

Brain and Estação



We are maintainers of <u>Brain</u>, Private Institute of Science and Technology (*Instituto Privado de Ciência e Tecnologia*), which works with the purpose to develop disruptive solutions focused on new products, services and business models. Brain's project management is based on an agile methodology, which requires multidisciplinary teams and provides faster and more assertive deliveries than the traditional waterfall model. Headquartered in Uberlândia, Brain had its performance expanded in 2019, arriving to Recife and São Paulo.

Mission

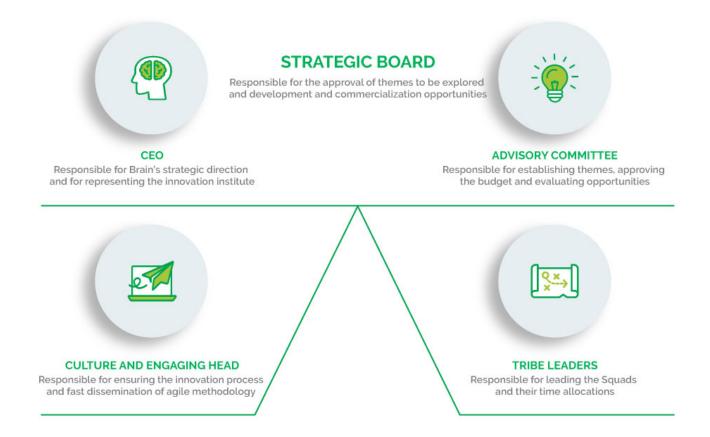
Solving the customer pains by generating innovative business

Vision

Being the platform to generate innovative business benchmarks in the market.

Structure of Brain





Brain Performance

Since its inception in 2017, Brain has worked on four main themes: Internet of Things (IoT), Cyber Security, Cloud and Digital. According to the 2020-2022 Strategic Plan, the new technological paths to be worked on will be: IoT, 5G, Cloud and Digital, with the purpose to offer the best experience to customers and expand the possibilities and usability from these technologies.

The Strategic Plan for the new cycle foresees the expansion of Brain's work to develop solutions not only for Algar Telecom, but also for other Algar Group companies, thus diversifying the portfolio of all companies of the Group.

To disseminate the culture of innovation within Algar Telecom, in 2019 we carried out an on-the-job training with 90 employees of the Company, who lived and experienced the Agile development model in Brain, for nine months. Another 1,200 employees were trained in the agile methodology, in workshops held by Brain professionals.

Brain received over 350 customers in 2019

Brain has become a reference in the application of the agile methodology and in the



development of new products and business models. As a recognition of the company's importance and pioneering spirit, its headquarters was visited by over 350 Algar Telecom's customers in 2019. Professionals and representatives of companies from different segments learn about the agile methodology and Brain's operation workflow, inspiring other companies to transform themselves and incorporate innovation into their internal processes. The outlook for 2020 is creating the Brain Academy so that the training, currently only for the internal audience, also covers the external audience.

Uberlândia

Start of Operations: August 2017

The proximity between Brain and Algar Telecom's headquarters makes it easier to exchange experiences and provide training to the Company's employees in innovative processes and agile methodology, as well as incorporating products and services into our portfolio. In 2019, we signed a partnership, through Brain, with the Federal University of Uberlândia (*Universidade Federal de Uberlândia*), the Ministry of Science, Technology, Innovation and Communications, and the Brazilian Reference Center in Technological Innovations for Paralympic Sport (Cintesp – *Centro Brasileiro de Referência em Inovações Tecnológicas para o Esporte Paralímpico*) to implement an Innovation Center in Assistive Technologies. We also created an innovation hub focused on developing solutions for the 4.0 industry – including automation, control and information technology applied to manufacturing processes. The space is shared between large companies, startups, development institutions and universities, which work in collaboration to generate new businesses and solutions.

São Paulo

Start of Operations: August 2019

The state of São Paulo concentrates 43% of the country's technology production, according to data from Brazilian Association of Information and Communication Technology Companies (Brasscom – Associação Brasileira das Empresas de Tecnologia da Informação e Comunicação), and the capital city of São Paulo is the largest city in Latin America, helping Brain have a constant contact with companies and institutions, expanding the possibilities to create new businesses.

Recife

Start of Operations: October 2019

Recife is a reference in innovation in the country's Northeast region, enhancing Brain's relationship opportunities with companies, institutions and startups. Brain is located in Porto Digital, the city's technological site, which currently houses 300 companies and institutions in the Information and Communication Technology (ICT), Creative Economy (EC) and Technologies for Cities.



Innovation environment: partnerships with Brain

Brain is a member of Santa Catarina's Technology Association (ACATE – Associação Catarinense de Tecnologia), the main representative of innovative entrepreneurship in Santa Catarina and whose network has over 1,200 members, seeking to support, train and inspire entrepreneurs in the technology industry. Brain also has partnerships with relevant technology and telecommunications companies or with start-ups that are aligned with the purposes of developing new business models, focused on solutions to facilitate, in particular, the daily life of companies. In 2019, it consolidated its partnership with Instituto Brasil e Israel (IBI) to evaluate and develop disruptive solutions within Israel and Brazil. In addition, it promoted an open innovation program, in partnership with Startup Accelerator and Corporate Innovation (ACE) to select startups in agribusiness, energy, Micro and Small Enterprises (MPE), health, logistics, 4.0 industry and cybersecurity to develop new businesses and solutions that can complement Algar Telecom's portfolio.

Discover some of Brain's innovative practices:

Brain has created and incubated an IoT business unit, seeking to create connectivity products for device management platforms. This unit was incorporated into Algar Telecom in October 2019.

Although consistent actions in innovation have been carried out for over 10 years, at the end of 2018 we identified the need to promote innovation in the operation team, which has a significant numerical presence in our structure, since it also includes field technicians, responsible for the installation and maintenance of our services. For this reason, we designed Innovation in the Field, a program initially focused on first-tier leaders, coordinators and supervisors, which would have the role of impacting technicians to bring innovation to the operation and make the deliveries in this area faster, more efficient and productive.

Brain had the support of an innovation advisory firm to design and monitor the program. Initially, leaders were selected and split into eight working groups.

We proposed the challenge and trained them in agile methodologies, offered mentoring and created an Innovation Path (course of Design Thinking, Canvas, Sprints and idea management as a business). After three months of training, all these groups went through an ideation process and made a pitch to "sell" their ideas to a board, including directors from Algar Telecom and Brain. Six groups were approved and started prototyping their ideas internally, helped by our Shark Tank methodology and structure, through the prototype mat.

The Shark Tank was inspired by an American reality show, which consists of participants presenting ideas to a team of renowned investors. In the initiative that we promote, we invite our employees to send their suggestions for innovative ideas to be implemented for our program of processes management, prototypes, transformation, human talents, new products or services.



Submissions are evaluated by a Multidisciplinary Committee, which establishes if the project will be carried out.

Patents filed optimize processes

As a result of the Innovation in the Field initiative, we filed two patents in 2019. The Flash Field Stretcher and Flash Field Rings were designed to optimize the installation in posts. The solutions reduce points of failure, allow more distance between networks, reduce the technician's time in aerial activities and generate more security. Due to the gain in efficiency, the estimated annual savings is R\$1.8 million.

Estação

Structured in 2018, Estação is an area of Algar Telecom responsible for operationalizing and scaling new businesses from Brain, besides contributing to the evolution of the Company's ICT services portfolio. Thanks to Lean and Agile methodologies, Estação allows a faster scale up of disruptive projects and solutions, through a multidisciplinary team that brings together 120 employees from different areas of the Company. Estação works with teams (tribes) focused on: ICT, digital experiences (thinking about the best customer experience) and technology structuring, which helps leverage projects.

In 2020, other areas of Algar Telecom will start working in the same format as Estação, through the EstaçãoXcale Movement. The outlook is that in two years, 70% of Algar Telecom will be structured and working in this format, generating a greater synergy to the processes.

Time Out and Little Time Out Programs spread the agile culture at Algar Telecom

With the purpose to engage the leadership and create an awareness on their role in the digital transformation, we had the programs Time Out, developed in partnership with Brain, and Little Time Out, developed by Estação.

The initiatives included an immersion process, in which the Company's employees and leaders worked as members of squads and had a hands-on learning experience with agile methods. In all, 15 leaders of Algar Telecom's senior management participated in Time Out for a month. Little Time Out, in turn, covered 30 employees, during a week of immersion.

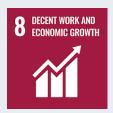
Digital Transformation in Algar Telecom's processes



Products incorporated into Algar Telecom's portfolio

Brain has a constant flow of ideas evaluated in its opportunity funnel; in 2019 alone, 1,008 possible solutions were analyzed. Proving the assertiveness of its model, since its creation, nine products were developed and incorporated into Algar Telecom's portfolio.

- Smart Fi Pro: Allows our customers to intelligently manage their wi-fi network, allowing them to increase their margins by knowing the profile and history of their users. The product also guarantees maximum data security, with control to access, content and applications.
- IoT Multi Connect: Connectivity solution that allows connecting M2M and IoT devices through a number of mobile networks in Brazil, increasing the effectiveness and quality of the services by using the best signal available.
- Service management: Software as a Service (SaaS) solution to manage phone calls, improving the relationship with customers through an online platform that professionalizes all phone calls.
- Financial management: Intuitive and online business management system that helps manage companies with efficiency and time optimization when controling business routines.
- Tax management: Online tax assistant for micro and small entrepreneurs with over 18.5 million tax rules to answer questions. The results are presented immediately in a single solution, using a modern artificial intelligence technology.
- Web Protection: Cloud protection solution that ensures productivity management and effective security against cyber attacks for all navigation of Micro and Small Entrepreneurs. In addition, the solution ensures compliance with the new Data Protection Law (LGPD).
- SD-Wan: Solution that allows companies to connect with their subsidiaries, regardless of their geographic location and access technology, using a virtual, reliable and intelligent network anywhere and anytime
- SD-Wan2.0: Allows the interconnection between branches of a company and its head office privately, with several types of connections (Broadband, MPLS, Dedicated Link, 4G/LTE), besides centrally managing these connections so that companies are always available and operating.
- Marketing SMS: Digital communication platform for companies to safely communicate with their customers without the need for a network connection.



Decent work and economic growth - SDG 8

The telecommunications industry is a major driver of economic growth, especially due to the provision of telecommunications services, with emphasis to internet access, broadband and the generation of direct and indirect jobs.

Inspired by the purpose People serving People, we have been able to intensify the investment in the development of talents for the continuous improvement of the productivity level through programs of innovation and technological modernization, intrinsic to the Company's business. We founded the Brain, a Center for Technology and Innovation, to foster the innovation ecosystem in Brazil.

The initiative develops skills in agile methodologies of the employees of Algar Telecom and articulates with the industries of innovation, like the startups. Algar Telecom supports this model so much that in 2019 it founded two new Brain branches: one in São Paulo, Brazil's largest business center, and another



in Recife, one of the country's largest technological centers. During its two years of operation, Brain has already developed nine new solutions for Algar Telecom. Due to its hard work on this subject, in 2019, the Company was elected as Brazil's most innovative Telecom by Valor Econômico, and the telecom company most open to the innovation ecosystem by 100 Open Startups.

This history only certifies the path and strategies adopted to promote this important goal of sustainable development.

Brain and Estação's Flow x Conventional Flow

Brain's flow involves three main steps: ideation, preparation, and development. In the first phase, ideas of disruptive solutions are analyzed, and a survey is carried out with companies and startups to verify the main discussions on innovations and potential projects to be developed. In the next phase, the ideas are submitted to the Advisory Committee, the body responsible for evaluating the opportunities. Finally, the development is carried out by the squads, with multidisciplinary teams, providing agility for deliveries and allowing the Minimum Product Viable (MPV) to be quickly and easily available to the market, being improved until reaching the Desirable Product. This process takes about six months and is more assertive because between the MPV and the end product, the customers can send suggestions for improvement on the product according to their needs.

With the launch of Estação, Algar Telecom's area fully structured according to the Agile and Lean methodologies, the products developed by Brain can be more easily inserted into the Company's portfolio and internalized in a period of 15 to 30 days. Previously, due to the difference between Brain's and Algar Telecom's structures, a developed solution took more than 4 months to be incorporated into the Company's portfolio.



Agile Development

Continuous Deliveries

Deliveries are carried out throughout the development, allowing faster assessments and corrections, ensuring that the customer can monitor the proccess.

Sprints and MVP Deliveries

Given the constant testing, the final delivery is more assertive.

6 Months to Generate Results

The delivery of the MVP (Minimum Viable Product) makes it possible to place the product in the market, while it continues to be improved, ensuring a quick return.



Guarantee of good results



Traditional Development (waterfall)

Delivery at the Conclusion of the Project

Deliveries at the end of the project make it impossible for the customer to monitor the development of the product.

Final Product

Recurrent possibility of failures, since tests are carried out only at the end of development.

9 to 12 Months to Generate Results

Delivery of the final product, making the improvement and maintenance harder and more costly.