoft Brazil promotes connections with NGOs, government agencies and companies that work for inclusive digital growth

Establishing partnerships is an effective way to expand digital skills education for everyone, which is essential in Brazil's journey towards an inclusive economic growth that generates opportunities for all. This mission requires a collective effort, with countless connections across all sectors of society, and Microsoft uses its leadership in the IT ecosystem to strengthen this network. From July 2022 to June 2023, the Philanthropy division allocated \$16.7 million in donations and purchase discounts of software. In all, around 3,000 entities, from North to South, were benefited. Over the same period, Microsoft and its partners skill trained over 680,000 people in essential digital skills for the new economy, enabling approximately 65,000 individuals to find a new job or a promotion in their current jobs.

The company's global capacity attracts international institutions that wish to contribute to Brazil's development. One of them is **The Trust for the Americas**, a non-profit organization, affiliated with the Organization of American States (OAS). Operating in 17 Latin American and Caribbean countries, the organization's mission is to build alliances to promote social and economic inclusion in the region. In Brazil, together with Microsoft since 2013, it has reached well over 700,000 people through its social development model with the POETA DigiSpark project, offering educational tracks for comprehensive training, such as those relating to digital skills, with five local partners, among them the civil society organization **Instituto Tecnológico Inovação (ITI)**, which has been operating in São Paulo since 2005 in research and promotion of technologies for economic, scientific and social development.

In order to reach the continental scale which our country requires, being alongside government agencies in the creation of public policies is also an important variable. An example of this is **Escola do Trabalhador 4.0**, a cooperation between Microsoft and the **Ministry of Labor and Employment**, carried out by **Softex**, a public-interest civil social organization (CSO). The partnership, which began in 2021, gained such relevance that it was renewed until December 2026, ensuring its continuity. Escola do Trabalhador 4.0 is part of the Caminho Digital program of the federal government.



Photo: Claudio Rossi

Fátima Galeazzo, representative in Brazil of The Trust for the Americas non-profit organization: a Microsoft partner since 2013

One other channel of action with the government sector is the partnership created with the **Administration of the City São Paulo**, through the Secretary for Economic Development and Labor, which was signed in March 2023. This partnership involves offering digital skills courses directly on the web portal of the Support Center for Work and Entrepreneurship (CATE), a skill training distance learning platform with 261,000 active student registrations.

Digital literacy

A part of the digital skills promotion network is made up of private foundations linked to large companies. Together with **Fundação Bradesco**, Microsoft participates in the Escola Virtual e-learning web portal. The results point out the enormous potential of this partnership: so far, 930,000 people have been reached, 310,000 skill trained and 250,000 certified between June 2022 and June 2023. On another note, alongside **Fundação Banco do Brasil** Microsoft has co-created the Conexão Jovem Mercado, aiming at developing digital skills and socio-emotional skills which are necessary for young people to effectively access the technology employment market. The program is active in five regions of Brazil (Brasília, Manaus, Porto

Alegre, Belo Horizonte, and Salvador), reaching 500 graduates between October 2022 and June 2023.

In addition to digital literacy actions, students learn through practice, how to create and operate a business with the Programa Miniempresa, offered by **Junior Achievement (JA) Brasil**, a global NGO, nominated for the Nobel Peace Prize, that seeks to inspire and prepare young people for the employment market through entrepreneurial education. Another innovative project surfaced with our close cooperation with **iFood**, a Brazilian technology company that is a benchmark in delivery services – which provides evidence that there are no limits to creativity. The partnership between Microsoft and iFood came about in March 2023 with the launch of two digital literacy training tracks available on the Potência Tech platform, founded by iFood in 2021. The latter teaches technology through WhatsApp, using microlearning technique. Simple, fast, and most importantly completely free. The idea is to reach underrepresented groups in society, such as black people, indigenous people, women, LGBTQIAP+ or people with disabilities. The courses are aimed mainly at people who wish to take their first step into the digital world – learning how to use a computer – or who want to learn about tools that can support their day-to-day work.

Independent social organizations are also part of this large network that generates economic opportunities. Three of them help depict this group: **Associação Telecentro de Informação e Negócios (ATN)** used Microsoft Community Training to create a new e-learning platform and improve access to its basic and advanced computer courses; **Generation Brasil** promoted in 2022 an intensive three-month training program on .Net technology, dedicated to young people aged 18 to 30 from underrepresented groups in the sector, where over 70% of participants managed to find a job; **Recode**, which launched in 2022 an educational track to empower job seekers through the Microsoft Power Platform.

In addition to education, a virtual workshop was created to further implement the solution, demonstrating how to offer economic opportunities in the technology universe, to people who are in vulnerable conditions and who are part of minority groups. Lastly, the partnership with the non-profit organization **WOMCY, Latam Women in Cybersecurity** (NGO dedicated to the development of cybersecurity in Latin America), which aims to encourage women and people from underrepresented groups (such as black people, people with disabilities and those over the age of 50) to develop skills for the cybersecurity industry, offering a comprehensive course and the SC-900 certification, which is well recognized and required by the market.

The Escola Virtual web portal, alongside Fundação Bradesco and Escola do Trabalhador 4.0, with the Ministry of Labor and Employment and Softex, are two good examples of partnerships

When combined with innovation, education in Brazil gains additional strength

Every day, Microsoft is inspired by efforts educators and community leaders are making to drive innovation in education and increasingly improve student performance. With the purpose of updating and sharing experiences, in order to improve the work that educators have been doing on a daily basis and bring more innovation to the classroom, Microsoft has made available new openings for the Innovative Educator (MIE). The latter is a pioneer program created to develop and recognize visionary teachers around the world.

Over 30,000 educators from 100 different countries have received MIE Expert certification. In Brazil, a total of 1,817 educators were certified, which corresponds to more than 80% of those selected in Latin America, clearly pointing out the strength of this program in Brazil. These are teachers from public and private schools in 22 states, highlighted by Paraná (27% of the total), São Paulo (20%), Rio de Janeiro (11%), Santa Catarina (9%) and Espírito Santo (8%).

At MIE, educators have the opportunity to participate in international seminars and interact in their own social channels, sharing and receiving information. The goal is that this learning process, wherever it takes place, reaches classrooms with innovative teaching methods that are supported by technology.

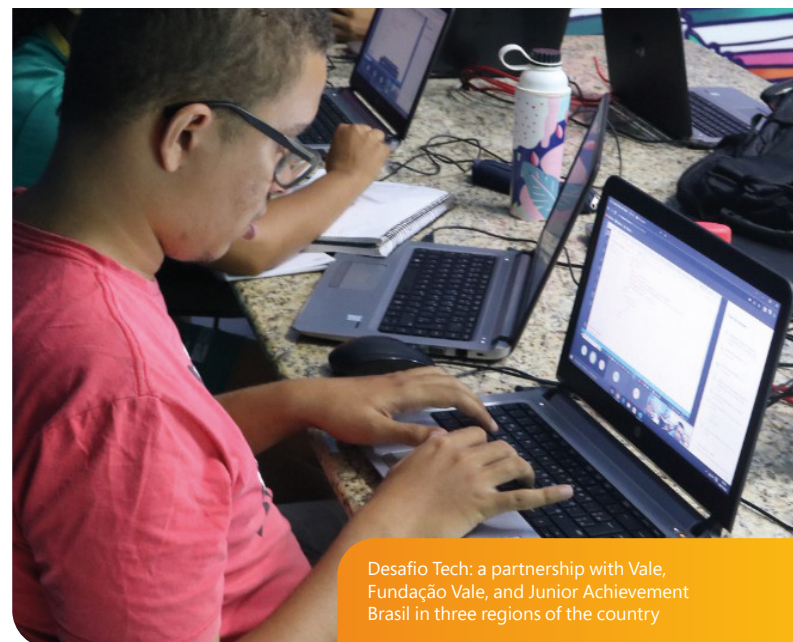
To be recognized as a MIE Expert, educators must present a project or educational action that makes regular use of at least two of the top Microsoft tools used in education (Microsoft Teams, Microsoft OneNote, Microsoft Forms, Minecraft: Education Edition and FlipGrid). The path for those who are taking their first steps into technology is to go through Microsoft Learn for Educators: learn.microsoft.com/en-us/training/educator-center/programs/microsoft-educator/. This platform offers, at no cost, education guides to help teachers and educational leaders improve their knowledge in technology, in an innovative and fun way.

Programming for the future

The Desafio Tech offers access to the programming universe to low-income young individuals, glimpsing at the technology job market

Providing technology skill training for young people living in socially vulnerable conditions is essential to promote inclusive economic growth in Brazil. Access to computing tools contributes to expanding the so-called “digital literacy”, an expression increasingly used by specialists to summarize the ability of human beings to create, interpret, develop skills, and communicate in the digital environment. These actions help reduce social inequalities and prepare a new generation for future challenges.

One of Microsoft’s strategies to achieve these goals is to act directly in communities that experience social, economic and most of the time, infrastructure challenges. In order to address this scenario, Microsoft in partnership with Vale, Fundação Vale, and Junior Achievement Brasil, carried out throughout the 2022 school year, the **Desafio Tech**, a tech challenge project which aims to introduce



Desafio Tech: a partnership with Vale, Fundação Vale, and Junior Achievement Brasil in three regions of the country

programming concepts in order to promote digital literacy and help prepare young people to join the job market.

Overall, 292 young people from five cities in three Brazilian regions participated in the Desafio Tech: Marabá (PA), Tucumã (PA), Arari (MA), Serra (ES) and Brumadinho (MG), locations where Knowledge Stations are available – which are spaces that offer education, culture and sports activities during after-school hours backed by Fundação Vale, a Microsoft partner.

Crafting good citizens

The initiative involved 79 educators in a learning program involving 220 class hours and many hands-on activities. Students aged 15 to 19 were encouraged to propose solutions for their communities based on the Sustainable Development Goals (SDGs), a collection of 17 objectives established by the United Nations – among them poverty eradication, quality education and clean and sustainable energy.

The program includes learning journeys involving HTML, CSS, and Python, as well as skills for the job market. The aim is to prepare not only students, but also citizens. Microsoft professionals were involved with

Digital literacy helps reduce inequalities and prepares young people for new challenges

tutoring along with advisors from the international NGO Junior Achievement, which works to develop young people so that they can find their first job position.

Infrastructure challenges in the homes of the region did not prevent Sâmia Michele Santos Pereira from completing the training program. “Sometimes I had no power or internet access, which made it difficult for me to attend classes online,” stated the 19-year-old young woman who lives in Arari, a city with 29,000 inhabitants, in the countryside of the State of Maranhão, 169 kilometers from São Luís. “This online thing is pretty wild, but when we didn’t understand it, the teacher repeated [the explanation]”, she recalls. “I never thought I would enjoy programming this much.”

Technology in learning tracks

Technical schools use Microsoft resources to prepare young people for the job market

We act in partnership with technical schools to educate young people in technology, in addition to promoting their qualified inclusion in the job market, it contributes to meet the technology market need for people with trained digital skills – a continuously growing demand in Brazil and across the world.

Together with other companies, Microsoft is part of the **Minha Chance program**, of the Secretary for Economic Development of the State of São Paulo (SDE). Through the Centro Paula Souza, openings were made available for free online skill training on cloud computing technology, big data, and AI. The target audience involved students from State Technical Schools (Etecs) and State Technology Colleges (Fatecs) in São Paulo.

In the second half of 2022, 1,800 openings were offered for five course options: Microsoft Azure AI Fundamentals, Microsoft Azure Fundamentals, Microsoft Azure Data Fundamentals, Microsoft Power Platform Fundamentals and Microsoft Dynamics 365 Fundamentals.

In this program, student selection was carried out through an online test, with questions related to logic and computing concepts. Classes were lectured on a virtual platform by professors from Centro Paula Souza and market specialists. In addition to technical content, participants had the opportunity to develop socio-emotional and behavioral skills, such as leadership, communication, conflict resolution and entrepreneurship. At the end of the courses, students with the best results received, at no cost, vouchers for internationally recognized certification exams.



Minecraft inside the classroom

Microsoft technologies are also widely used at Senac São Paulo, which began to utilize **Minecraft Education Edition** resources in 19 school units in the state, which offer Technical High School education. The game allows users to build spaces and structures in the virtual world and interact with them.

The institution's idea was to provide dynamic and multidisciplinary classes, catered to the connected profile of young people. This novelty was made available to 164 classrooms from multiple school units, impacting over six thousand students. A total of 440 teachers were skill trained in various areas of knowledge, who started to use the program in their curriculum activities.

A practical example of an activity that uses Minecraft, took place with students from the technical high school course in computer science at Senac in São Bernardo do Campo (SP), who set up a Historical Museum of Computer Science, applying knowledge related to the impact of information technology and its relationship with the past, present and future. In addition to all the research carried out, conceptual work and creativity we part of the experience, students also reflected on issues related to ethics and technology.

Additional stimulus to accelerate entrepreneurs

Microsoft Platform for Startups Founders Hub removes barriers as a means to support innovative companies

A shortcut to trigger inclusive economic growth is to encourage entrepreneurial culture, especially among startups. These companies usually offer new ideas and technologies to multiple sectors and contribute to job creation and professional qualification, with an opportunity for benefits of scale and fast growth.

To better understand what startups need to succeed, especially when they are starting out, Microsoft collected feedback from countless entrepreneurs worldwide. It was based on these responses that the company launched, in March 2022, the **Microsoft for Startups Founders Hub**, a support platform for innovative companies.

The Microsoft for Startups Founders Hub targets three key areas: the first is "Unlocking innovation for everyone": anyone can sign up for free, even companies

with no investor support for venture capital. The idea is to offer this opportunity for anyone who has good ideas, an effective business plan and the grit to grow.

The second is "Increasing technology benefits": gradually making software benefits available, following the growth pace of the startup. Founders can unlock up to \$150,000 of Microsoft Azure credits and over \$100,000 worth of development tools including GitHub and Microsoft 365. They also have access to a 3-month free use of OpenAI's API Innovation Center, a pioneer company in artificial intelligence that receives significant investments from Microsoft.

Since no one can accomplish anything alone, the third key area is "Access to mentoring and counseling", which is shaped up by consulting and training programs. Platform users can connect with seasoned industry

professionals and access specific technical counseling for startup entrepreneurs, including Microsoft Learn, which focuses on learning and skill training programs. Everything is tied together so that great ideas can thrive.

One other initiative that values entrepreneurs is the **Microsoft Entrepreneurship for Positive Impact**, which selects projects from social entrepreneurs, focused on solving challenges related to sustainability, and offers mentorship and coaching sessions with Microsoft executives. Winners also have access to the benefits extended by the Microsoft for Startups Founders Hub.

Companies are evaluated based on financial metrics and on their direct contribution to sustainability issues through their products, services, and operations. To be recognized, the business must direct attention to four priority areas, which are in line with the United Nations Sustainable Development Goals (SDGs): Quality education, Decent work and economic growth, Action against global climate change, and Peace, justice, and strong institutions.

In 2023, twenty-eight Brazilian startups were selected. Among them are Ambify, designed to provide widespread access to carbon credits through a smartphone app; GrowPack, which helps the agricultural sector transform excess biomass from crop fields into sustainable packaging, and To.gather, which aims to help companies get on the path towards corporate diversity.

In-person meetings

Microsoft Brazil opened, in February 2023, its new **Reactor São Paulo** headquarters located at CoW premises. A coworking office space in the southern area of the city of São Paulo. Reactor is a Microsoft global hub created to promote networking and knowledge exchange among technology entrepreneurs, developers, NGOs, and academia, with support from company professionals.

The São Paulo unit is the only one in Latin America. The others are located in Redmond, San Francisco and New York, in the United States; Toronto, Canada; London, UK; Stockholm, Sweden; Tel Aviv, Israel; Sydney, Australia; Abu Dhabi, in the United Arab Emirates; Bangalore, India; and Shanghai, China.

Its structure includes an auditorium for in-person events, a lounge room and a coworking space for startups that are part of WE Ventures. Altogether it takes up 215 square

Innovation with diversity

To encourage technology startups led by women, the WE Ventures Fund was created in 2019, which is part of the Women Entrepreneurship (WE) initiatives, a Microsoft Participações program in partnership with Sebrae Nacional and M8 Partners, in association with Bertha Capital.

On November 19, 2022, on the Women's Entrepreneurship Day, WE Ventures received a contribution of R\$5 million from the Rio de Janeiro State Development Agency (AgeRio), a state agency with a 20-year experience that aims to promote, through financial solutions, the sustainable development of the State of Rio de Janeiro with excellence in the provision of services.

Such resources will be used to support startups created and led by women, targeting economic development and the expansion of women representation and strength in the job market in the State of Rio de Janeiro.

In order to receive investment from WE Ventures, the company must have a minimum annual revenue of R\$500,000, have at least one woman in a leadership position and a female team with at least 20% participation in the company.

meters (2,314 sq. ft.). The activities that take place in this space are always free, carried out in Portuguese and Spanish, open to the public and depending on the event organizer, live streamed to the entire community.

Since its launch in 2020, the initiative has held around 500 events, including online, in-person and hybrid events, with engagement of well over 30,000 people. All content available has reached over 100,000 views. Those who are interested can keep track of the schedule and programming on the project's official website.

The Innovation World Cup is for everyone

Microsoft Brazil holds programming marathons to bring new ideas to the Imagine Cup

Encouraging young people to come up with innovative ideas can be transformative. And how about calling on students from all over the world for a sort of innovation cup? This is exactly what Microsoft has been doing since 2003 at the **Imagine Cup**. The competition has entries from 163 countries, reaching over 2 million students. In 2023, Microsoft held the 21st edition of the competition offering to the winner a prize of \$100,000, in addition to access to Microsoft Azure and a mentorship session with Satya Nadella, Microsoft’s Global CEO.



The first-place prize was given to the Kenyan team that created TAWI, an innovative solution that uses AI capabilities to help children with Central Auditory Processing Disorder, a condition that affects the area of the brain related to listening skills and impairs learning. TAWI reduces noise from noisy environments so that users can hear clearly, it improves speech quality and converts speech into text, all tailored to the specific needs of each child.

Two Brazilian teams, both made up of students from the Pontifical Catholic University of Minas Gerais, were among the finalists in the regional stage of the competition. Competing in the health category, the Deaf Glass project won the spot by proposing a pair of glasses capable of transforming sounds into subtitles for hearing impaired people. The solution uses Microsoft’s API Azure Voice Recognition, which captures what is said through a microphone and transcribes the audio into subtitles on a display adapted to the lens of the glasses.

On another note, the Blind-E project, competed in the education category. It is a translator of digital text into the Braille standard. The initiative uses Translator and Cognitive Services (AI) from Microsoft Azure connected to hardware that translates the content into the language system for visually impaired people. The purpose of this machine is to make digital content quickly accessible and reduce costs with paper publications.

Opportunity for all

The Brazilian qualifier began with a programming marathon held during Campus Party in São Paulo, in November 2022. In order to participate, individuals had to be over 16 years old and enrolled in High School, Technical School or in College. Registration was free.

Gathered in groups of up to five people, participants were challenged to create practical proposals, in a 36-hour session, within the topic of “Education – Innovations that transform the way students learn”.

The first place was granted to the Tupi-Guarani project, which uses gamification techniques so that indigenous children can learn the language of their people of origin and keep their culture alive. Its members used Microsoft Constructor software to develop the Fogo Sagrado app, with which local teachers can develop activities such as memory games, 7 errors games and puzzles using the local language.

Increasingly digital

A Microsoft study shows how micro, small, and medium-sized Brazilian enterprises incorporate new technologies

Micro, small and medium-sized Brazilian enterprises are experiencing an intense digitalization process since the covid-19 pandemic. In order to understand the challenges of this universe, Microsoft commissioned Edelman communication agency to carry out the third edition of the **Digital Transformation study for Micro, Small and Medium-sized enterprises (MSMEs)**. The survey gathered information regarding trends and insights relating to current issues, such as the adoption of new technologies, hybrid work and cybersecurity.

The research covered 312 leaders and decision makers from this group of companies. Of those interviewed, 92% consider that their companies are undergoing digital transformation. In addition, 98% of them recognize the positive impact of technology on their businesses, with 81% of them understand that the conversion into the digital environment is taking place very quickly. Their priority throughout this transformation is to optimize the use of data for business intelligence (47%), recruiting technology talents (41%) and acquiring and adopting new applications (40%).

Even with the end of social distancing demanded by the pandemic, remote or flexible work remains effective in 55% of these companies, with a satisfaction rate of 93%. However, in the case of the hybrid work arrangement, 71% of employees in small and medium-sized enterprises work in-person over 50% of the time, a percentage that drops to 39% in micro-enterprises.

In order to address this new scenario, 67% of companies invest in purchasing laptops and other portable equipment, 59% seek to promote training programs and 51% and 50% apply their resources in the adoption of platforms for video conferencing and for collaborative work, respectively. Regarding cybersecurity, half of the companies report that they have already experienced challenges related to this topic. However, of the total amount invested by all MSMEs in technology, only 27% of the budget is allocated for this purpose.

In reference to main concerns within their businesses, data demonstrates that for 35% of MSMEs, acquiring new customers and increasing sales are top concerns. Following the latter, businesses worry about issues relating to cybersecurity 31%, and efficiency gains and productivity 27%.



A comprehensive overview of the IT market

In order to promote increasingly effective changes, it is essential to have in-depth knowledge of the technology job market. For this reason, Microsoft released in May 2023, a new version of the Work Trend Index Annual Report: Will AI Fix Work?

This global survey offered insights that indicate that the pace of work has accelerated at a speed greater than humans can endure, which directly impacts innovation. The overall perception is that the latest generation of AI will reduce tasks, allowing for gains in productivity and creativity.

In terms of the Brazilian scenario, the study reveals that for professionals, the idea of diminishing workload with AI is welcome and outweighs their concern with regard to losing their jobs. In total, 74% of Brazilians state that they would let technology do much of their operational work, allowing more time for strategic activities, while 48% are concerned about possible layoffs as a result of the adoption of AI technology.

The company has also announced that the Microsoft 365 Copilot early access program will reach an additional 600 companies worldwide. The latter will be able to test and leverage the most powerful AI resources available in the M365 apps which they already use daily, such as Outlook, Teams, Word, Excel and PowerPoint.

Cloud infrastructure for innovation

The expansion of datacenters in Brazil and across the world takes into account environmental and security issues

The countless cloud solutions made available by Microsoft and the increase in the flow of digital information require a continuous expansion of datacenters that work 24 hours a day, 365 days a year. Microsoft has over 4 million servers in more than 200 centers across the world, connected by 265,000 kilometers of underwater, land and metropolitan fiber optics. Brazil has a server expansion plan that is grouped into two regional centers: Brazil Southeast and Brazil South. These structures make it possible to reduce the response time relating to customers' and partners' needs, this allows for a triple capacity increase of Microsoft Azure in Brazil.

The energy expenditure of this group of servers deserves special attention, since Microsoft's cloud services can be up to 93% more energy efficient than traditional datacenters. The company conducts research to improve its sustainability and meet its target for energy savings and carbon footprint – including replacing 100% of the carbon emissions from electricity consumed at datacenters by 2025 and eliminating reliance on diesel fuel for backup generators by 2030. Ideas implemented in Brazil include a state-of-the-art cooling system and the use of renewable biofuels for backup generators.

The facility sites of each one of these centers are strategically selected to minimize risk from a variety of factors, including floods, earthquakes, hurricanes, and other natural disasters. Microsoft datacenters use climate control to monitor and maintain optimal conditioned spaces for staff, equipment, and hardware. In addition, fire detection and suppression systems and detectors that help identify and prevent fire and water damage to equipment.

Data security is another key point in the development of these structures, and to ensure the most advanced layers of protection, Microsoft invests over \$1 billion a year in datacenter security, including hardware, software, protocols, and teams, aiming at ensuring privacy of all data stored and processed internally. The system undergoes regular internal and third-party audits to ascertain that it is in full compliance with international certifications. All of these measures are taken to make certain that customers and partners have no concern while using our cloud applications.



Mixed reality and immersive experience

HoloLens 2 expands possibilities and adds features in new remote collaboration scenarios

Cloud expansion

Microsoft is committed to skill train Brazilian companies with the most innovative tools. In October 2022, the company announced the expansion of the infrastructure of Dynamics 365 and Power Platform services in the country. The expansion of the coverage of cloud applications is developed as a means to enhance the adoption of these tools, a direct result of the acceleration of digital services in recent years.

One of the novelties is the availability of the Omnichannel module in Dynamics 365 Customer Service, which contributes to a continuous service experience, providing connected support for consultants with different channels available for contacts with the public. This feature allows Microsoft to offer faster responses to questions from corporate clients. The new tool has improvements that make it possible to better manage the allocation of tasks among sales professionals.

Helping companies grow with innovation and in a sustainable way is one of the paths chosen by Microsoft to drive economic development. **The HoloLens 2** mixed reality device, available in Brazil since March 2023, follows this trend by offering this immersive experience to corporate use in multiple sectors. The idea is to allow specialists to work together in physical or virtual environments, even if they are distant, providing greater flexibility and reducing costs.

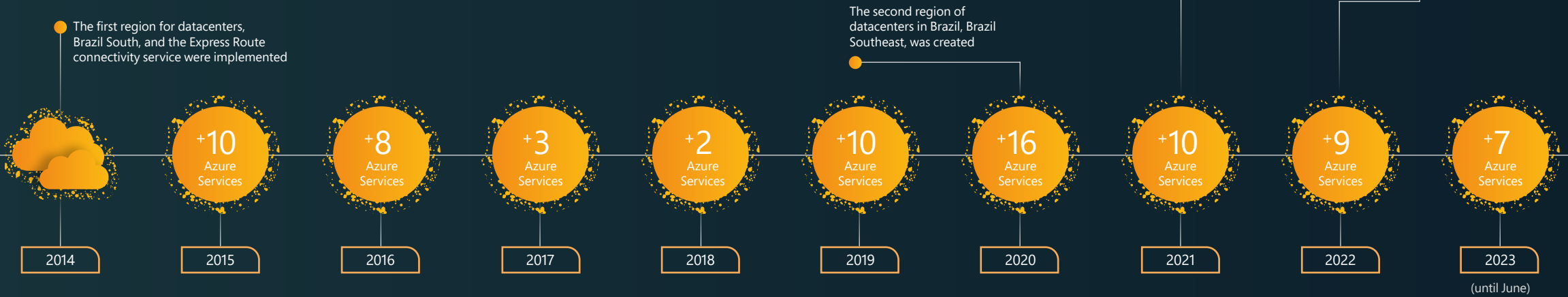
The device is used in conjunction with Dynamics 365 features for mixed reality. Among them, Dynamics 365 Remote Assist, which enables remote audits and inspections with expert service support. With Dynamics 365 Guides it is also possible to promote internal knowledge by sharing and using well-documented processes while interacting with a physical object. Thus, with Dynamics 365 apps for mixed reality, companies can skill train employees to collaborate with each other for more accurate decision making, increasing productivity, and improving outcomes.

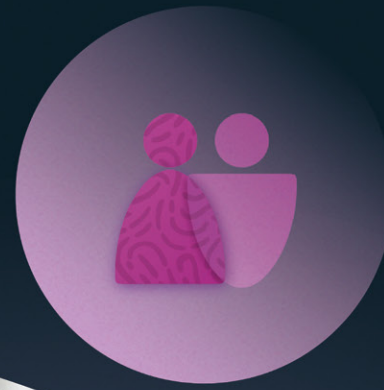
The solutions provided by the device have been useful, for example, in hospital environments. It is used in several countries by top-notch health centers to train doctors, surgeons, and nurses at a distance, enabling new approaches and expanding connections.

Another practical example of HoloLens 2 is carried out by a Brazilian company comprised of specialists who explore technology for the prevention of neurological sequelae in newborns. The PBSF (Protecting Brains, Saving Futures) intends to use Microsoft's device for the evaluation of newborns at high risk of permanent brain damage – such as those with perinatal asphyxia, with heart defects or other brain damage.

PBSF has partnerships with over 40 public and private hospitals throughout Brazil and has treated more than 7,000 newborns. The first hospital to receive this novelty will be the Santa Casa de Misericórdia de São Paulo.

The evolution of datacenters in Brazil, with the inclusion of new Azure services, year by year





Protect fundamental rights

Expanding access to technology for all people and promoting accessibility, diversity, and inclusion, inside and outside our offices, are paths towards a future with decreased inequality

To achieve a more equitable future, Microsoft supports the protection of people's fundamental rights, starting from defending democracy to human rights and tackling injustice and racial inequality, in addition to expanding access to technology for all people, offering broadband internet access to hard-to-reach locations.

Diversity and inclusion (D&I) are part of a fundamental pillar of our culture. We believe that an environment with multiple profiles and ideas has greater potential for understanding society's needs and generating

innovative ideas. In Brazil, Microsoft has four pillars of action in D&I: WAM (Women At Microsoft), BAM (Blacks At Microsoft), GLEAM (Global LGBTQIA+ Employees and Allies At Microsoft) and Accessibility (*learn more on Page 26*). Its members and allies offer ideas and alternatives for inclusion, providing training programs, mentorship sessions and implementing initiatives that reinforce the importance of having a welcoming environment that fosters diversity.

Find out in the following pages additional initiatives which we promote on this topic.

Diversity and inclusion in technology

Skill training programs strive to increase gender equity in the IT ecosystem

Protecting fundamental rights is directly linked to expanding gender equity in the technology environment. Everyone deserves to have equal opportunities and possibilities. Microsoft is committed to changing this scenario, with initiatives on several fronts. Internally, we work continuously to increase female participation in the company, in addition to promoting skill training for new leaders.

In parallel, Microsoft develops several external actions focused on valuing the entry and qualification of women in the technology market, through lectures and courses with Microsoft certifications. The company's Diversity and Inclusion (D&I) pillar that is committed to them and helps drive these initiatives is WAM (Women At Microsoft). *(learn more about the other pillars on Page 26).*

Our aim is to trigger a virtuous circle. The more women presence we have in this profession, the more we inspire those who are starting out. "When I was in technical high school for computer science, in Jequié, Bahia, I thought that the technology market was out of reach for a black woman coming from a lower social class, because I didn't see anyone similar to me", states Liggia Lima, Conversational Intelligence Analyst at the Take Blip automated communication platform, a Microsoft partner company. "So much so, that I decided to go to college into some other field when I took the entrance exam", she recalls; she now lives and is completing the last year of Medical Physics in Aracaju, State of Sergipe.

Expand gender equity in the technology environment is a Microsoft commitment



Photo: Jorge Henrique

Liggia Lima, from Aracaju, participated in the Black Women in Tech program, supported by Microsoft: "Now, I want to be a role model for other women"

She is the daughter of a primary school teacher and was raised in the small town of Ibirapitanga, in the cocoa region of Bahia, her trajectory began to change when she discovered the **Black Women in Tech**, a training program supported by Microsoft which focuses on skill training black women for the technology market. In 2021, she was at the second class to obtain the AI-900 certification, centered on Artificial Intelligence (AI) and machine learning. She also had the opportunity to participate in mentorships and study the English language for IT.

With Microsoft certification in hand, Liggia started applying for employment and quickly got a job. In her day-to-day life at Take Blip, she works with two Microsoft Azure services, QnA Maker (for creating conversational apps) and LUIS (which uses AI for language recognition). She was promoted in less than a year of work.

Her interest in the world of technology continuously increases. In March, she went to São Paulo to participate in the "**Encontro de Mulheres e Carreira em Tecnologia**" (Meeting for Women and Careers in Technology), in which she had the chance to attend lectures and strengthen networking opportunities. Now, she is dedicated to completing her college degree, where she will enhance her knowledge on the use of AI in medical diagnosis for disease prevention. "My dream is to become a role model for other women," she states.

The Black Women in Tech program, which served as stimulus for Liggia's journey, is completely free. To be able to participate, in addition to being a woman and black, they need to have some type of connection with technology, whether it is a technical course, graduate course (completed or not), or self-training studies. In 2022, in its fourth edition, it offered 50 openings for classes on technical certifications in Microsoft Azure. The program is embedded in a wider community: the **WoMakersCode**, a Microsoft partner platform that aims to promote women empowerment and prominence in the technology field, through education and support for employability.

There are other initiatives with WoMakersCode. The **#GirlsPower** mentorship program, for example, has the mission of skill training women in the fundamentals of low code/no code programming on the Microsoft Power Platform. In 2022, the program was attended by 1,736 students from multiple regions of Brazil. Classes were held by Microsoft professionals who are volunteers in the Diversity and Inclusion communities. The lessons were delivered online and live streamed, through the Microsoft Reactor platform.

Women interested in the program also had a chance to participate in the **Cloud Skill Challenge**, which selected 175 students and gave away application vouchers for the PL-900 certification: Microsoft Power Platform Fundamentals. Its continuous aim is to increase women qualification for the job market.

The more women presence we have in this profession, the more we inspire those who are starting out

Quality and free skill training

Three other training programs for women within Microsoft Brazil's cooperation with WoMakersCode also took place during fiscal year 2023. Skill training tracks can be found on the website **MaisMulheres.Tech**, a platform created by WoMakersCode, in partnership with Microsoft, NTT Global Networks and RME (Rede Mulher Empreendedora) and IRME (Instituto Rede Mulher Empreendedora), to offer courses in Cloud Computing, Infrastructure, Information Security, DevOps, Development and Data Science, and Artificial Intelligence.

One of them was the sixth edition of **Elas na AI**, targeting those who want to work with data science and AI, with a seven- week duration and 100 openings.

DevOps 4 Women, on the other hand, targeted software developers with some experience in the field and offered 25 openings. The second edition of **Security Girls**, in turn, made available 100 openings for women with interest in the fields of security and cloud training.

All programs allowed participants to undergo exams to obtain certification in each of their field of activity. The MaisMulheres.Tech website has over 53,000 women registered.

Open doors for inclusion

Diversity and inclusion are part of a fundamental pillar of Microsoft's culture. Multiple profiles and ideas increase the chances of understanding customer needs, generates more innovation, and expands world awareness.

In addition to encouraging actions for women through the **WAM (Women at Microsoft)** pillar, Microsoft Brazil seeks to achieve greater inclusion in initiatives aimed at three other pillars: **BAM (Blacks at Microsoft)**, **GLEAM (Global LGBTQIAP+ Employees and Allies at Microsoft)** and **Accessibility (people with disabilities)**. Together, these four pillars make up the D&I Committee, having support form Cross-pillar which integrates the objectives, strategies, and calendars as a way to strengthen the vision of the intersectionality of the pillars in Brazil. All D&I actions area carefully assessed and led by Danni Mnitentag, Vice President of Partners and Channels, and Diversity & Inclusion leader at Microsoft Brazil.

Each group has a leader, who is responsible for encouraging internal and external initiatives to ensure that everyone has access to opportunities, and is supported by allies and volunteer members, who help put ideas in practice. They all act collectively within what is known as intentionality – a concept that includes direct daily involvement with each approach and continuous learning.



Promoting the importance of diversity when hiring new people is one of the recurring topics. This is done, for example, through awareness events for Microsoft leadership and partner companies, such as the panel “A Importância e o Papel da Tecnologia no Ambiente de Trabalho Acessível” (The Importance and Role of Technology in the Accessible Workplace), held on December 3, on the International Day of People with Disabilities.

Creating an environment where people feel free to be themselves is another concern. After all, they can only reach their full potential by genuinely contributing when they feel they belong in their work environment. Microsoft is a signatory and has strong presence in the LGBT Companies Forum and is a reference in community inclusion initiatives, such as the implementation of a genderless bathroom in the São Paulo office (which has become a reference for other companies) and the expansion of a health plan, announced in August 2022, which covers procedures such as gender affirmation for transgender individuals, fertility treatment and surrogate pregnancy for same-sex couples, in addition to treatment for individuals with Autism Spectrum Disorder (ASD).

Microsoft also offers training and skilling for black people, such as the Certifica GerAll AZ-500 project, which takes into account their real-life context. An example is to carry out activities on Saturday mornings, as a means to increase the participation rate in the program.

The commitment with diversity and inclusion must be carried through a learning journey since we will never know everything about this topic. It is a long-term trajectory. It is dependent on social changes that do not happen as fast as we desire. The effort has to be permanent. Therefore, Microsoft promotes courses and playbooks to expand knowledge about D&I and considers that all its employees are allies of this topic. The mission of being inclusive, is not simply for those with their profiles represented by the pillars. It is everyone's job, for a more diverse and egalitarian society.



Technology for everyone

Microsoft's accessibility solutions allow people with different profiles and characteristics to have access to technology

Over 1 billion people worldwide have some type of disability, according to the World Health Organization (WHO). Most of them – approximately 70% – do not have an apparent disability. All of us will experience some type of disability at some point in our lives, be it temporary, occasional, or permanent. Brazil has 46 million people who have some type of disability, according to the IBGE – almost 24% of the population.

At Microsoft, we believe we have an opportunity to drive massive change and create increasingly inclusive schools and work environments as a means to improve education and employment opportunities for these individuals. We see disability as a strength. Accessible technologies, powered by Artificial Intelligence (AI), help people develop their full potential at school, work and at home.

We are passionate about creating accessible services and products. Companies that take an inclusive approach can attract and retain top talent. Millennials, who will make up 75% of the workforce by 2025, state that they wish to work for companies that reflect their values. Diversity, accessibility, and inclusion are at the top of their list.

We are also committed to working with employees – across all industries – and share our knowledge and collaborate to create a more inclusive world for all, where people with disabilities have the same opportunities as everyone else.

Accessibility

We want everyone to have the ability to work together and access information. In order to truly bring about transformative change, accessibility needs to be a priority. We must ensure that it is embedded in our projects and that it is available to each and every team, company, school, and home. A good project is an accessible project, and if we fail to be inclusive, we are in fact excluding people.



We know that accessibility is the basis for building inclusive experiences. It allows everyone to be more connected and be increasingly independent and productive.

We have examples that are well known and illustrate the power of technology for accessibility and inclusion. Microsoft 365, for example, has tools such as the Accessibility Checker, Narrator, Translator, Magnifier, Microsoft Word voice typing options, and Microsoft Power Point automatic captions or subtitles – a roster of options that is constantly being improved and expanded. In the Microsoft Outlook smartphone version, the Play My E-mails tool reads messages aloud and has features that make it possible to reply, delete, move, or archive new messages through voice commands.

An accessibility novelty is available on Microsoft Teams since November 2022. It is an innovative sign language view feature, which keeps signers, sign language interpreters, and others who use sign language, prioritized in a consistent on-screen position during meetings. In the same way as the pin and caption functions, the display for sign language is private and appears only on the screen of those who choose that option, not affecting other participants. Find out more about multiple accessibility features available in Microsoft Teams on the Microsoft support website.

There is another innovation that has the potential to transform the quality of life of people who are visually



The Autismo Tech initiatives and support for the Made By Dyslexia organization expands our efforts so that everyone is able to explore their full potential

impaired. Seeing AI is an Artificial Intelligence app with a series of functions for those who are blind or have low vision. For example, the app recognizes a friend who is beside the person (and describes their emotion), narrates a landscape, identifies bills and coins, among other features.

Neurodiversity

Microsoft is one of the supporters of **Autismo Tech**, an online experience focused on innovation and social impact, carried out by aTip, an inclusion ecosystem for adult autistic people. The initiative aims to increase the prominence and development of the autistic community – with over two million individuals diagnosed. The company offered mentorship sessions from executives trained in neurodiversity, a term related to natural variations in the human brain of each individual in relation to sociability, learning, attention, mood, and other cognitive functions.

Autismo Tech was conceived in 2018, through an initiative by the FIAP university center, and is now in

its 4th edition. In addition to mentorship sessions, the event offered to participants lectures and opportunities to develop impactful solutions for the autistic community, access to FIAP ON courses and, at the end, a cash prize for winners of the Hackathon.

Another initiative which focuses on neurodiversity is the partnership with the non-profit organization **Made By Dyslexia**, an entity specialized in working with people diagnosed with dyslexia. Microsoft has put together training programs dedicated to ensuring that students with this diagnosis have adequate education and follow-up during classes. The module was made available at no cost, on Microsoft Learn, a platform with training programs for different knowledge fields. Developed for tutors and teachers, the content is divided into two levels. In the basic level, which was named Awareness about Dyslexia, concepts are presented to identify, support and skill train children and teenagers. The advanced level (Teaching for Dyslexia) offers specific strategies and solutions for the classroom environment. All of this is designed so that everyone is able to explore their full potential.



Computer lab at the headquarters of the Associação Terra Indígena Xingu: digital skills for indigenous peoples

Skill training in Xingu

Technology helps increase autonomy of indigenous peoples

Microsoft's initiative to provide technology access to indigenous peoples gained momentum in Brazil in February 2023 with the signing of a partnership to supply IT devices for the computer lab at the headquarters of the **Associação Terra Indígena Xingu (Atix)**, located in the State of Mato Grosso. This is the first stage of a broader project that aims to expand access to technology and provide digital skills to indigenous peoples.

The company donated equipment and plans on offering, in the future, skill training programs to qualify indigenous instructors so that Atix has autonomy and is able to use technology as a means to develop solutions that meet the needs of 16 indigenous peoples who live in the Xingu Indigenous Land.

Similar agreements were created in Australia, with the Aboriginal population, and in Canada, with three different peoples: the First Nations, the Inuit, and the Métis.

"We believe that skill training in technology allows the possibility of empowering the indigenous population of Xingu. We cannot depend on white men to access technology. We need to empower our people to use technology to meet the needs of indigenous people", explains Ianukulá Kaiabi Suia, President of Atix.

Where is the lab located



Xingu Indigenous Land (Atix), located in the State of Mato Grosso

Create a sustainable future

Initiatives aimed at preserving the environment and reducing water wastage are some of our commitments to improve life on the planet

Climate change and its consequences are a crucial point for our generation. Very few issues are this urgent. Facing this challenge requires changing habits, collective actions, and innovation in technology. In addition to acting to fulfill its commitments, Microsoft also seeks to help customers and partners achieve their own sustainability goals.

Our global goals are: by 2030, we will be carbon negative and by 2050, we will remove our historical emissions since we were founded in 1975. By 2030, we will replenish more water than we use and reach zero waste across our direct waste footprint. These are ambitious goals, and we are working relentlessly to achieve them.

This involves directing attention to what our suppliers are doing. In the Marketing area, for example, we mapped out companies and NGOs from multiple sectors that have conscious practices, such as initiatives for direct protection of the environment, reduction of inequality, responsible consumption and production, and human development, supported by the 17 SDGs

(Development Goals Sustainable Development of the United Nations). Our intention is to be sustainable from start to finish and avoid waste in all aspects.

We also have partnerships with public and private institutions to help preserve the environment. One of them is the development of the PrevisIA platform alongside Instituto Homem e do Meio Ambiente da Amazônia (Imazon), an entity with over 30 years' experience in the Amazon region, and Fundo Vale. This innovation uses data analysis and Artificial Intelligence (AI) to spot areas with the highest risk of deforestation in the Amazon Rainforest (*learn more on Page 32*).

Another initiative in this area is the Clima Adapt platform, the result of a partnership with the Ministry of Integration and Regional Development, whose mission is to monitor the Brazilian regions most susceptible to extreme natural events caused by climate change. (*learn more on Page 34*). Find out on the following pages, these and other actions aimed at a creating a sustainable future.

On the forefront against deforestation

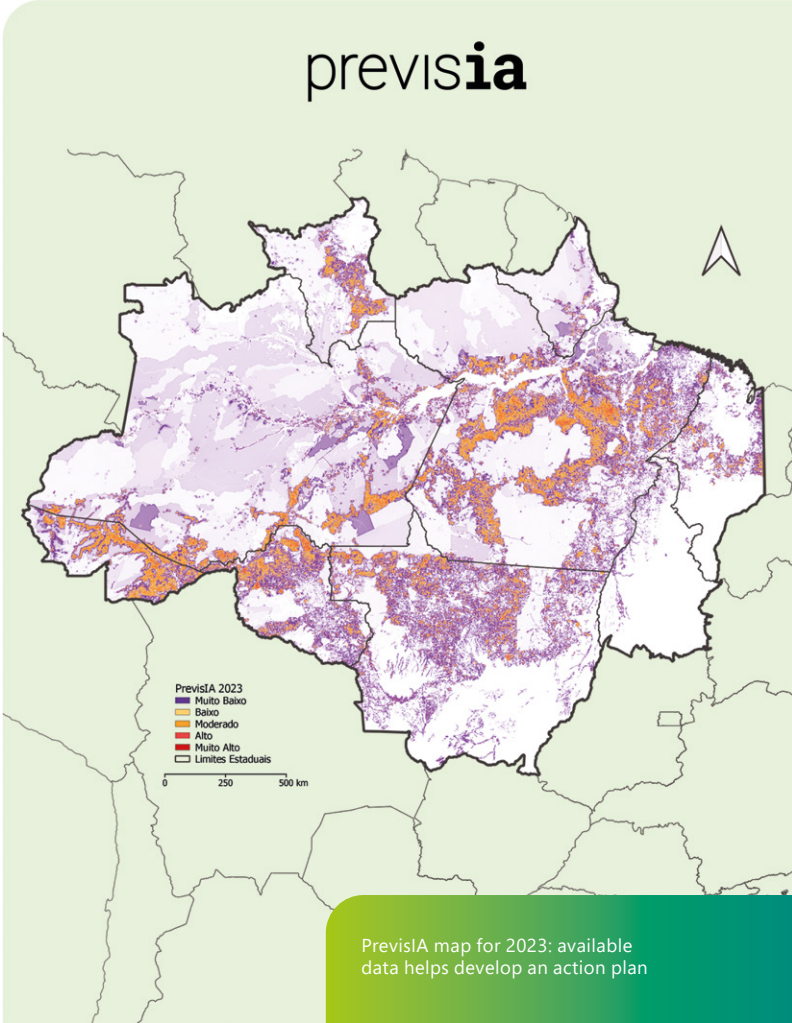
PrevisIA is a tool supported by Artificial Intelligence that helps accurately monitor areas at risk of deforestation in the Amazon

The expansion of deforestation in the Amazon is a global concern. Between August 2021 and July 2022, 11,568 square kilometers of forests were devastated, the third largest destruction in 15 years, according to data from Prodes, the Brazilian deforestation monitoring system. This devastation area is equivalent to cutting down over 3,000 football fields of trees per day. The protection of the largest equatorial forest worldwide is of interest to the entire planet, as its ecosystem plays a crucial role in regulating the climate, producing oxygen, carbon storage and preserving biodiversity.

Microsoft offers its knowledge and technology to help protect the quality of life on Earth. The company is one of the developers of the **PrevisIA platform**, a data analysis solution and Artificial Intelligence programmed to identify areas at greater risk of deforestation in the Amazon, which uses advanced resources from the Microsoft Azure cloud.

Its partners in this innovative initiative are Fundo Vale and Instituto Homem e do Meio Ambiente da Amazônia (Imazon), an entity with 30 years of experience in the Amazon region. The tool's mission is to provide valuable information for decision-making by public and private sectors, as well as society in general, for the implementation of preventive actions to tackle and control deforestation.

The tool provides valuable information for decision-making in public and private sectors and for society in general



In its second year of operation, the tool's success rate was of 78.2%, considering the forecast for July 2021 and August 2022. PrevisIA predicts that deforestation in 2023 will be close to 11,805 square kilometers, exceeding 2022.

Methodology

Launched in 2021, PrevisIA provided to this forest protection effort a new algorithm capable of monitoring new illegal roads built in the region through satellite

images. This technology innovation made it possible to quickly and efficiently map out these paths, spotting changes that take place in the surroundings. Simply because speed, accuracy and processing capacity are paramount to prevent the action of deforesters.

Monitoring is important because roads are one of the core variables in the task of predicting the risk of deforestation in the region. Studies by Imazon point out that 95% of accumulated deforestation in the Amazon is concentrated within a radius of 5.5 kilometers from its borders. In addition, 90% of

annual fires occur within 4 kilometers of them. These routes are constructed in the forest for logging, mining, and land grabbing – illegal takeover of public land. It is a new age of data science for the forest.

As a result of this partnership, PrevisIA was presented at the United Nations Conference on Climate Change (COP26), in a discussion panel which warned leaders of the risks of deforestation and how technology can help avoid this scenario. The platform is constantly being improved and can be accessed by everyone through the website previsia.org.br.



11,805 km²

is the prediction of deforestation in the Amazon in 2023, according to an estimate by the PrevisIA platform

The award grants global recognition to technology

The performance of the PrevisIA platform in contributing to the preservation of the Amazon Rainforest awarded Microsoft the ECO 2022 prize, granted by the Brazilian section of the American Chamber of Commerce (Amcham). The award selects projects from companies of all sizes that include sustainability attributes in their strategies.

Two aspects contributed to the selection of this technology that tackles deforestation. The first is the operation in one of the most sensitive areas on the planet, where any environmental change can impact the entire world. The other aspect involves the perspective of utilizing a solution with similar features in other biomes thus expanding the reach of its benefits.

AMCHAM PRÊMIO ECO



How to identify climate vulnerabilities

A platform created through a partnership between Microsoft and the Brazilian government, identifies critical areas of climate change

Increasingly heavy rainfall, severe droughts and rising sea levels are some of the visible consequences of climate change. Launched in Brasília in April 2023, the **ClimaAdapt platform** has the mission of monitoring the Brazilian regions most susceptible to these extreme nature events. This fully automated tool is the result of a partnership with the Ministry of Integration and Regional Development (MIDR) and is aligned with Microsoft's mission to use its technology to support solutions that positively impact the planet and society.

With open public access, this technology is intuitive and visual and can be accessed at climaadapt.com.br/pt. It brings together information that can be analyzed individually or collectively through

a heat map overlay model. Research combines data on specific vulnerabilities from multiple locations, from North to South, such as soil types, land slopes, GDP per capita and the Human Development Index. The platform uses databases with public surveys available from entities that work directly or indirectly with the climate change agenda.

In addition to the heat map indicating the most vulnerable areas, there are also two specific models, one of them that identifies the most vulnerable areas in terms of rising sea levels on the coast, and the other one that identifies critical stretches of federal and state highways for the prevention of floods and landslides. Users can identify these locations through an interactive map and check technical data through Microsoft Power BI, where it is possible to generate reports on vulnerabilities.

ClimaAdapt will help define the evaluation of public policies in a very visual way, providing greater clarity on the status of climate vulnerabilities, even in the most distant regions. "Understanding risk and vulnerability helps us adapt to climate changes, which are already taking place and being recurrent, thus helping to better direct public resources, actions and programs towards preventing and mitigating the extreme impacts of climate change," states Waldez Goés, Minister of Integration and Regional Development.

Hosted at the MIDR, the platform has wide reach and will contribute to improving the National Policy on Climate Change, in addition to supporting the implementation of the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, which will involve the participation of the Ministry of Environment and Climate Change and the Chief of Staff of the Presidency of Brazil.

ClimaAdapt platform identifies vulnerable climate areas in Brazil



Tânia Cosentino, GM Microsoft Brazil, with Waldez Goés, Minister of Integration and Regional Development

Sustainability journey

An interactive exhibition alongside Capgemini offers alternatives for a sustainable future

Establishing partnerships with customers, partners and communities is a way to accelerate the promotion of sustainable values, in which environmental, social, and corporate (ESG) challenges are addressed in a comprehensive way.

The **Jornada de Soluções de Sustentabilidade** (Sustainable Solutions Journey) points to that direction. Microsoft, together with the multinational consulting, technology, and outsourcing company **Capgemini**, launched this initiative in March 2023, which gathered executives from large companies to provide their opinion and share ideas about ESG programs. The event took place at the Microsoft Technology Center (MTC), in São Paulo, a space which was conceived for the presentation and experimentation of innovations with Microsoft solutions

for customers and partners. Invitees had the opportunity to learn more about sustainable operations with the data platform that supports adjustment simulations in the production chain, edge, and cloud computing approaches to reduce datacenter emissions, with cost optimization of the technology park that allows for productivity gains focusing on turning goals into concrete results.

From March to June 2023, the Sustainable Solutions Journey, which is supported by interactive and immersive demos, will be held at the MTC, aimed at raising awareness and supporting customers in their sustainable transformation challenges. After this period, the initiative will have a new version. Learn more at [capgemini.com/br-pt/service/jornada-de-sustentabilidade-microsoft/](https://capgemini.com.br-pt/service/jornada-de-sustentabilidade-microsoft/).

Sustainability for our company, our customers, and the world

In 2022, Microsoft reduced global carbon emissions and expanded aid to the climate innovation fund

Microsoft's 2022 Environmental Sustainability Report, released in May 2023, illustrated the advances in our commitments across the world. Among them, being carbon negative by 2030 and by 2050, removing all our historical emissions since our conception in 1975.

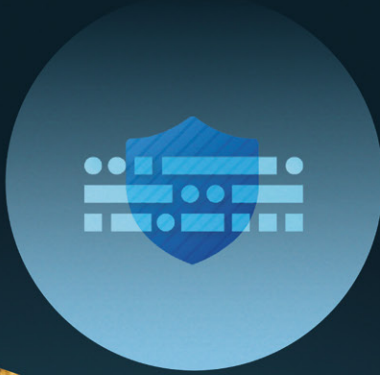
From January to December 2022, Microsoft reduced its global direct carbon emissions by 27%. Indirect emissions, related to partners and customers, increased slightly, by 0.5%, despite a 25% increase in purchases of goods and services. The result was due to an improvement in operations, investments in renewable energy, purchase of sustainable jet fuel, among other initiatives.

We have also extended support for our customers' sustainable engagement by launching Microsoft Cloud for Sustainability, a comprehensive environmental sustainability management platform, that contains Microsoft Sustainability Manager, which enables organizations to record, report and

reduce their scope 1, 2, and 3 emissions. Microsoft Azure users have also benefited from significant updates to the Emissions Impact Dashboard, which helps customers understand the impact of emissions resulting from Microsoft Cloud usage.

The report explained that Microsoft invests in climate impact business models through the Climate Innovation Fund. Since 2020, the company has allocated over \$600 million to a global portfolio that includes solutions in energy, industry, and natural systems.

The document also pointed out three key areas capable of boosting the fight against global warming. These key areas are: advancements in Artificial Intelligence solutions to reduce climate change, accelerating the development of sustainable markets through investments and creating tools that enhance the measurement and compliance of emissions. All of the above will help the planet achieve climate stability faster.



Chapter 4

Earn trust

Advances in new technologies are followed by challenges that must be faced responsibly. Innovations, beyond being useful, must be reliable for people and companies

While we are optimistic about the benefits of advances in technology, Microsoft is mindful of the challenges that come with innovation. We believe that people need to trust the technologies they use and the companies behind them. This compels us to act with transparency in all our businesses and remain committed to providing security and privacy in terms of our customers' and partners' data.

Microsoft tracks around 65 trillion critical signals in its digital environment every year. This information is used to improve cybersecurity solutions against password cracking and data theft, among others. The budget for this challenge is \$20 billion worldwide until 2025. To fulfill this mission, we have a team of 8,500 specialists, in 77 countries, continuously updated on digital threats (*learn more on Page 38*).

We are at the forefront of Artificial Intelligence (AI) and its applications, which have surprised us all. We are aware of our responsibility with regard to this revolutionary technology in terms of building it and using it in a responsible, transparent, reliable, safe, and ethical way. Its growth strategies need, for example, to encompass all people, in search of fair and inclusive growth (*learn more on Page 39*).

AI and other advanced technologies from Microsoft are applied on a daily basis in companies from multiple sectors, contributing to increase productivity, operational efficiency and consequently, leverage digital transformation in Brazil (*learn more on Page 40*). In the next pages, learn more about how Microsoft helps make technology an increasingly useful and reliable tool.

Cybersecurity in an ever-changing world

Investing in cybersecurity is at the heart of Microsoft's strategy

The speed of digital transformation requires particular focus on **cybersecurity**. Technology generates positive impacts, and it takes us to a new battlefield, it is therefore important to modernize security strategies for this new scenario. The numbers help us understand the size of this security challenge involving everyday online activity of people and companies. Over 30 billion authentications are processed daily by more than 550 million users of the Azure Active Directory identification platform. On average, 1,287 password cracking attempts are detected every second. Microsoft security experts identified a 130.4% increase in organizations with ransomwares (malicious software intentionally designed to steal data). Altogether, financial amounts lost to cybercrime reach trillions of dollars – estimated to exceed 10 trillion by 2025.

Microsoft understands that the scenario is distressful, and it is prepared to tackle it and support companies. The budget for cybersecurity alone over the next five years is \$20 billion worldwide.

The company has a team of over 8,500 specialists, in 77 countries, who monitor external threats 24/7, that is, 24 hours a day, seven days a week. Moreover, part of this security ecosystem is made up of 15,000 partner companies with professionals who are trained to further support our customers.

The company incorporated robust processes to prevent cyberattacks, based on Zero Trust strategies. It involves a security model adapted to the complexity of the current environment, considering hybrid work and the protection of personal devices, apps, and data availability anywhere. Its principles include authentication and authorization across all available data points (including user identity, location, and device integrity), utilizing the principle of least privileged access and performing analysis and tracking as a means to detect threats and protect data.

The company has integrated solutions that include cloud security, defense against advanced threats, identity management (i.e., without the need for passwords), data protection, privacy, and compliance. Altogether, the portfolio is comprised of over 50 products grouped into six major families: Microsoft Defender, Microsoft Sentinel, Microsoft Entra, Microsoft Purview, Microsoft Priva and Microsoft Intune. We have a dedicated team of specialists to support customers in their security journey, especially from the perspective of the business strategy, since the security strategy has to be increasingly associated with the company's strategy, thus becoming a great enabler and enhancer of the evolution and transformation of corporations.

Microsoft knows that effectively understanding this complex environment is paramount to continuously improve its

solutions. To this end, it promotes studies and research, using over 65 trillion critical safety signals received daily. For example, the **Microsoft Digital Defense Report**, released in November 2022 offers relevant information, such as that related to nation-state model cyberattacks, which doubled its success rate, from 20% to 40%. This enhanced efficiency is justified by the fact that Russia uses cyberattacks against Ukraine's structure and spies on Kiev's allied countries. Tailored to professionals active in this knowledge field,

the third edition of the report Cyber Signals, presented in December 2022, data collected on the risks which the systems of convergent IT, internet of things (IoT) and operational technology pose on what is called "critical infrastructure", with practical recommendations for companies.

Microsoft understands that this journey has to be collaborative and that the more knowledge we have, the more protection we can build against digital threats.

Responsible Artificial Intelligence

AI must be built and used ethically, promoting competitiveness, and broadly benefitting society

The Evolution of **Artificial Intelligence (AI)** takes place at a fast pace, with increasingly surprising applications. Microsoft is at the forefront of this innovation, in close collaboration with customers, partners and alongside OpenAI (creator of ChatGPT), a company in which it makes significant investments. The surfacing of this new technological frontier involves many possibilities for everyone's lives, yet above all, it bears responsibilities so that technology can effectively benefit people and the planet.

The first of these commitments is to be prepared for AI to be built and used responsibly and ethically, with self-regulatory efforts that pave the way for new laws that ensures international competitiveness. Microsoft has been addressing this issue since 2017, when it launched the Aether Committee with researchers, engineers, and experts on the topic. The idea evolved into the development of AI principles in 2018 and the creation of a Responsible AI Office in 2019. In 2022, the second version of the Responsible AI Standard was designed, which is a framework that guides us on how we shall build AI systems.

These principles are built into the Azure OpenAI Service, which has ChatGPT available for preview since March 2023. The tool enables more companies to access the world's most advanced AI models, including GPT-3.5, Codex and DALL•E 2. Microsoft Azure's cloud and computing infrastructure has made it possible to take advantage of these programs on a large scale, and in an increasingly dynamic way.

Microsoft is currently expanding its AI portfolio. Microsoft Security Copilot uses innovation to quickly detect and respond to digital threats, substantially improving cybersecurity. Microsoft 365 Copilot promises to revolutionize everyday life at the office: for example, in Word, the software provides a first draft of a document. With Dynamics 365 Copilot, in turn, people exchange repetitive tasks for strategic activities in the areas of sales, operations and supply chain.

Updated versions of Microsoft Bing search engine and Microsoft Edge browser, introduced in February 2023, already feature AI-based technologies. These tools were thought of as a sort of co-pilot of artificial intelligence for the web. Bing began to allow more complex searches, such as planning a detailed travel itinerary, using a chat feature with potential to revolutionize the search market. Edge offers a new feature that can help users create content, such as writing an article or a post for LinkedIn.

As an additional layered protection, safeguards have been built into both products to prevent harmful content, addressing aspects such as misinformation, content blocking, data security and preventing the promotion of harmful or discriminatory content.

In addition, in May 2023 we released the document *Governing AI: A Blueprint for the Future*, which provides suggestions on how governments should consider policies, laws and regulations related to the topic while providing details of our commitment to AI ethics. All of the above is aimed at ensuring that AI fulfills its role of bringing progress and innovation to humanity in a responsible way.



Digital transformation

Find out how Brazilian companies are using Microsoft technologies to revolutionize their businesses

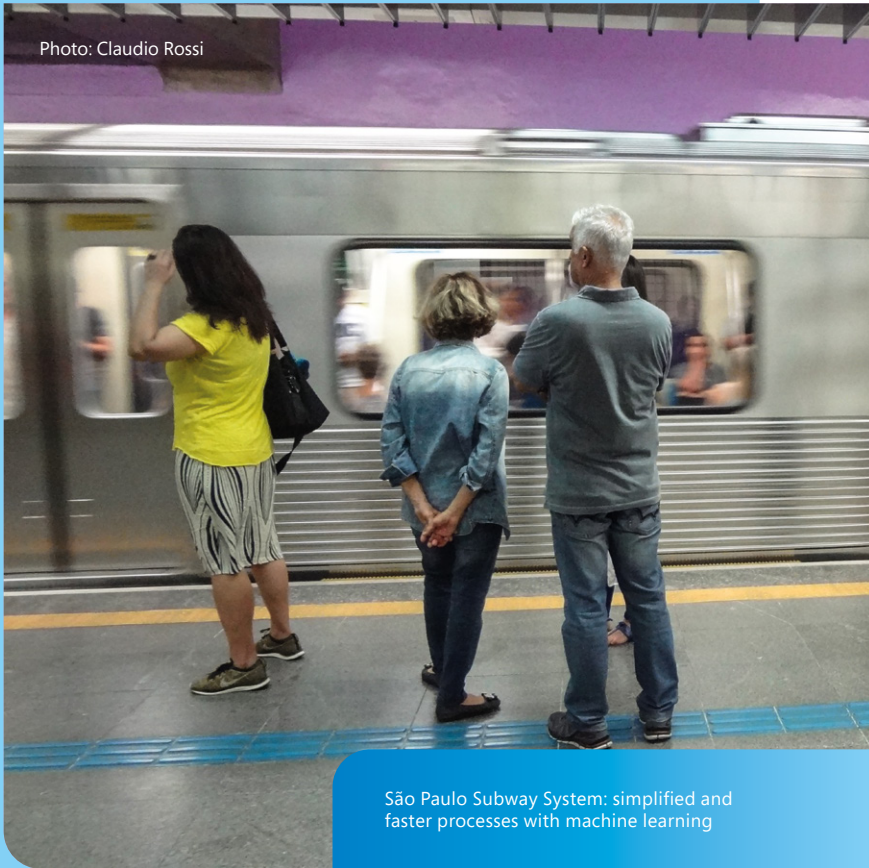
The adoption of advanced technologies in the business environment helps increase productivity, operational efficiency and, consequently, leverage companies' digital transformation. Microsoft continuously works alongside private initiatives to adapt its solutions and support challenges experienced by them, in multiple sectors of the economy: whether it relates to accelerating internal processes of the São Paulo Subway System with support of

Artificial Intelligence (AI), improving CPFL Energia's data security network, or to contribute to enhance Rede Globo's efforts to engage employees in its digital transformation. It is all about exchanging knowledge and experiences and it is key to earn people's trust in terms of the technologies they use. On the following pages, learn more about a few cases of technology applications that have taken business environments of large Brazilian companies to a higher level.

Enhance public services with IT

Four out of six subway lines in São Paulo are managed by a company controlled by the State Government: **Companhia do Metrô de São Paulo**. Microsoft's solutions adopted by the company, such as cloud, data analysis technologies and machine learning, helped the company simplify processes and extract data-based insights from its systems. A top benefit was significant reduction in response time to standard public notices, which were previously done manually and took 15 days to complete and involved six departments directly. Now, the process is done in only one day using automation tools, creating low code applications and data sharing.

The company plans to incorporate artificial intelligence resources, especially machine learning and deep learning with solutions targeting the areas of finance, logistics, maintenance, human resources, among others. These divisions are developing collaborative laboratories with the IT division, aiming at enabling big data environment with resources such as Azure Synapse Analytics and Azure Storage Account. The company also intends to adopt applications for natural language processing and intelligent voice recognition resources. At its core, technology is enabling the delivery of enhanced public services.



São Paulo Subway System: simplified and faster processes with machine learning

Increased data security

Independent asset manager **Fram Capital** has turned to Microsoft Azure cloud solutions to grow its business and increase security for its customers. The migration aims to build an infrastructure that is within risk control and compliance standards required by the financial industry.

"The company's growth led us to seek modern and flexible platforms, with the capacity to store all our customers' data, in an increasingly safer way", explains Roberto Adib Jacob Junior, COO of the company.

Caution with data security, especially in the cloud environment, is another issue highlighted by the executive, who keeps an eye on both regulatory standards and customer services. "When we think in terms of adequacy related to the LGPD (Brazil's GDPR)) here in Brazil, Microsoft suggested cloud-based embedded tools, which supports compliance management, and further strengthens the protection of company data and that of our clients."

Data mining

VR is undergoing a process of digital transformation aspiring to become a company with increased data-driven decisions. The first step was to restructure the Data & Analytics area in terms of data governance, data platform, data services and data lab. As of 2023, it will also have a team specialized in data production.

To achieve this goal, the company adopted Microsoft Azure solutions, Microsoft's cloud platform, and Azure Databricks, which is performing an analysis on company data to offer relevant business insights.

With the use of technologies, information becomes a strategy to make customer experience even better through data crossing. One of the practical results is the possibility of suggesting purchases to consumers at registered establishments that they may not be familiar with, yet which are in line with their consumption profile, based on an analysis that considers their recent habits.

Keeping an eye on Open Finance

As part of its digital strategic planning, **XP Investimentos** began to use Microsoft Azure as the platform for launching its digital products and services, which are integrated into a single application, simplifying the management of assets carried out directly by its clients. The solution offers even more resilience, security, and efficiency, as well as scalability for XP to launch new applications, products, and services in shorter time and within a completely secure environment. Among the new possibilities offered by XP, through cloud use, are XP digital accounts and debit and credit cards.

This partnership is in line with Microsoft's commitment to support companies in the financial sector with data storage solutions that can be used in new methods that are surfacing in the market, such as Open Finance.



Advanced protection against cyberattacks

With digital transformation driven by the pandemic, **CPFL Energia** modernized its security strategy against cyberattacks. In this journey, remote work, IDs, as well as internet connection structures at employees' homes, created a new company boundary. New security actions were required to mitigate risks and respond to this new reality, thus allowing CPFL to continue its progress with advanced security.

The first of these measures was to review, in detail, the tool for managing and correlating security events, aiming at adding increasingly modern layers of protection. To achieve the desired result, the company adopted Microsoft Sentinel, a Security Analytics Platform solution that offers intelligence, automation and behavioral and risk analysis against current threats and attacks, together with Azure Monitor, which collects and organizes data.

As a result, it is no longer necessary to have dozens of dashboards and consoles in the Security Operations Center since this solution manages dozens of applications. Technology has given the company a continuous view of its entire online environment, allowing it to become a strategic ally in its cybersecurity operation. "We have



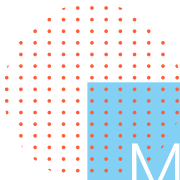
network and device monitoring, which allows us to identify virtual attacks right from the start, mitigating and even preventing intrusions", explains Renato Amabile da Costa, Information Security coordinator at CPFL Group.

AI for the benefit of customer experience and operational efficiency

Moving towards generative AI is one of **Vivo's** objectives when it announced the adoption of Microsoft Azure OpenAI Service in the first half of 2023. Focused on operational efficiency and improving customer experience, the company will develop a solution for its call center that helps customer service agents better understand and quickly respond to questions from customers. Their expectation is that this will increase consumer satisfaction, allow prompt responses, enhance efficiency, and reduce customer service errors. Vivo also wishes to use technology to support their salespeople when

preparing business-to-business commercial proposals, allowing sales processes to become more assertive.

Vivo will also encourage employees to gain knowledge on this new AI technology. For this, three action pillars were established: AI Lab, whose objective is to accelerate the implementation of use cases; AI Business School, to skill train the company's top executives in topics related to AI; and AI Factory to ensure successful implementation of use cases across the enterprise through software development partners.



Moving towards the cloud

Swiftness and scalability. These two words served as drivers for **Idever's** system migration to the cloud, a startup that works with technology tools for customer relationship management (CRM). The main objective of this transformation was to optimize the operation for the retailer and improve user experience. Today, thanks to the use of Microsoft Azure, with only one professional, Idever manages the entire environment, supported by SOU.cloud, an Azure MSP Expert company.

The adoption of Azure Monitor and Application Insights was one other advancement, allowing it to track in real-

time, sales activities via application. These solutions allow the system to collect and store tracking data and, consequently, monitor platform availability, responsiveness and automatically detect failures and autonomies.

AI technologies also make it possible for Idever to reliably identify consumers profile, directing personalized promotions in accordance with their consumption habits. The retailer is able to swiftly change its strategies. The entire process is automated, requiring no human intervention, in a speedy, effective, and safe way.

Power Platform for digital transformation

Globo adopted solutions such as Power Platform, Microsoft 365, and Microsoft Teams to standardize and improve collaboration and communication among employees. The company understood the usage potential when it experienced a 300% increase in the number of users in Teams, within a one-month period at the start of this process. The next step was to empower employees by providing Power Platform tools, such as the "Power Platform Hackathon", with the consultancy and participation of Microsoft. The programming marathon reached well beyond the Information Technology department, involving core areas of the company, such as Human Resources, Entertainment and Finance.

The event brought together 90 participants, divided into 15 teams. The objective of each team was to develop applications that could solve day-to-day problems at the company, based on challenges experienced by employees. The three winners had their applications implemented. One of these solutions is aimed at managing approximately 500 invoices that need to be issued daily by the company. The process gained swiftness with Microsoft Power Automate, which uses artificial intelligence to read PDF files and automatically fill in the fields in the application. Developed by a team from São Paulo, the initiative was so successful that it was expanded throughout the country.

Two other ideas which were implemented came from the Entertainment area: an app that helps Globo purchase international films for the Telecine channel (which will soon also cover domestic productions) and the other winning app offers insights for the creation of the channel's programming schedule, by crossing data related to gender, age group, audience ratings, among others, all supported by AI technology.

The result is measured by multiple triggers. The hackathon helped boost usage of the Power Platform by approximately 30%. The organization currently has approximately 16,000 dashboards in Microsoft Power BI, 3,600 applications in Microsoft Power Apps, with close to 5,800 flows in its environment, running up to 1 million flows per month.



Globo: solutions that enhance communication

Technology for digital transformation

Cloud applications and AI are allies of **ClearSale**, an anti-fraud solutions company, against hackers and fraudsters. Technology plays a core role in a scenario where more and more people are using e-commerce. This partnership with Microsoft allowed the company to become fully digital when operating in a market where speed and accuracy are paramount.

When consumers carry out a digital transaction, the transactions are often screened and approved in less than 1 second by the platform with the help of AI. Data and history assist in the analysis. "Online transactions carried out at 2 am are considered riskier than those made at 7 pm and generally,

smartphone purchases have a higher fraud risk than purchases of mattresses" says Rafael Lourenço, Executive Vice President and Partner at ClearSale.

Among other benefits, Microsoft Azure allows the fraud detection system to track occasions of high volume of purchases, such as the Black Friday period. The company's trust in the system (and on cloud technology) is so strong that if a financial transaction is approved, and ultimately proves to be fraudulent, ClearSale reimburses the merchant.

While the company was not conceived with cloud technology, it has become fully digital through its partnership with Microsoft.

Innovation for the legal system

AI solutions have become part of the legal ecosystem. **Licks Attorneys** are experts on intellectual property rights, the law firm has incorporated Big Data and AI solutions into its daily activities, aiming at increasing its chance of succeeding in court cases and in patent applications for its clients.

The firm uses Microsoft Azure SQL language and more than 100 bots to maintain its own database, currently with over 1 million lawsuits and 4.5 million documents, containing 100% of the information made available by the Brazilian Executive and Judiciary branches on invention patents, enabling access to information from clients and that of its 300 office employees, based in four cities in Brazil and in Tokyo, Japan.

The system crosses data from different sources, such as the National Institute of Industrial Property (INPI), the Judiciary, the Official Gazette of the Union and

patent authorities and court decisions from other countries. In order to achieve this efficiency, the firm uses Power BI Premium P1 and other Microsoft data processing tools, such as Cognitive Search and Azure Synapse. From public court cases made available by multiple judiciary bodies, the Licks Attorneys systems find those that are similar, within the parameters specifically determined for each case.

"With access to this data, we were able to determine better strategies and increase our chances of succeeding. All this investment allows us to anticipate and identify whether a given court case follows a specific path which may have a different outcome than what was predicted. When required, this allows us to shift strategies thus increasing our likelihood of succeeding while reducing processing time and costs for clients", explains Otto Licks, founding partner of the firm.

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