TechnoCreative Entrepreneurships

Creativity and Technology: Allies or Enemies?

BID BID | LAB

Contents

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TechnoCreative Entrepreneurships

Creativity and Technology: Allies or Enemies?

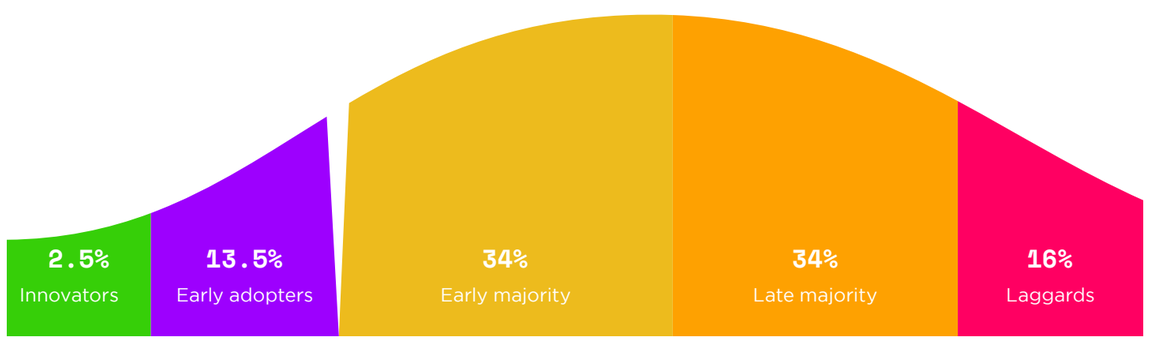
The book, *TechnoCreative Entrepreneurships Creativity and Technology: Allies or Enemies?*, is a guide that focuses on demythifying that the orange economy is not linked to new technology. In general, when we think of handicrafts, we don't think about technology, but in reality they are more allies than enemies. We will also focus on demonstrating how creativity eliminates frontiers and permeates other more traditional sectors such as health, education and Fintech. Here you will find 50 successful cases from 11 countries in Latin America and the Caribbean that use technology as the basis for developing their products and services. Among their technological allies, you will find entrepreneurships that use Artificial Intelligence, Augmented Reality, Blockchain technology, cryptographic tokens and facial recognition, among others. To make reading easier, we have grouped these enterprises into 10 groups which correlate with the 10 most representative keywords after analyzing over 400 entrepreneurships: Culture: Data Science (AI, ML, IoT, Blockchain), Publishing, Fintech, Interactive Games, Music, New Media, Robotics, Creative Services and Wearables. For each group we have pointed out both global and regional trends, and the only enemy you will find will be the capacity to let go in order to learn something new.

WHAT IS A TECHNOCREATIVE COMPANY?

TechnoCreative entrepreneurships are emerging companies that use creativity and emphasize the application of new technologies.[1]

"TechnoCreative (entrepreneurs) tend to be persons who are in the first two stages of the Rogers' Innovation Adoption Curve. They will be the innovators, motors of innovation, or at the very least they will be among the early adopters.[2]

Innovation Adoption Curve



Introduction

Leonardo da Vinci was one of the greatest inventors in history and a precursor to creativity and technology. In addition to being a writer, sculptor, architect and artist, he was also renown in the world of engineering, mathematics and systems. Among his most important creations was the Vitruvian Man, created from his studies of human anatomy. In 2017, Mario Taddei gave life to all of his manuscripts, honoring the knowledge and creativity of Da Vinci through technology. With this same objective we bring you this report on technocreative entrepreneurships to show the successful and innovative cases of a variety of entrepreneurships that use technology as the cross-cutting common basis for developing their products and services.

Many of these showcased entrepreneurships are part of the creative and cultural industries, while others use these key competencies in the design or functionality to give life to their creations. There is quite a wide variety of examples that show us how technology can be combined with handicrafts. Such is the case of YUCA_TECH, which makes handicrafts a more profitable business, or the case of ATAR Band, a wrist band that uses Near Field Communication (NFC) technology to make payments. Since it is difficult to separate design from functionality, we put it into the category of Fintech, but that does not detract from its merit as a design, which is key to getting the product accepted in the market. There is also the case of TOMi7, a robot with a sophisticated design that is supported by digital and interactive contents in its DNA, but its function is to help teachers in low-income institutions to give interactive classes in schools were there are no Wi-Fi connections.

All of these examples reinforce the idea of how technological advances are increasingly blurring the boundaries that separate industries and allow creativity to accelerate and strengthen a vast number of products and services. When we think of innovation, we tend to think of unimaginable solutions that we could call “moonshots,” that is, that radical technologies are used to solve the planet’s most difficult problems. There are many necessities in the world, however, that can be filled without very sophisticated technologies if some creativity is brought into the picture. By combining these factors, entrepreneurs can solve relevant problems which can impact thousands of persons. The use of cutting-edge technology can allow products and services to be personalized on an unprecedented scale, while also creating experiences never-before imagined.

In the last few years, we have seen how technology has been converted into one of the great allies of many industries, even in the sectors of the orange economy. It has impacted the fashion industry, music, and entertainment. One of the most noteworthy technologies has been 3D printing, which has made it possible to print models on a large scale, converting it into one of the revolutionary technologies of the XXI century. One of the most interesting cases is that of the Dutch firm MX3D,[3] which has printed a stainless steel bridge to cross one of the oldest and most famous canals in the center of Amsterdam. According to the Global Agenda Council on the Future of Software & Society, over 800 technology executives and experts concluded that by 2025, the first 3D automobile will be produced and that at least 10% of the clothing we use will be connected to internet.

The big question is whether or not Latin America will be capable of creating services and products such as those mentioned in the “Technology Tipping Points and Societal Impact Report,” In the Inter-American Development Bank, we think it will. We believe that there are many Da Vincis in our region and by combining technology with creativity they will develop entrepreneurships that improve lives around the world.

This is why we decided to create this report to showcase 50 technocreative entrepreneurships, grouped into ten sections: Culture, Data Science, (AI, ML, IoT, Blockchain, Publishing, Fintech, Interactive Games, Music, Creative Services, New Media, Robotics and Wearables. All stand out for their use of technology and many come from the creative industries sector. Some share properties that are clearly from others sectors but with strong characteristics and components from the creative sector. The capability of the creative sector is evident in this sample, particularly in sectors such as education, health and Fintech.

When will the future arrive?

Thechnological Tipping Points for 2025

Eight hundred experts and executives in the communication and information sector were surveyed, asking them to share their predictions.[4]

First
3D printed car in production

10%
of all cars on US highways will be autonomous vehicles

10%
of persons will have internet-connected clothing

First
robot pharmacist in the US

First
government will replace its census with Big Data sources

First
transplant of a 3D liver

90%
of persons will have access to unlimited and free data storage (with advertising)

90%
of the population will use smartphones

10%
of reading glasses will be connected to internet

First
implantable mobile phone will be commercially available

30%
of corporate audits will be made by Artificial Intelligence

1 trillion
sensors connected to internet

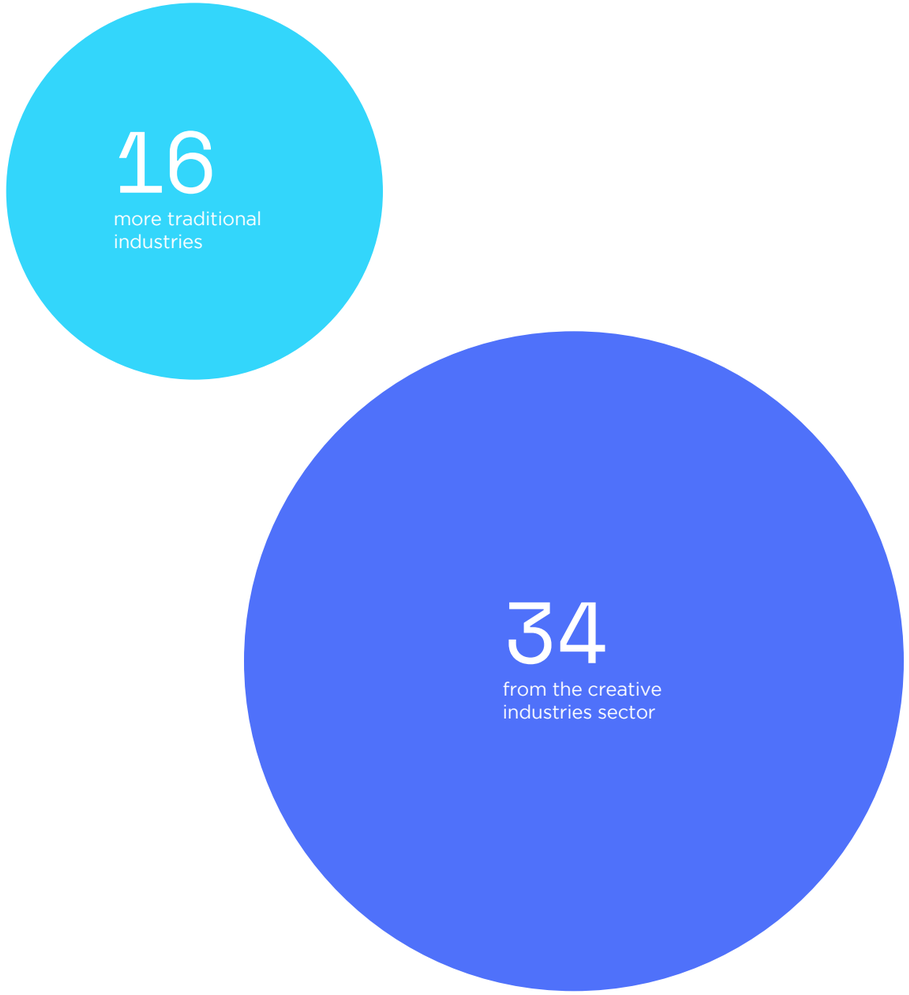
90%
of the population will have regular access to internet

80%
of persons will have digital presence on internet

5%
of consumer products will be made from 3D printers

30%
of taxes will be collected for the first time by a government via Blockchain.

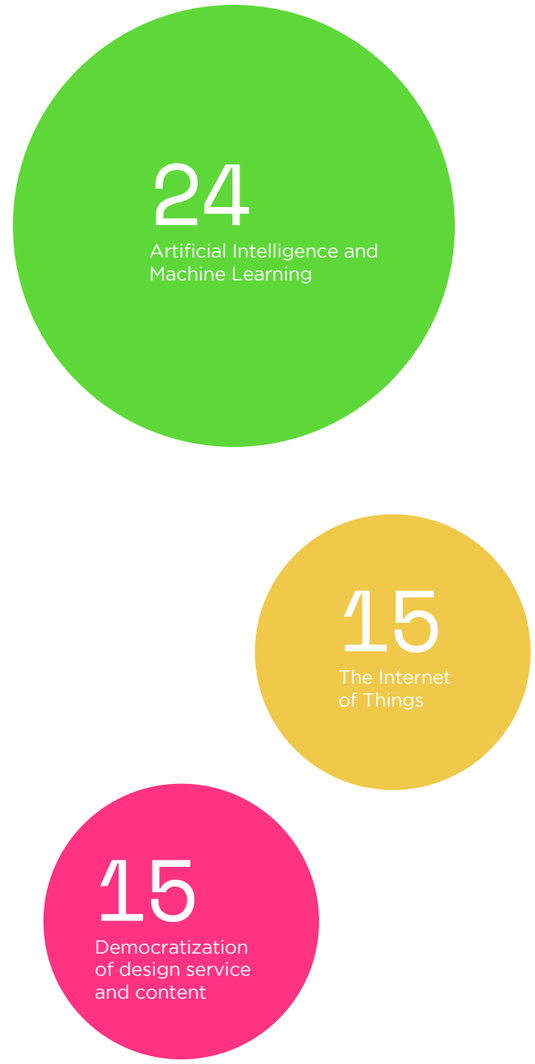
In our study we compare start-ups in the creative industries with more traditional industries.



Even though there are numerous technologies, the large groups of entrepreneurships that we showcase in this report focus mainly on Artificial Intelligence and Machine Learning (24), the Internet of Things (15) and the Democratization of design, service and content.

It is not surprising that the majority of start-ups in this sample are developed from Artificial Intelligence and Machine Learning. According to a KPMG report, the investment in Artificial Intelligence and Machine Learning will have increased by 20% in 2025, to US$232 billion dollars,[5] a figure that significantly exceeds the 2018 level of US$12.4 billion dollars. According to IDB data, the countries that will benefit the most will be Chile, Colombia, Peru and Brazil, which together represent 85% of the South American economic production. In total, Artificial Intelligence in Latin America will have a 5% impact on GDP.[6] Even though the impact on the GDP in other economies will be greater, Latin America needs to promote the use of this technology, identify the companies that are doing it correctly, make them known, and learn from them to inspire others. At the same time, it should expand its public policies so that they benefit the entire ecosystem.

En nuestro estudio la mayoría de las startups se destacaron por el uso de:



The second-largest group in the sample uses the Internet of Things, a technology that will have a profound impact in the future. It stands out for its vast number of uses and applications that range from household tasks to the security of citizens and their cities. In Latin America, it is expected to grow by 21%, reaching 100 million devices by 2022.[7] Firms in the region will invest an average of US$54.7 million in initiatives that use the Internet of Things and it has been shown that this investment results in an average increase of 18.3% in the income of these firms.[8]

Altogether, the sectors of the orange economy will have a unique opportunity if they explore how they can create solutions with all of these new technologies, particularly the Internet of Things. Nevertheless, many do not seem to be naturally turning to these new technologies or they simply are not familiar with them They are afraid to make the leap to use them. This represents a challenge that we should face. We need to be able to communicate how new technologies could have a positive impact on their products, without causing them to lose their essence. Up to now, Brazil is one of the few countries in the region that has viewed the Internet of Things as a key component of its digital strategy. The Development Bank of Brazil (BNDES), in association with the Ministry of Science, Technology, Innovation and Communication (MCTIC), and a consortium of firms have developed the National Plan of the Internet of Things (IoT).[9] This plan offers an analysis of international practices as a point of reference for initiatives and public policies on the Internet of Things which could be adopted by Brazil. Latin America has many technocreative countries that dare to venture into new technologies, such as Brazil and Mexico who are already working on robotics and where there are one or two robots for each thousand employees. In Switzerland, Germany and South Korea, there are more than 20 robots for every thousand employees. In China, the sale of robots has increased by 67% in the last two years, twice the global average of 34%.[10]

Even though other countries have taken the lead, firms in Latin America and the Caribbean have an opportunity in other markets such as China and India, where there is great appetite for innovating in the supply and consumption of creative products and services. If these Latin American and Caribbean entrepreneurs keep the global market in mind as they begin to develop their technocreative products and services with new technologies, an entire universe of collaboration possibilities could open up for them. Today there are more things that unite us with Asia than separate us. Currently, some 59.5% of the world's population is in Asia and the potential is enormous for Latin American entrepreneurial talent to attend this market.

In the Inter-American Development Bank, we believe that talent is an inexhaustible resource in Latin America and the Caribbean and that it is capable of creating innovative solutions for both global and local markets. A case in point is the Chilean firm, Artificial Intelligence Recruitment Assistant (AIRA) which has invented a system to publish job offers, read and evaluate applications, apply psychometric tests and carry out interviews with candidates via video conferences. Another is the case of the company 99, a Brazilian ride-sharing firm, which in 2018 was acquired by Didi, the Chinese version of Uber. Didi had bought Uber in China in 2016 to consolidate its leadership in that market and eliminate the huge cost of having Uber as a competitor.[11]

"The success that the founders and team of 99 have achieved in Brazil embody the very spirit of entrepreneurship and innovation in LatAm region," claimed Chen Wei, founder and CEO of DiDi in a communication.
[12]

In the last few years, the creative sector has been capable of using cutting-edge technology to innovate in the orange economy. Other more traditional sectors, however, such as health, education and finance have also made this intersection more notable in their innovations. Even when start-ups are adaptations of successful models from other parts of the world, Latin American entrepreneurships have been able to personalize and acculturate them with improvements to the original proposal and cultivate a local market. In this report, we will find cases such as Matternet, a firm in the Dominican Republic, which is dedicated to the construction and operation of drone networks, which transport diagnostic samples or medicines between hospitals, or the Argentinian company Satellogic, which produces and launches low-cost satellites for research, exploration and mapping in order to produce affordable high quality earth observation data for daily decision making.

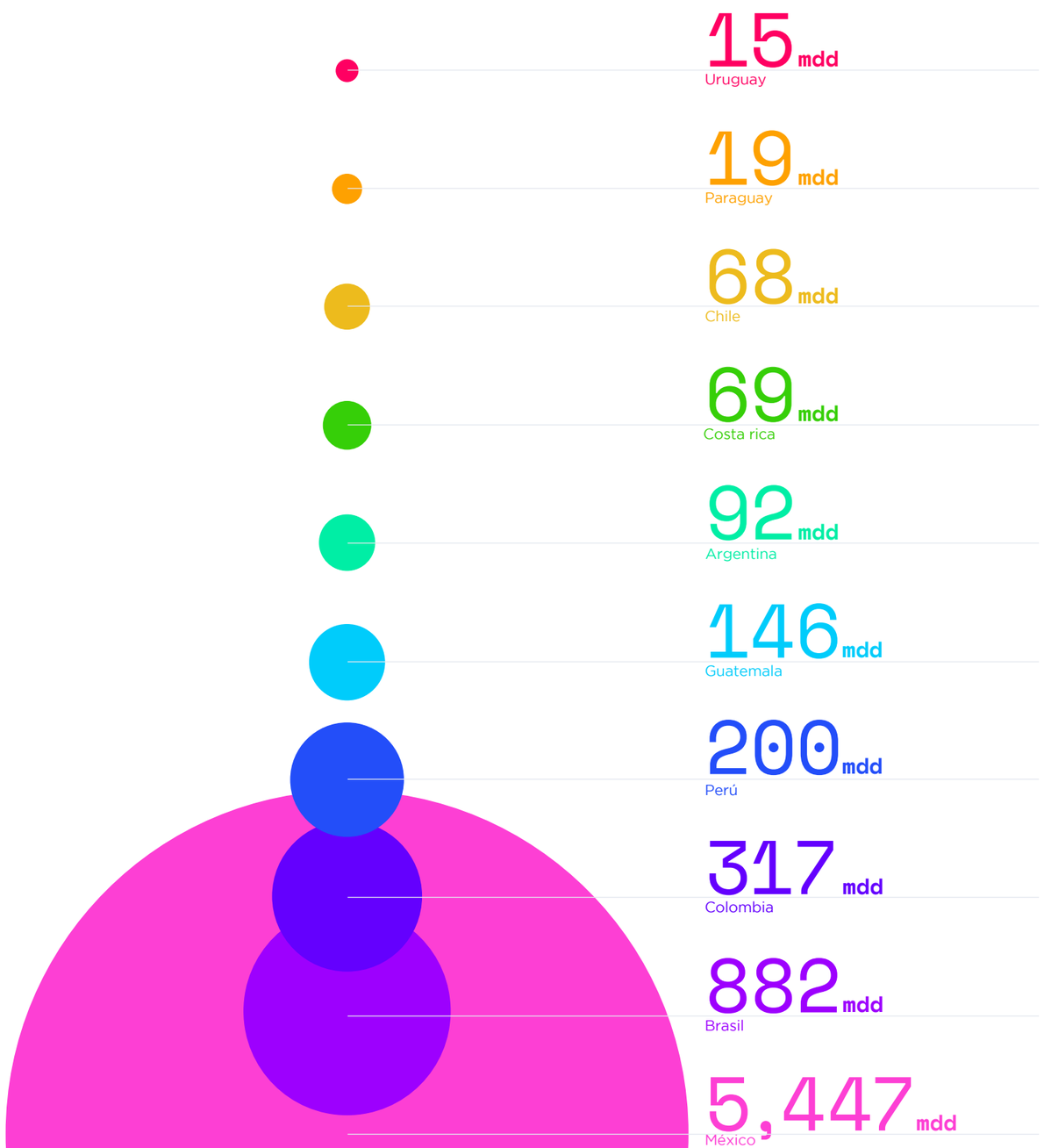
The sample in this report shows companies at different stages of development but all with an enormous potential in the Latin American and global markets. For the most part, all of these start-ups are a click away from conquering the world market, considering that the frontiers lie simply in what we know as the Cloud.

In this study, we note that the majority of these showcased entrepreneurships are concentrated on services. This trend is not surprising, given that global services are growing between 8% and 10% the world over, according to the data produced by the National Association of Software and Services Companies (NASSCOM).[13] Latin America and the Caribbean have registered a significant growth over the last decade and have won a prominent place in the services export map on a global level. This represents an opportunity for creative services (Cushman and Wakefield, 2016).[14]

The development of software and Big Data technologies is another notable factor among the selected companies. There is the case of Amis, the first anti-bullying technological tool from Colombia which is based on Artificial Intelligence and the collection and analysis of data. There is also uSound, an Argentinian start-up that developed a system based on Artificial Intelligence for persons with hearing loss or impairments. By means of an application and earphones, this system converts any smartphone into a device for improving hearing.

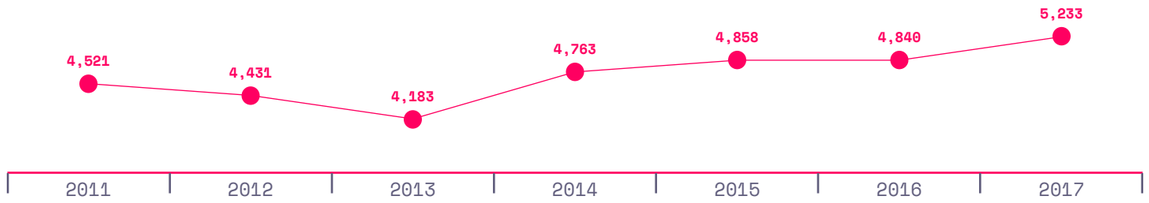
The countries that lead in this study are Brazil, Mexico, Argentina and Colombia, which represent more than half of the showcased start-ups. It should be noted as well, that these same countries are positioned in the top 10 of the leading countries in creative goods exports. The case of Mexico deserves particular mention since it has become the principal exporter of creative goods in the Latin American region, with annual exports worth over US$5.2 billion dollars, which demonstrates its great potential for being a relevant world player in the global services sector.[15]

Latin American exports of creative goods, 2015 (millions of dollars)



Source: ProMexico, with data from the Global Trade Atlas, 2016

Mexican Exports of Creative Goods 2011-2017



According to the Harmonized System 2017, Subheadings defined by UNCTAD.
Source: ProMexico with data from the Global Trade Atlas 2018

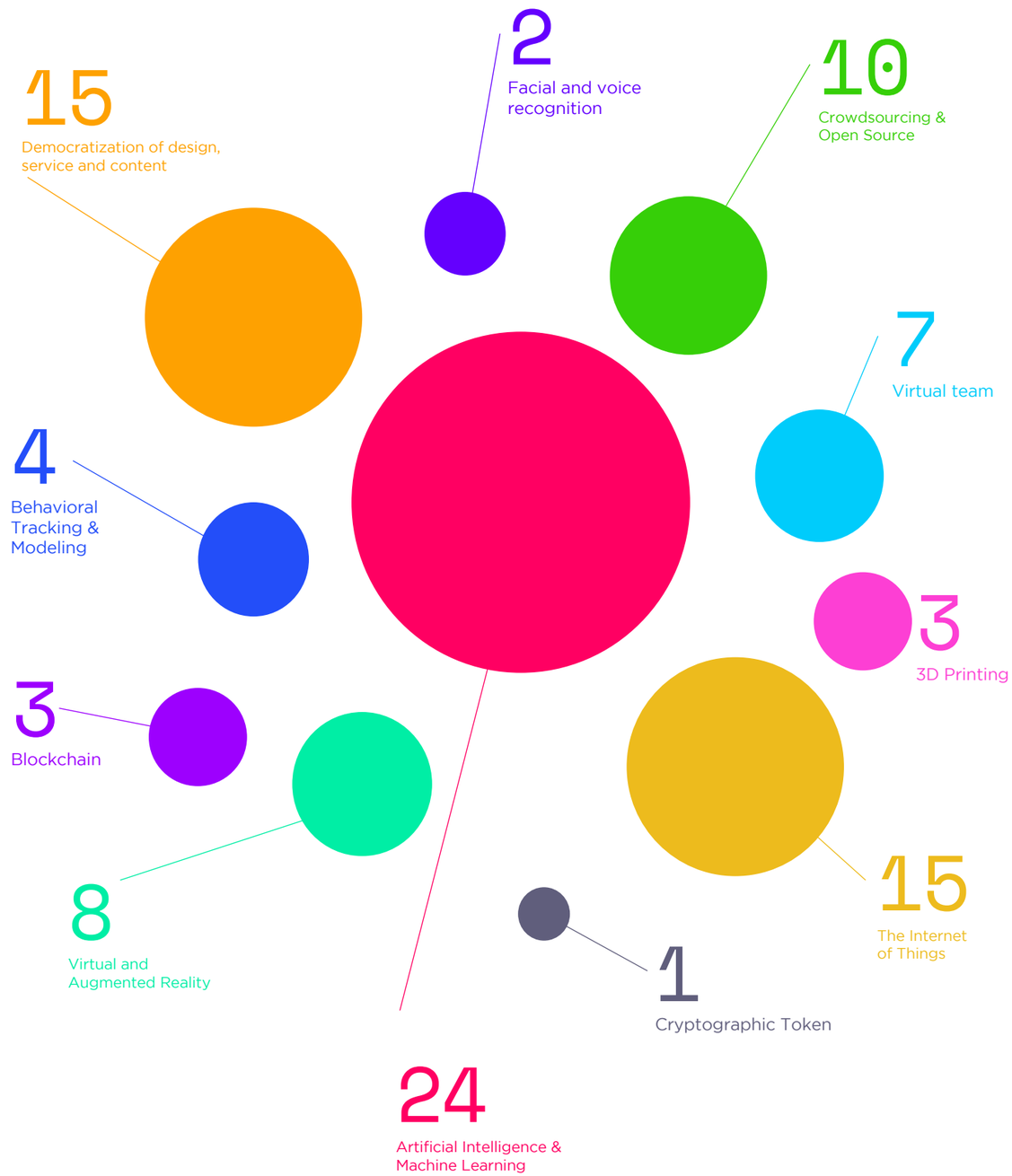
Technological transformation is giving rise to new business models and even the smallest firms can incorporate technology from the very beginning of their development. In addition to incorporating technologies of Artificial Intelligence, Automated Learning, Virtual Reality and the Internet of Things, one of the characteristics we have observed among the showcased start-ups was their emphasis on user experience (UX) in the design of their products. User experience is a key component for satisfying new buyers who do not want think about how to use an application or a product. They only want to have a simple way to use it. An emphasis on user experience from the very beginning can differentiate a product from a similar one that is in a market in constant competition.

As we pointed out in 2016, "A perspective that returns to basic principles is the cornerstone of any well-designed technology or product. It must be capable of showing, in a more efficient, modern, and less complicated way, how it can fulfill its objective." In the end the user—who is king—should be able to see the value in a clear and rapid way. Of course, research and development must focus on improving functionality, efficiency, and durability but what will keep the lights on in the CEO's office is making sure that user experience at the forefront of the innovation.[16]

According to the Design in Tech Report 2018, the 10 trends having the most impact on design are:

- **Artificial Intelligence and Machine Learning**
- **Augmented Reality**
- **Virtual Reality**
- **Behavior tracking and modeling**
- **3D Printing**
- **Distributed Teams and Virtual Workspace**
- **Democratization of Design**
- **Algorithmic Design**
- **Crowdsourcing and Open Source**
- **Facial and Voice Recognition**

In our study, we found that the 50 showcased entrepreneurships can be found within the following 10 trends:



Methodology

This mapping was focused on generating information regarding the technological innovations in the creative and cultural industries, as well as from other sectors whose key components lie in the design. More than 400 Latin American and Caribbean start-ups were evaluated, using the following criteria to narrow them down to the 50 selected companies that are featured in this report.

THE EVALUATION CRITERIA CENTERED ON THREE AREAS:

1.**The use of technology:**: Under this criteria, we evaluated whether or not the company had a) developed a patented technology; b) if it had come up with a unique solution that generates value; c) if it made it possible to undertake an activity that had been impossible without the use of the technology; d) if the technology used was a component part of the service or product, or if it was only used for marketing the product.

2. **The impact**: Under this criteria, we evaluated weather or not the project was able to generate employment, economic value, or a transformation of the community, city or the environment. In the cases of minimum viable products (MVP), if the solution was capable of impacting thousands of people because it solves a global problem.

3.**Innovation**: Under this criteria, we evaluated whether or not a different perspective or value creation was incorporated into the process, if the solution tried to solve a local or global problem and if its symbolic value will make people want to adopt it in order to change the cultural context of their environment.

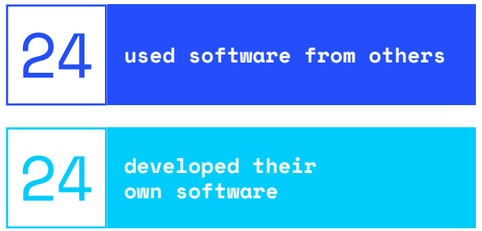
OBSERVATIONS FROM THE SAMPLE

400 projects from the 26 IDB member countries were evaluated and from these, we could see:

Number of showcased firms per country

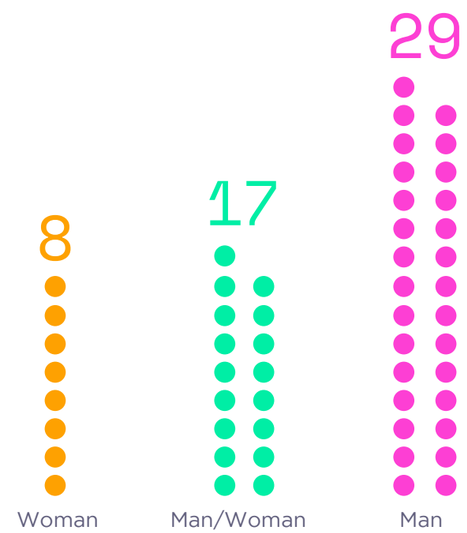
#	País
8	Brazil
7	México
6	Argentina
5	Chile
5	Colombia
3	Perú
3	Uruguay
3	Paraguay
3	Ecuador
2	Costa Rica
1	Bahamas
1	El Salvador
1	Jamaica
1	Venezuela
1	Dominican Republic

Software Development



Type of solution

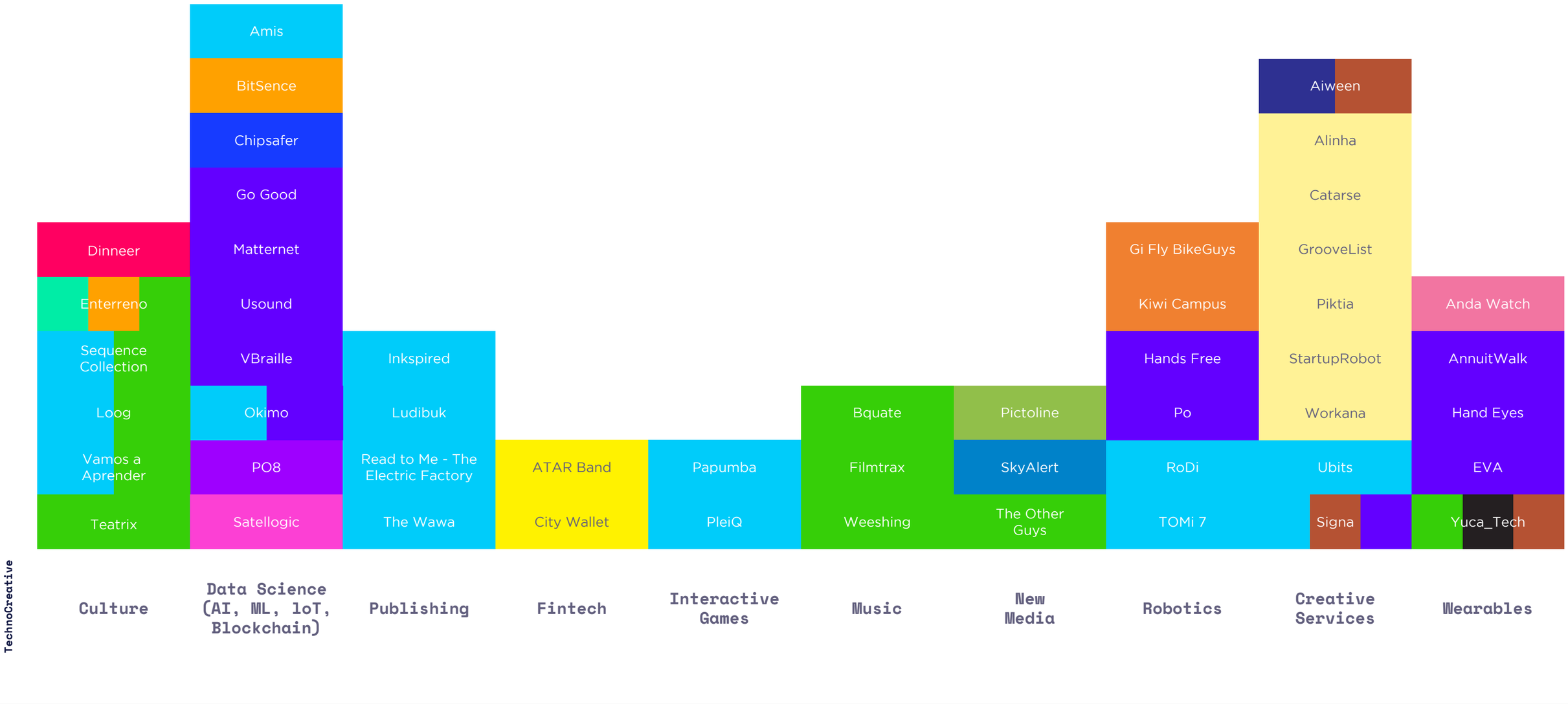
Distribution by gender of the founders and co-founders of the 50 firms



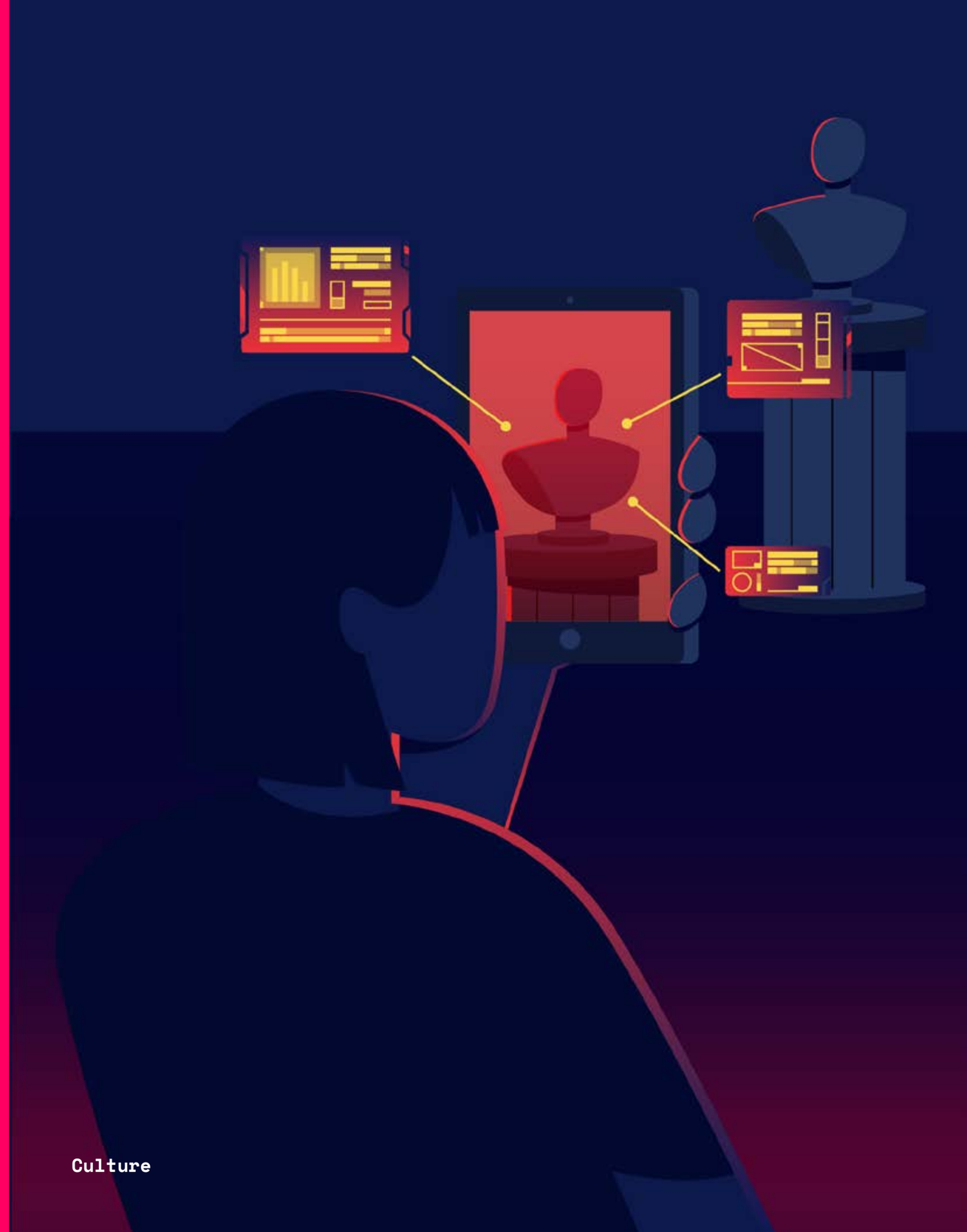
Most-used platforms

#	Platform
27	Mobile App/Device Physical Products
26	App mobile
24	Web / Web app
7	Multi-platform (from any internet-connected device)

Correlation between the TechnoCreative category and the IDB sector.



Culture and Entertainment



Culture

CATEGORY

Culture and Entertainment

Technology
has transformed the way of experiencing culture in Latin America.

Streaming and on-demand Video
have been a watershed for music, theater, cinema and other artistic expressions.

67%
of millennials pay on one or more on-demand services.

GLOBAL VISION

Contemporary art and culture have been transformed by technology, resulting in new ways of mixing media, devices and materials for creating.[17]

There is an increasingly stronger tendency to intertwine artistic elements with video, animation, sound, augmented and virtual reality, 3D printing, science, software, and social interaction.[18]

As well, there are more and more collaborations among artists and developers, experts in technology, designers and scientists.[19] These trends have changed the role of the public to evolve from being a mere spectator to becoming an active participant in cultural and artistic creation.

Internet has played a crucial role in the propagation, consumption and reception of art. Now it is a continuous process of exploration and greater collaboration. The arrival of platforms such as Netflix, Hulu, and YouTube have propelled the cultural industry to create consumer services for theater, music and documentaries for any time from any place.[20] Because of internet, culture and art have gained greater visibility, creating a greater appetite for the consumption of live experiences. In 2017, more than 60 million tickets were sold for live performances, generating world-wide sales of US$4.9 million dollars.[21]

LATIN AMERICA

The zone of Latin America and the Caribbean is rich in culture. It is not surprising to see collaborations among code developers, designers, architects, and scientists that merge their work with art in applications as diverse as rebuilding and documenting our cultural patrimony. An example of this is Vamos a Aprender, a series of mobile applications that were developed to preserve the linguistic richness of Mexico, where there are 68 indigenous languages with a total of 364 dialects.

In our region, culture is historically hybrid and diverse. As a result, politics, social themes, and traditions are topics that are frequently approached in the artistic expressions in museums, galleries, urban walls, and in a variety of architectural proposals. Nevertheless, a great deal of material and archives could be lost unless the original photography and documentation is preserved. Enterreno is a platform that has collected and digitalized over 40,000 historical photographs of Chile, not only registering locations but also diverse artistic manifestations that are exhibited on the walls in their cities.

01

Enterreno

/ CULTURE

ENTERRENO

Chile - México

Enterreno is a collaborative platform of historic photographs that shows how the exact location where you are standing looked like in the past.

Enterreno has collected and digitalized over 50,000 historic photographs of landmarks in Chile. While the visitor is at a site, the application's GPS system shows the user how it looked years ago.

FOUNDERS

Felipe Bengoa Trucco and
Nicolás Fernández Gurruchaga

YEAR FOUNDED

2016

USERS

Over 200,000 users on social networks

WEBSITE

www.enterreno.com

Art and Culture · Urban Development · Cultural Tourism · Heritage · Museums · Monuments · Photography · History · Historic Centers · Archaeological Sites · Crowdsourcing · Augmented Reality

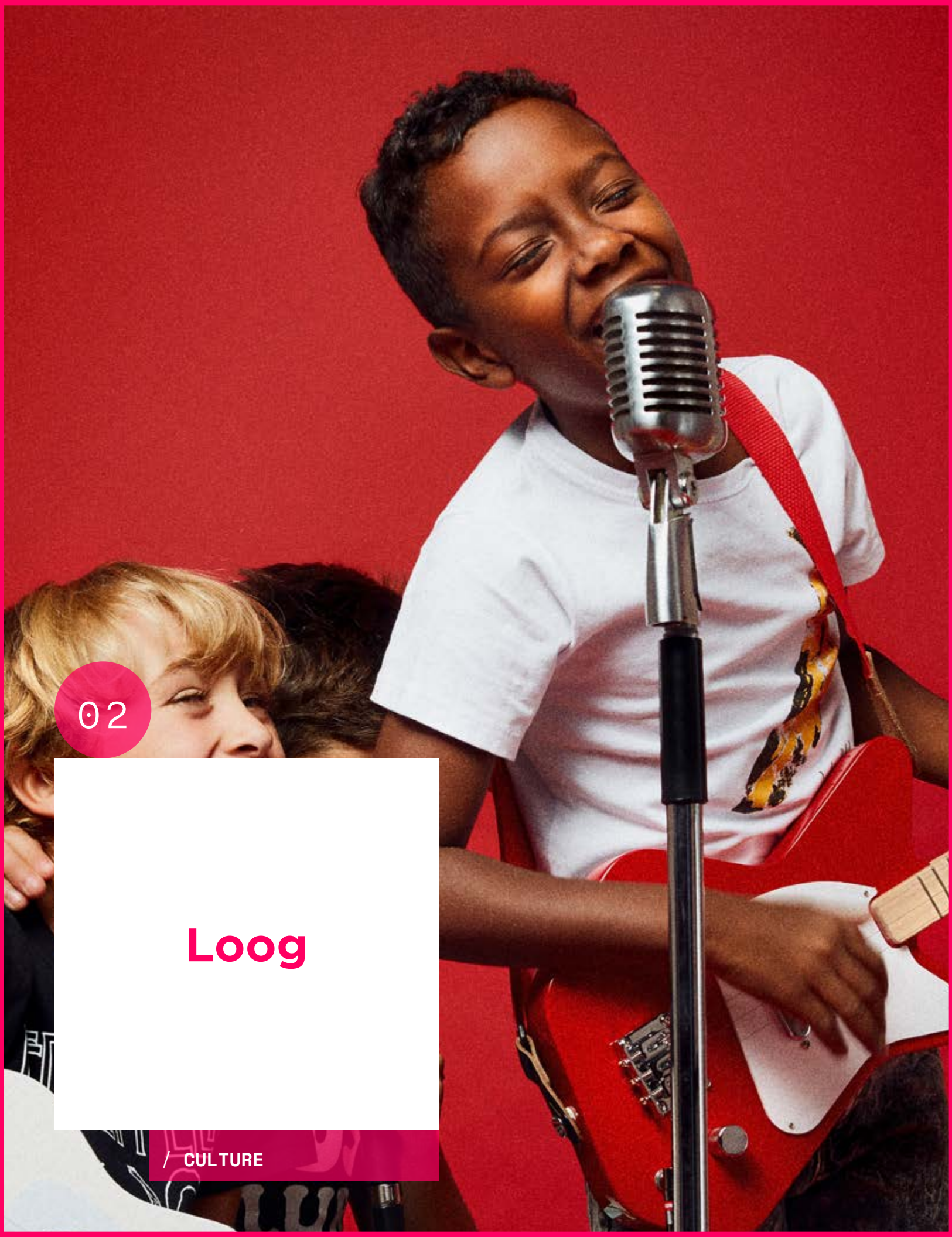
Enterreno has collected and digitalized more than 50,000 historical photographs of Chilean landmarks.

WHY IT WAS DEVELOPED

It is easy to forget the history of our towns, their architecture, their landscapes. It is becoming more and more relevant to capture them through images, enriching how we learn about our countries.

HOW IT MAKES LIVES BETTER

Preserving a historical archive and showcasing these photographs on a digital platform is a way to raise awareness and reinforce the love of one's heritage, a sense of belonging and the roots of each place. Though this common, massive and interactive technology, the creators seek to democratize access to history and reinforce cultural identity and historical tourism.



02

Loog

/ CULTURE

LOOG

Uruguay, US

Loog is a guitar company and a mobile app that features face and voice recognition, along with augmented reality to learn to play music.

FOUNDER

Rafael Atijas

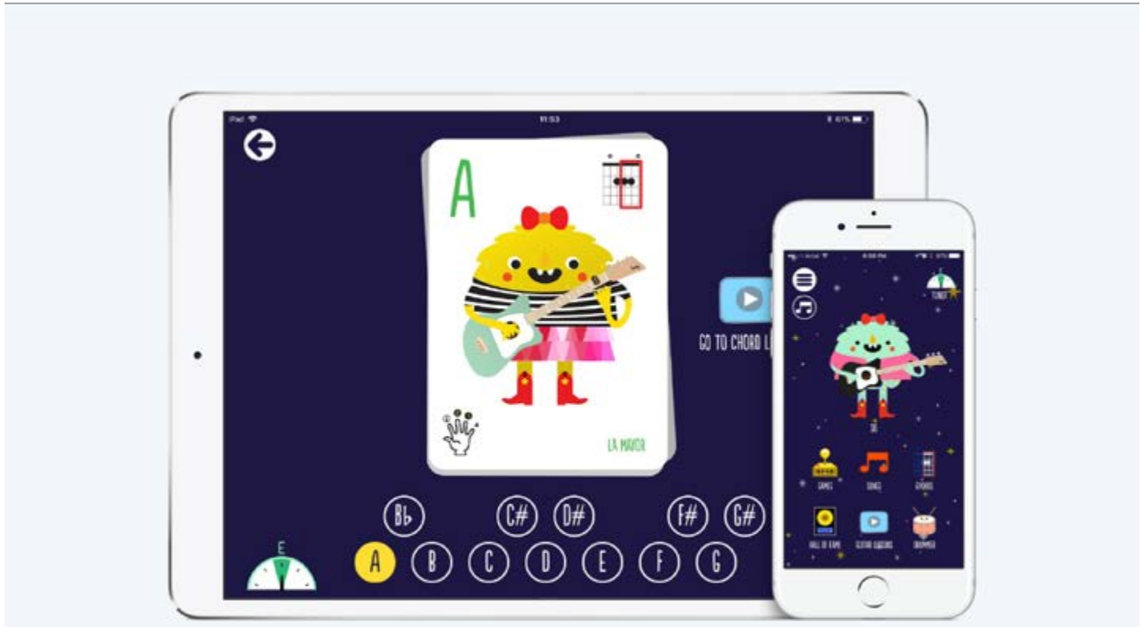
YEAR FOUNDED

2011

WEBSITE

www.loogguitars.com

Art and Culture | Education | Digital Song Book | Guitars | Electric Guitars | Self-Esteem | IP Software | Guitar Lessons | Muscle Coordination | Music



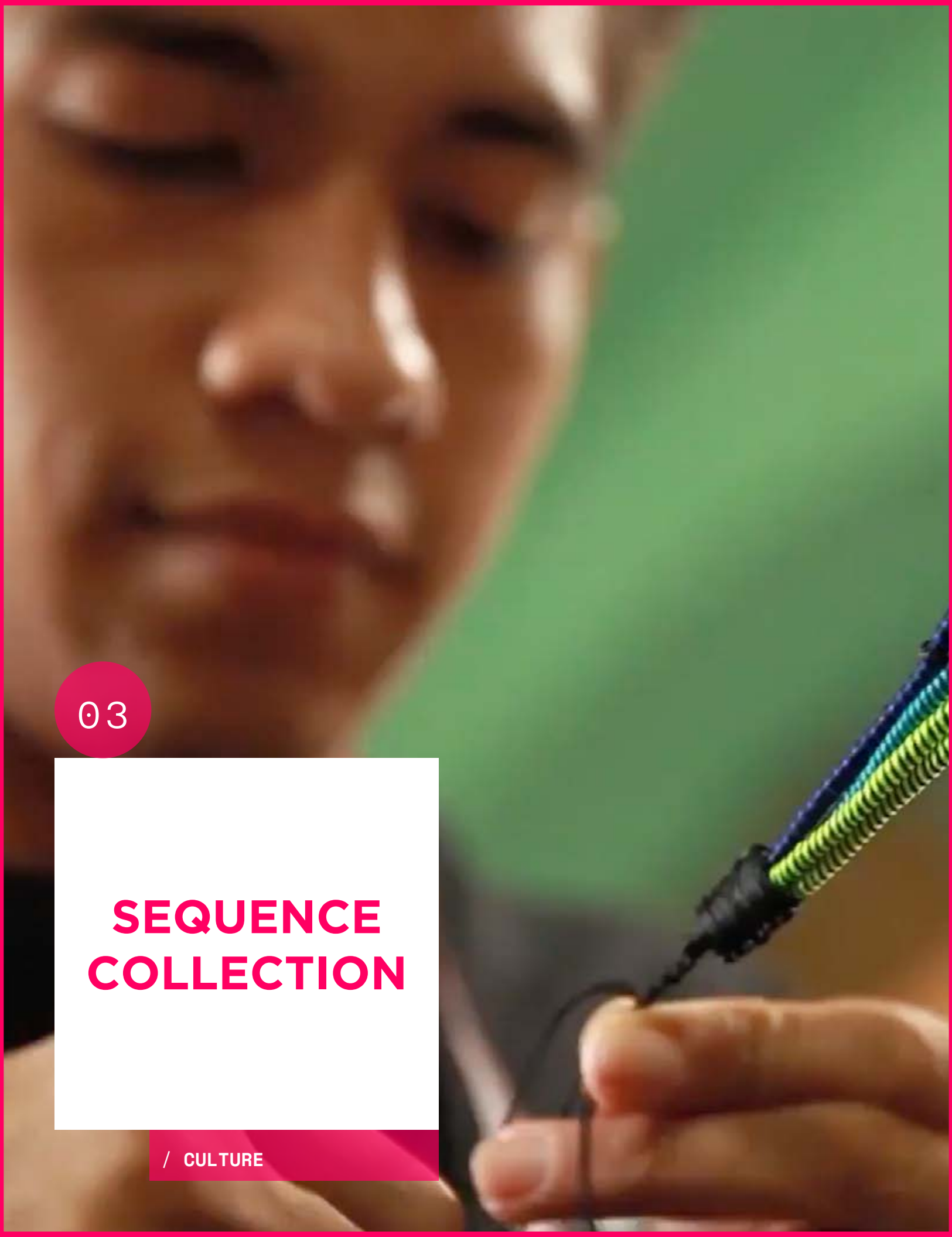
A musical instrument offers benefits that go far beyond the music itself.

WHY IT WAS DEVELOPED

Because playing the guitar is difficult, many abandon their attempts to learn. Guitars for children are simple small replicas of traditional guitars and they do not have anything special that makes a player particularly enthusiastic about playing the guitar. Loog's design has three strings and comes with an application that contains video lessons, games that teach music, a tuner and a digital songbook with popular songs.

HOW IT MAKES LIVES BETTER

A musical instrument offers benefits that go far beyond the music itself. Those who learn to play an instrument develop cognitive and social skills. Loog makes children enthusiastic about learning, which can extend to enthusiasm for developing mathematical skills, muscle coordination, self-esteem, concentration and creativity, all of which will stay with them for the rest of their lives.



03

SEQUENCE COLLECTION

/ CULTURE

SEQUENCE COLLECTION

El Salvador, US

Sequence Collection creates haute couture designs in collaboration with international designers. Via mobile devices, it trains at-risk youth from El Salvador

The objective is to interrupt the cycle of violence that limits at-risk youth. These young people, who belong to different gangs, are trained via Skype in high fashion sewing techniques, adhering to the highest standards. The only way to train these individuals is by distance technology since it is impossible to enter the zones where these gangs predominate.

FOUNDER

Ariela Suster

USERS/ACHIEVEMENTS

Employment of 40 artists, 16 personal and professional development programs created, and 10 alliances and collaborations with top fashion designers and companies.

WEBSITE

www.sequencecollection.com

Art and Culture | Social Investment | Education | Fashion Design | Employment | At-Risk Youth | Citizen Security

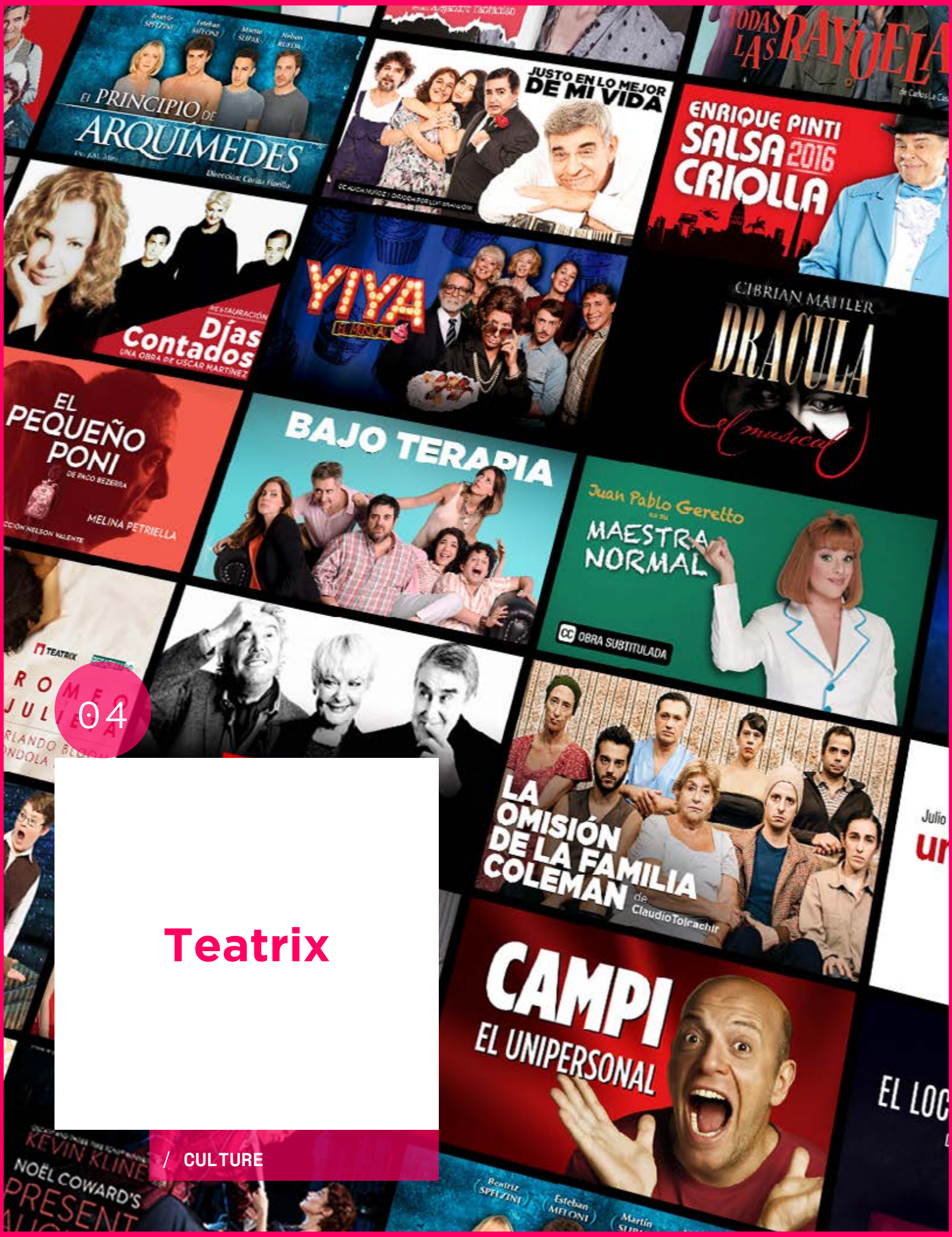
Via Skype, Salvadoran youth learn high-standard and sophisticated couture sewing techniques.

WHY IT WAS DEVELOPED

With the exception of countries at war, El Salvador has become one of the most dangerous countries in the world, where half a million persons are linked to gangs. After witnessing the war and violence, the founder of Sequence Collection, born and raised in El Salvador, was determined to change the chain of events that keep the country and its people trapped in a cycle of violence. After several years of a successful career in the world of fashion in New York, Ariela returned to El Salvador to combine her two passions: fashion and the desire to aid in the transformation of her community.

HOW IT MAKES LIVES BETTER

By employing at-risk youth who are exposed to violence, the firm seeks to break this cycle by creating opportunities for personal and professional improvement. Training and development programs using art and technology transform the way these youth see their future. They become proud of their work. They also become examples of overcoming obstacles and agents of change for their peers. With this new possibility, they can leave behind gang life and the violence that had appeared to be their only option.



04

Teatrix

/ CULTURE

TEATRIX

Argentina

Teatrix is an on-demand video platform that offers the opportunity to enjoy theater from anywhere at any time.

This subscription service offers theater productions filmed with HD cinematography, which can be viewed on computers, televisions and other electronic devices.

FOUNDER

Mirta Romay

YEAR FOUNDED

2015

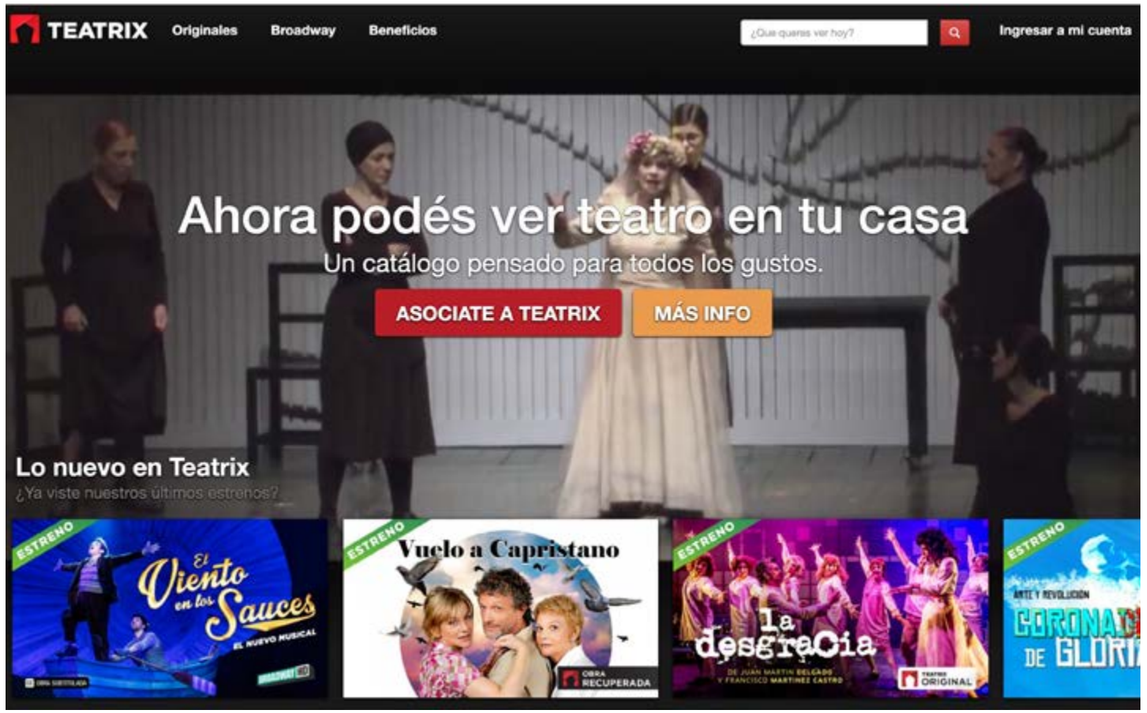
USERS

Over 5000 subscribers

WEBSITE

www.teatrix.com

Art and Culture | Democratization of Culture | Theater Production Distribution | Digital Distribution | On-Demand Video



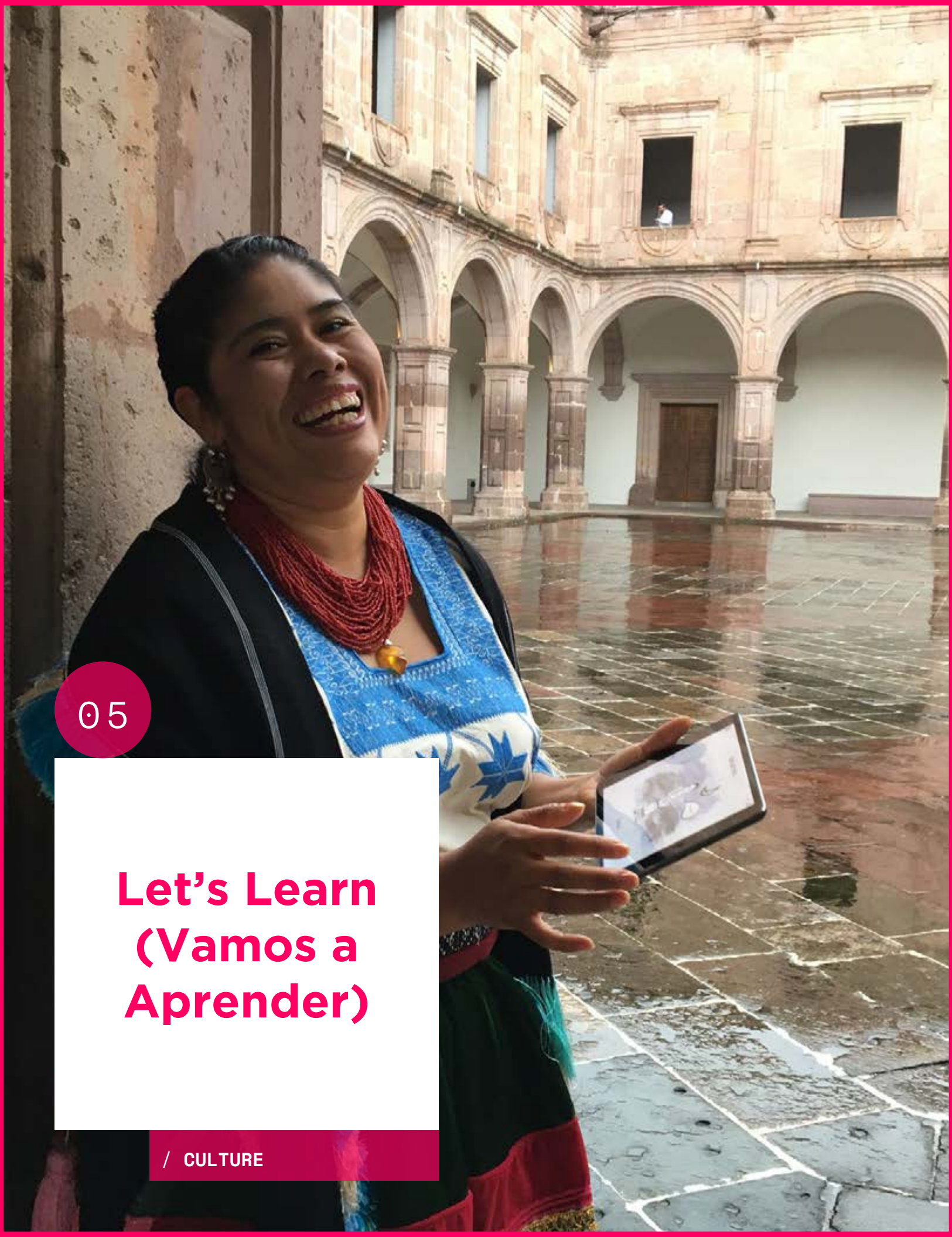
Teatrix Subscription service offers theater productions filmed with HD cinematography.

WHY IT WAS DEVELOPED

Live theater provides an experience unequaled by other forms of entertainment but many factors make it available only to a select audience. The Teatrix platform brings the theater to a larger public, making the experience more democratic and promoting it for the enjoyment of a population who until now might not have had access to it.

HOW IT MAKES LIVES BETTER

Democratizing this art form helps to include persons, who for one reason or another, do not enjoy access to this medium: the elderly, disabled persons, theater students, professors, or the public at large who have the cultural and intellectual appreciation of the art form. It has a great potential in education and training for persons of all ages.



05

Let’s Learn (Vamos a Aprender)

/ CULTURE

LET'S LEARN APP (VAMOS A APRENDER APP)

Mexico

Let's Learn focuses on preserving the cultural richness of Mexico with applications for learning the Mixtec, Náhuatl and Purépecha languages. It is also used to teach Spanish to speakers of these languages.

The Ciudadanía Digital (Digital Citizens) Laboratory and the interactive publisher Manuvo decided to develop these applications since there are some 68 different indigenous languages in Mexico, with 364 different linguistic variations. This is the first step to learn and more easily integrate those persons who speak and want to learn these languages. The applications consist of games and challenges and cover topics such as greetings, numbers, fruits and animals and lessons and include lessons about the system of community life, the geographical composition and sacred spaces of these cultures.

FOUNDERS

Donato García in collaboration with the Digital Citizens Laboratory of the Spanish Cultural Center of Mexico and developed by Manuvo

YEAR FOUNDED

2016

USERS

Mixtec: 32.191
Purépecha: 12.636
Náhuatl: 73.140

Art and Culture · Education · Indigenous Languages · Cultural Heritage · IP Software

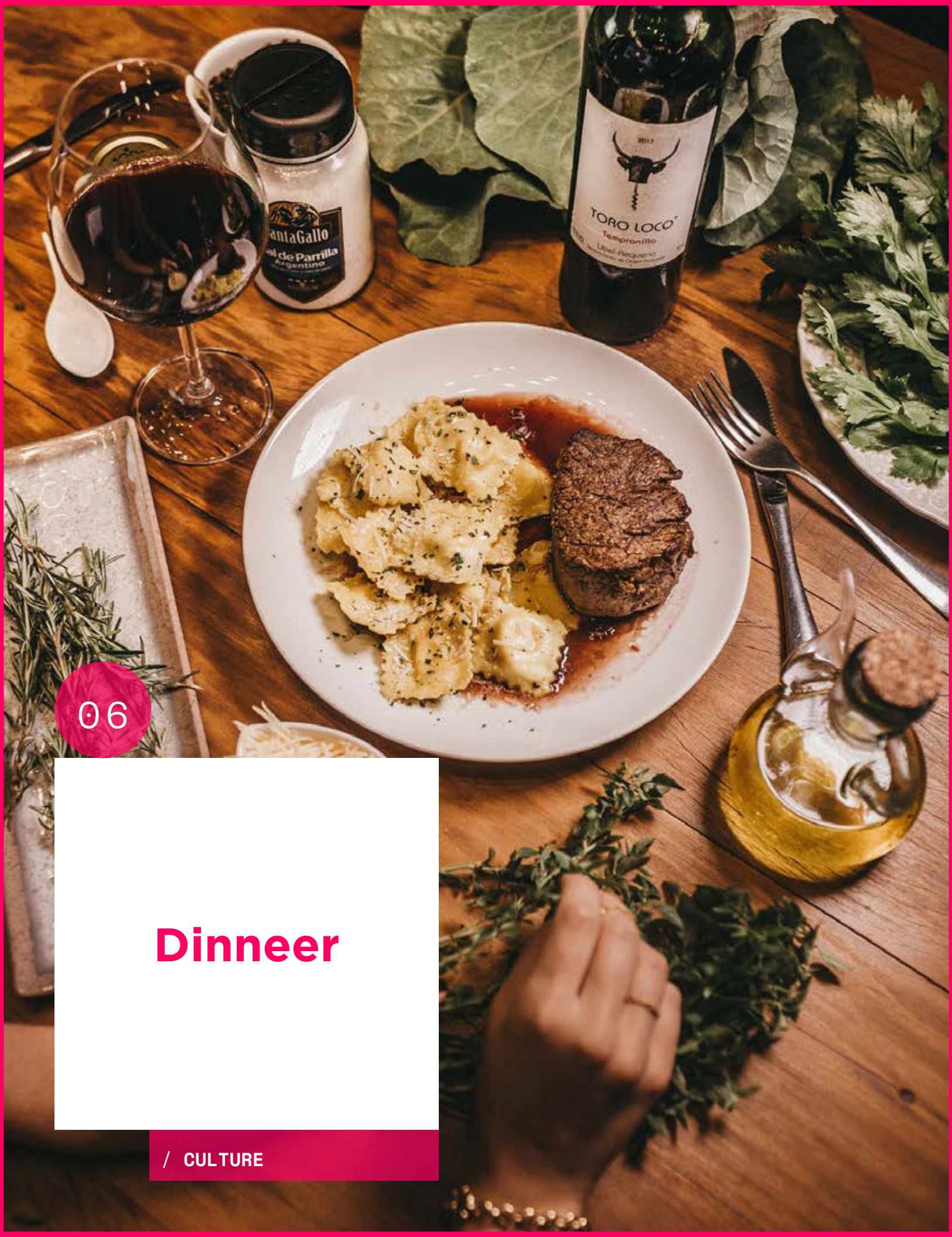
In Mexico there are 68 different Indigenous languages with 364 linguistic variations

WHY IT WAS DEVELOPED

Mixtec is the third-most spoken indigenous language in Mexico, and belongs to a community of nearly a half million inhabitants. This number is declining, however, partly because of discrimination from Spanish speakers and partly because of being classified as a "dialect" and not a language. The loss of a language brings the loss of a culture's vision and understanding of the world.

HOW IT MAKES LIVES BETTER

Technology should not exclude tradition; on the contrary, it should help to preserve it. This set of applications has been created to benefit the culture of the first nations of Mexico, their languages and their way of life. It also results in a cultural revitalization and preservation of the language. Let's Learn puts the cultural, historical and social values of Mexico's indigenous languages on the same level as Spanish.



06

Dinneer

/ CULTURE

DINNEER

Brazil- Operates in 49 countries.

Operating in 49 countries, Dinneer connects persons who love gastronomic experiences with hosts who are passionate about cooking.

FOUNDERS

Flavio Estevam, Raphael Jara
y Luiz Candreva

YEAR FOUNDED

2013

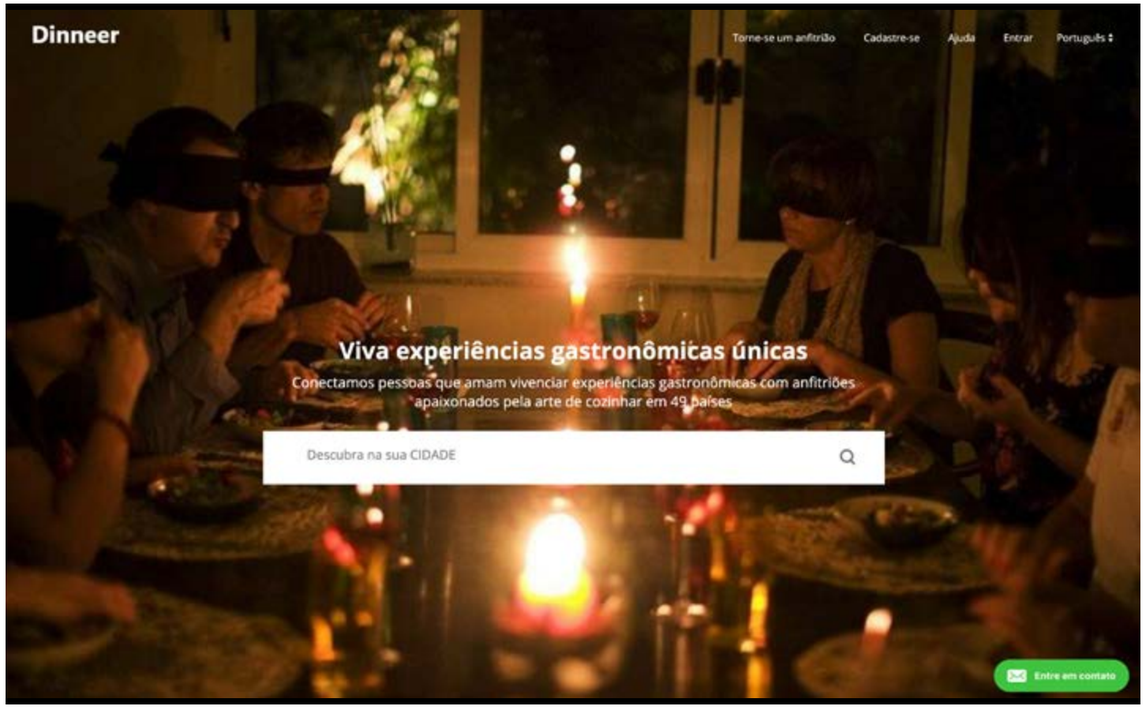
USERS

4,000 hosts and 20,000 gastronomic experiments

WEBSITE

www.dinneer.com

Creative Services · Shared Dining · Gastronomic Experience · Chefs · Art of Cooking · Income



Dinneer offers a variety of experiences in gastronomy in over 49 countries

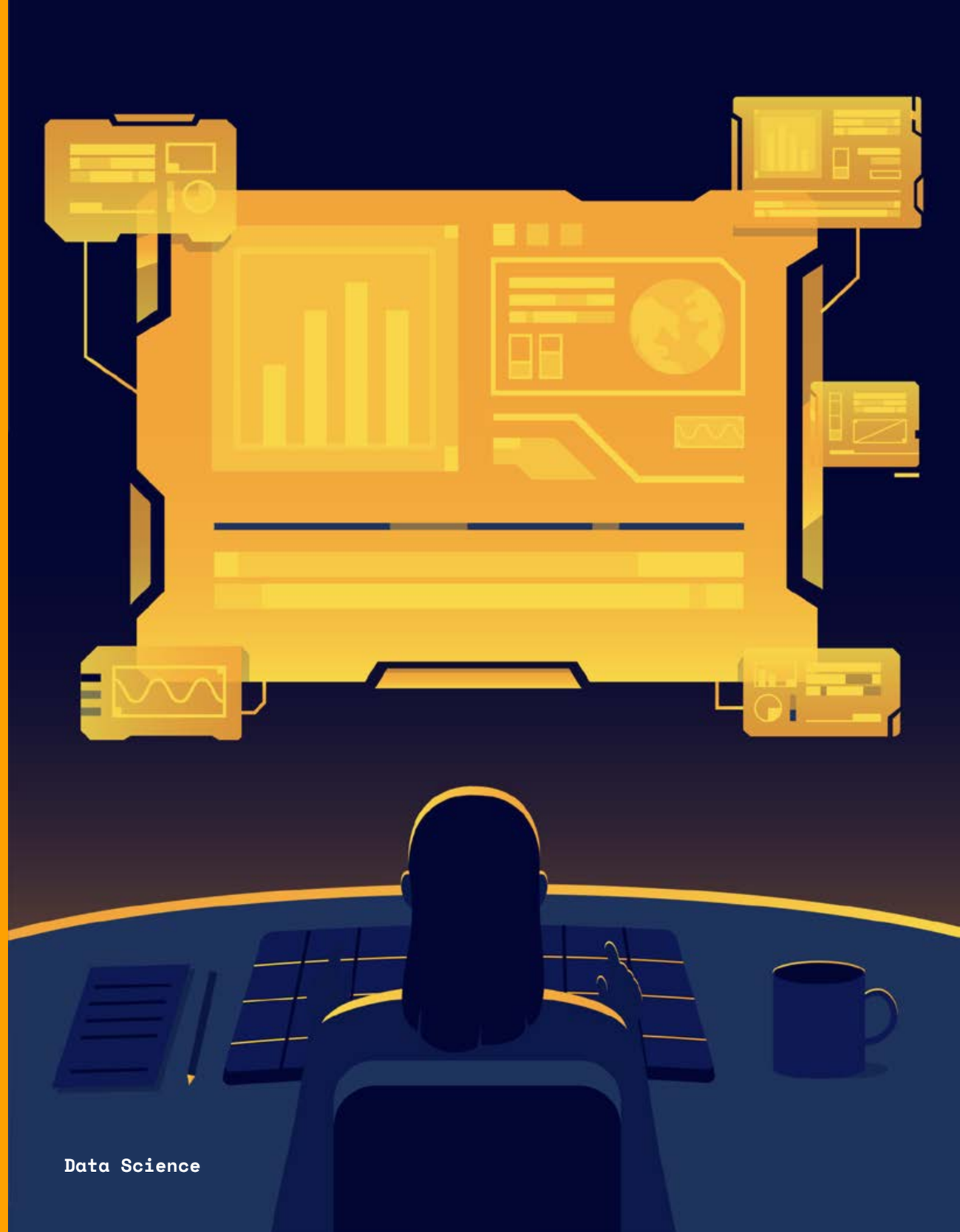
WHY IT WAS DEVELOPED

Since the world is looking for new gastronomic experiences, Dinneer opens a space for those who want to have these experiences, but also for those who want to create them.

HOW IT MAKES LIVES BETTER

It makes it easier for persons who would like to have a source of income from gastronomy—a powerful language of enchantment and entertainment that unites persons around a table.

Data Science



CATEGORY

Data Science

75%

of global executives surveyed confirmed that they will actively implement Artificial Intelligence in the following three years.[22]

Health, finance, marketing and modern agriculture

are the industries where Data Science has experienced the greatest growth on a global level.[23]

46%

of high performance firms in Latin America are already testing or operating with Artificial Intelligence based on Data Science.[24]

GLOBAL VISION

Data has been converted into a wealth of information that results not only in an important benefit for society but also in an infinite number of challenges. Each day, some 2.5 quintillian bytes of data is generated by the millions of users that constantly share information. Did you know that 15,220,700 text messages are sent around the world every minute?[25] This is only an example of the enormous amount of information that is generated day to day on websites, mobile devices, in transactions, images or videos. At the same time, new technological solutions are coming forth to organize and interpret this information. These efforts have come to be known as Data Science: the intersection of statistics, design, informatics and social sciences. The rapid advancement and growing interest from institutions and companies in this science have made automated learning models (Machine Learning) and Artificial Intelligence more and more demanded and affordable.

LATIN AMERICA AND THE CARIBBEAN

Currently in Latin America, over 88% of businesses are conscious of the transformational role that Data Science will play in the future of companies.[26] They are also aware of the challenges they will face in integrating new technologies into their business culture and business models. These positive changes will impact 50% of GDP in our region in the next three years. For example, 70% of expenditures in information technology between 2019 and 2022 should amount to US$380 billion dollars and will focus on areas that include the topics of mobility, the Cloud, Big Data and social media.[27]

According to the latest analysis carried out by Frost and Sullivan, the Latin American Big Data market will increase by 293%, to reach some US$8.5 million dollars by 2023. It will be led by Brazil (46.7%) and Mexico (26.7%), followed by Colombia (7.9%), Chile (6.9%), Argentina (5.6%) and Peru (2.4%).[28] The investment is clear for some firms that are already breaking models, such as in the case of iFood, a Brazilian food distribution entrepreneurship that will invest US$20 million dollars in a new Artificial Intelligence academy, which will center on automatic learning, deep learning, behavioral science, and logistical efficiency to take advantage of the opportunities and guarantee the success of firms in the future.[29] The solutions, however, will not come only from the leading countries. Rather they will awaken innovation in other smaller countries. This is the case with Matternet, from the Dominican Republic, an entrepreneurship which transports medical supplies and medicines via drones, using Artificial Intelligence to map out flying routes. Another case is Okimo, from Paraguay, which through Machine Learning has developed a system for the early detection of visual and developmental problems that can affect the reading performance of children.

Even though the field of Data Science is relatively new in the region, there is a great potential for firms and young professionals to develop more and more applications for real life and businesses.[30] In Latin America, the sound management of data can become the motor for progress, innovation, and participation in the global economy. Likewise, more and more governments are collaborating with Data Science firms to create initiatives that will help reduce corruption, improve health services and reduce violence in cities. This is already happening in some cities in Brazil, Peru and Argentina.[31]

07

Amis

/ DATA SCIENCE

AMIS

Colombia

Amis is the first technological anti-bullying tool in Colombia. Using artificial intelligence with data collection and analysis, it identifies and measures conflicts in schools.

The goal of Amis is to improve how children get along with each other at school by preventing violence, intimidation, sexual harassment, gang activity and drug abuse. It also detects the factors that affect the relationships and academic performance of students so that adequate pedagogical strategies can be enacted and conflicts prevented.

FOUNDERS

Eva Mariel Espitia, David Rojas y Andrés Roa

YEAR FOUNDED

2016

USERS

65,000 students in educational institutions
9,000 users in private companies

WEBSITE

www.amis.com.co

Education · Artificial Intelligence · Data Science · Prevention of Bullying · Data Collection and Analysis · Behavior Observation · Anti-Bullying

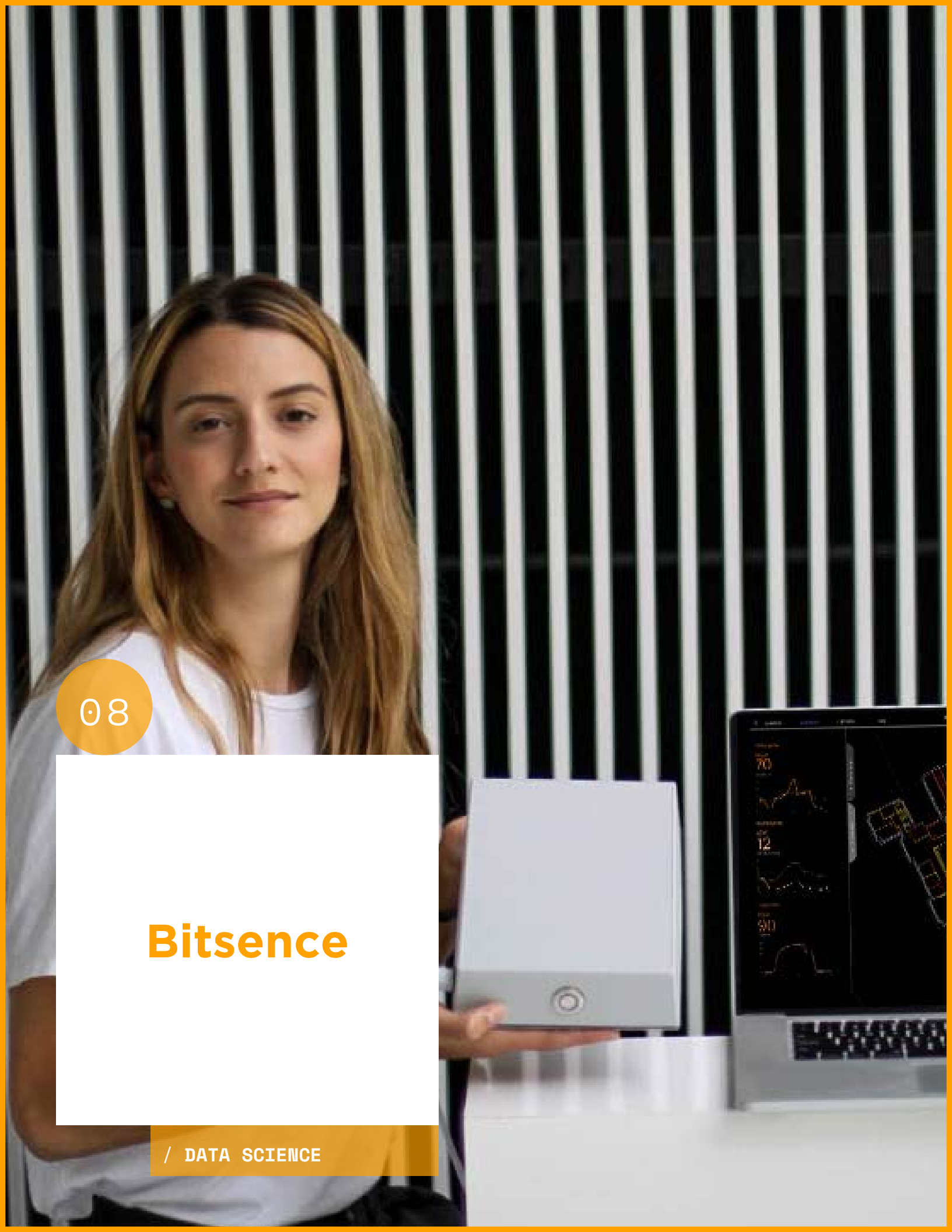
In Colombia, 1 out of every 5 children is a victim of verbal and psychological abuse.

WHY IT WAS DEVELOPED

In Colombia, one out of every five children is a victim of verbal and psychological aggression and one out of three suffers physical attacks. Nonetheless, some 60% of conflicts at school go unreported to parents or teachers since children are often afraid that tattling on their classmates will only result in more aggression.

HOW IT MAKES LIVES BETTER

Amis connects personality questionnaires and anonymous complaints to a neural network in order to detect and analyze harmful behavior, levels of conflict or victimization tendencies in children at school. This information is then used to help teachers and counselors create mechanisms for the protection, prevention or early detection or complaints about conduct that affects the well-being of students. Eradicating or reducing these harmful behaviors can prevent trauma, addiction, depression, school abandonment and suicide among children and young people.



08

Bitsence

/ DATA SCIENCE

BITSENCE

Costa Rica

Developed a technology that combines hardware and software to detect and analyze pedestrian behavior, and environmental factors such as the quantity of light, air quality and noise levels, in real time.

The activities are captured via smart devices so that it is completely anonymous and non-invasive. Bitsence is made up of an outstanding interdisciplinary team of urban designers, software developers, and business consultants who have collaborated with cities, educational institutions, and firms on a wide variety of innovative projects that explore the balance between the use of space and the comfort of the occupants.

FOUNDERS

Arianna Salazar, Amar el Seed
y Nissia Sabri

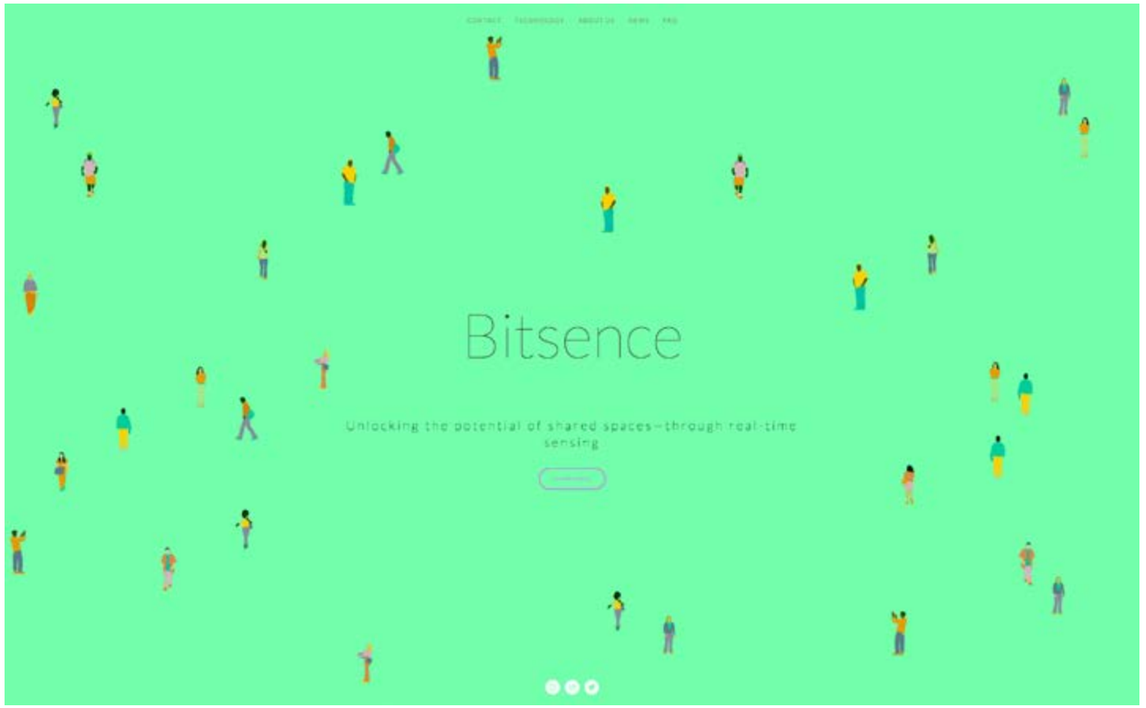
YEAR FOUNDED

2016

WEBSITE

www.bitsence.io

- Urban Development and Housing
- Intelligent Cities
- The Internet of Things
- Data Science
- Artificial Intelligence
- Behavioral Observation



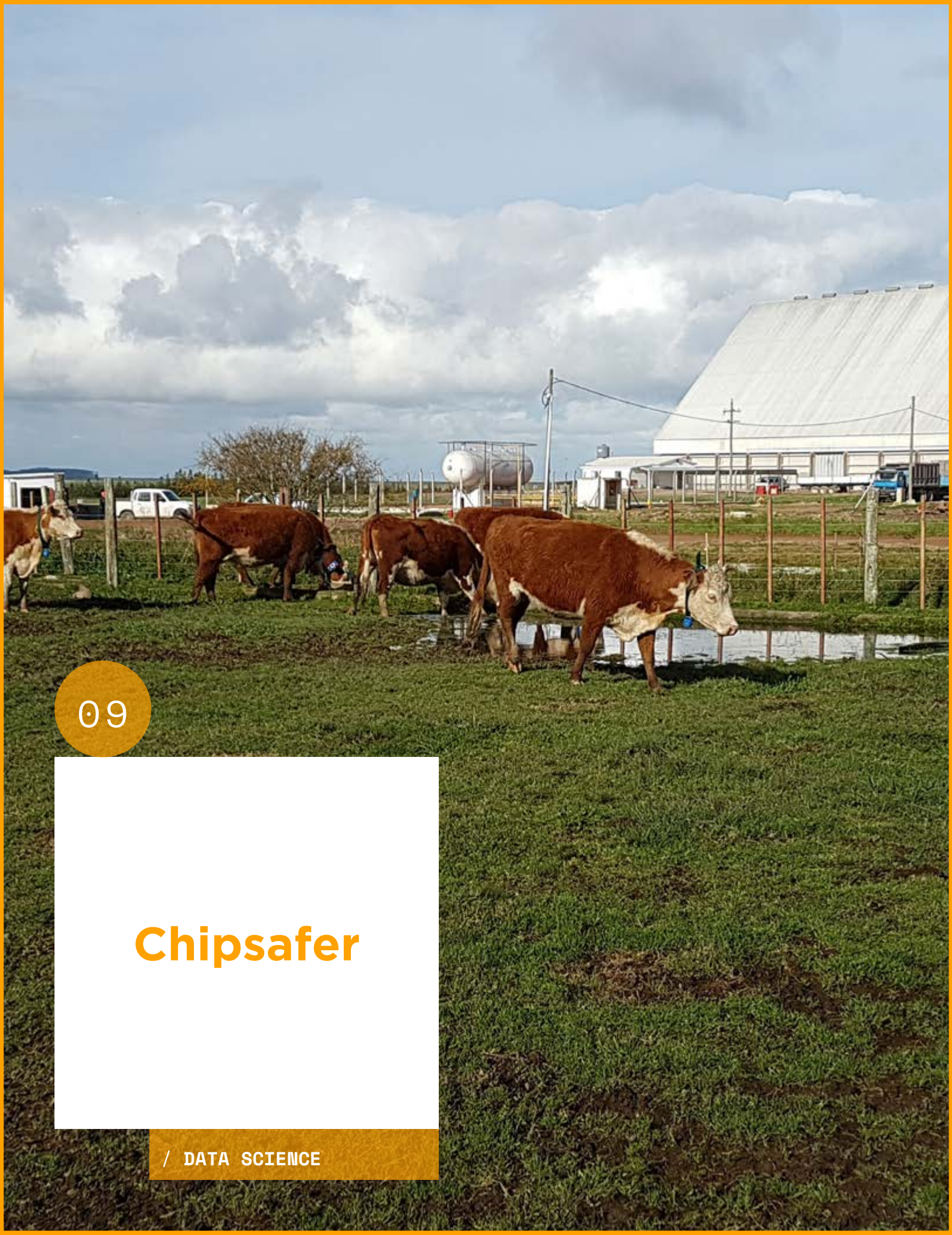
At the heart of Bitsence is the use of data to better understand how cities of the future will work.

WHY IT WAS DEVELOPED

Urban space is where we spend most of our time and its effects can go from the social fabric to health. With this understanding in mind, Bitsence was created to help cities and individuals make better use of this space. The analysis of population data makes it possible to calculate parameters, such as the number of persons that travel through a given space, how long they stay there and how often they do so. At the heart of Bitsence is the use of data to better understand how cities of the future will work.

HOW IT MAKES LIVES BETTER

Creating an innovative urban intervention to optimize a city's resources is key to improving the quality of life. It is a real challenge to make decisions, particularly for the use of shared space, without data. Bitsence offers a solution to capture this data and base planning on real information that can be used to create flexible and healthy environments. The understanding and improvement of the use of parks and public spaces will help, for example, to decide where to place urban furnishings, a stoplight or even a school.



09

Chipsafer

/ DATA SCIENCE

CHIPSAFER

Uruguay, Brazil, Namibia, Kenya, the Netherlands, Luxembourg and Australia

Chipsafer is a smart collar that contains a chip with satellite technology which remotely and autonomously tracks livestock and detects any anomalies in them. The rural producer can access all of the information via a computer or mobile device.

FOUNDER

Victoria Alonsopérez

YEAR FOUNDED

2012

WEBSITE

www.chipsafer.com

Agri-Tech · Wearable for Animals · Intelligent Collar · The Internet of Things · Data Science · Artificial Intelligence · Satellite Technology

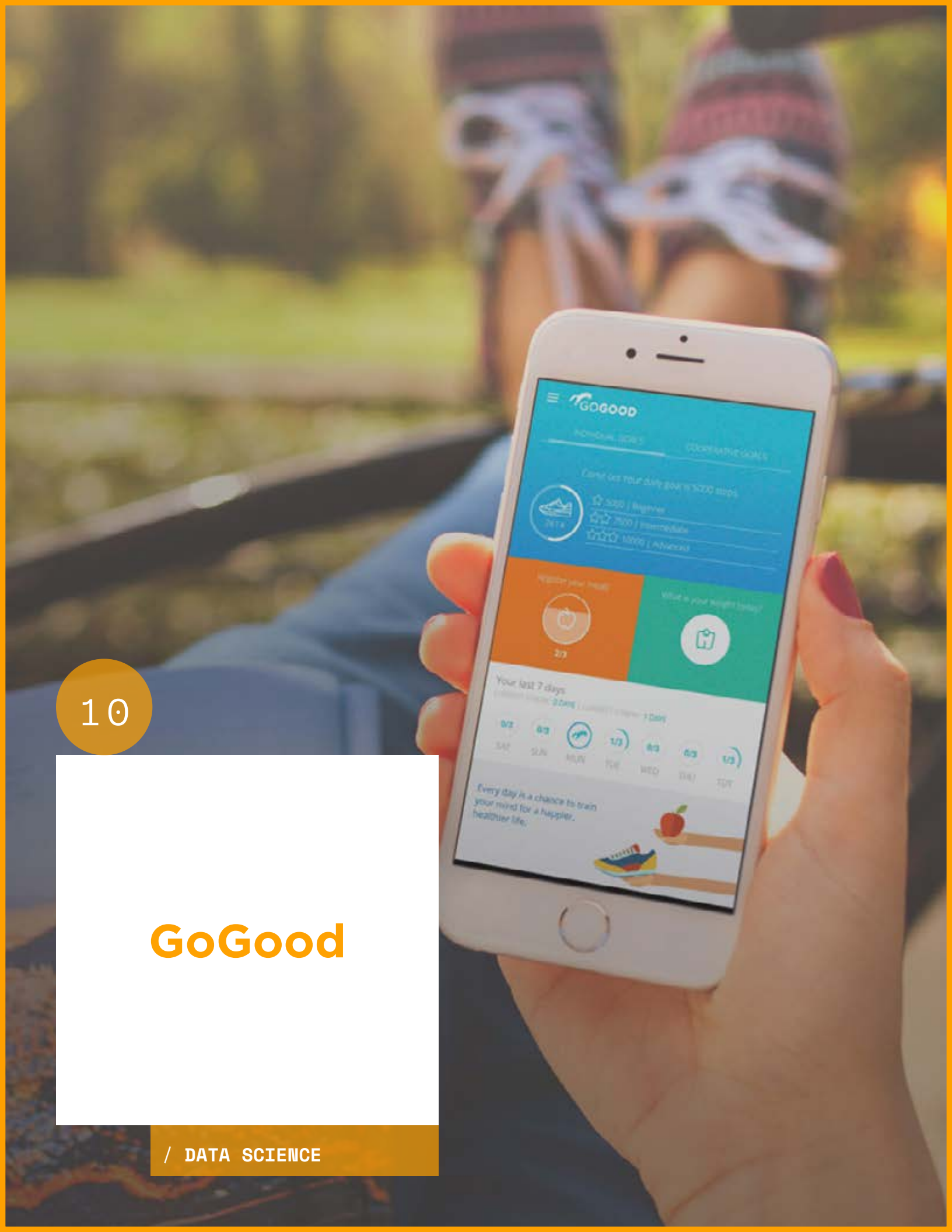
Chipsafer makes livestock raising more efficient without any negative effect on the environment.

WHY IT WAS DEVELOPED

In 2001 an outbreak of hoof and mouth disease devastated the economy of Uruguay. Given that livestock is one of the country's major exports, this epidemic not only affected the rural sector but caused great losses to the economy as a whole. More than a decade later, Chipsafer was developed to control the spread of disease in livestock by detecting any outbreak as soon as it occurs.

HOW IT MAKES LIVES BETTER

Chipsafer makes livestock raising more efficient without any negative effect on the environment. With this device, the producer knows where the animals are at all times and receives alerts if one strays outside of the boundaries or if it shows some type of anomaly. A timely reaction to this information can greatly improve production. This protection of resources is particularly important in poorer communities where livestock is a key source of income. Chipsafer is also considering expansion into the area of conservation and monitoring of wild animals and endangered species.



10

GoGood

/ DATA SCIENCE

GOGOOD

Brazil

GoGood is a corporate well-being platform that centers on improving employers' brand perceptions and business cultures. This helps organizations to attract and retain talent through gamification.

GoGood uses positive challenges and competitions to promote over fifty habits for a healthy lifestyle based on the four major dimensions of well-being: fitness, nutrition, sleep and stress. It uses integrations of applications (Strava, Runkeeper, HealthKit, Wearables, etc.) to capture data on participants, and then works them into a corporate gamification that includes rewarding users with credits for social entities.

FOUNDERS

Bruno Rodrigues and
Leonardo de Miranda Borba

YEAR FOUNDED

2016

USERS

1.233 users

WEBSITE

www.gogood.com.br

Health · Data Science · Personal and Labor Well-being · Gamification · Platform · Mobile

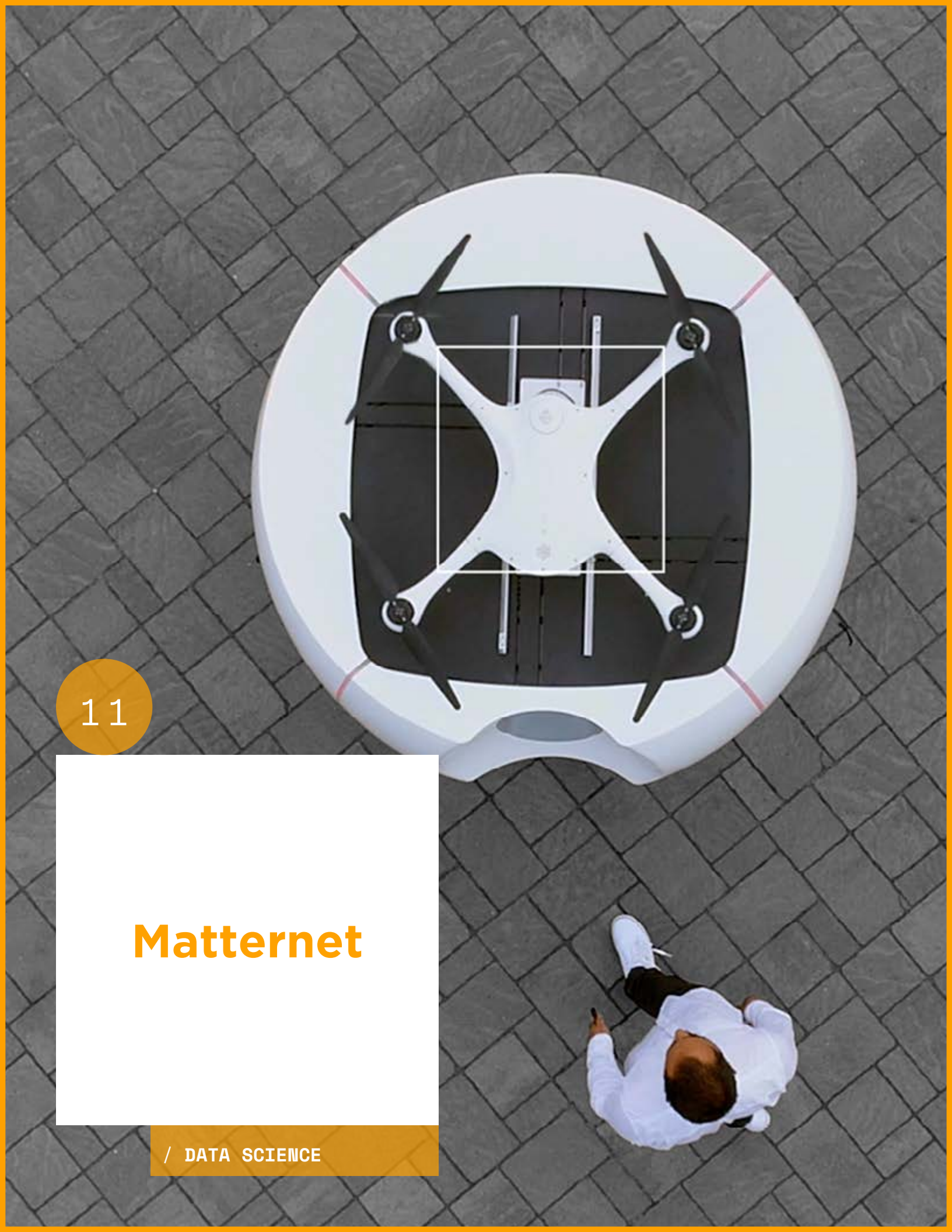
A workplace culture focused on well-being improves the workplace environment by 23%.

WHY IT WAS DEVELOPED

The mission of GoGood is to promote health and well-being as part of the corporate culture by inspiring employees to change their lives by adopting healthy habits. According to the data obtained by GoGood, an employee who exercises regularly and maintains a balanced diet is twice as productive and is six days less absent on average than those employees who do not take care of their health. Furthermore, a corporate culture focused on well-being enhances a positive workplace environment by 23% and reduces the costs associated with absenteeism and low productivity.

HOW IT MAKES LIVES BETTER

Balancing a healthy lifestyle with a heavy workload seems impossible to most but GoGood has developed a platform that uses gamification to keep users motivated to maintain a healthy lifestyle.



11

Matternet

/ DATA SCIENCE

MATTERNET

Dominican Republic, US, Switzerland

Matternet is a firm dedicated to the building and operation of drone networks for air transport of medical laboratory samples and medicines between hospitals or clinics and laboratories.

The process is completely automated which allows for easy, reliable and on-time deliveries. The drones have a range of 30 km, can travel at a speed of up to 70 km per hour and can carry up to 2 kilos. They are currently running a pilot program for transporting consumer goods directly between stores and the consumer. Matternet has established a permanent network of automated drones in Switzerland.

FOUNDERS

Paola Santana
Andreas Raptopoulos

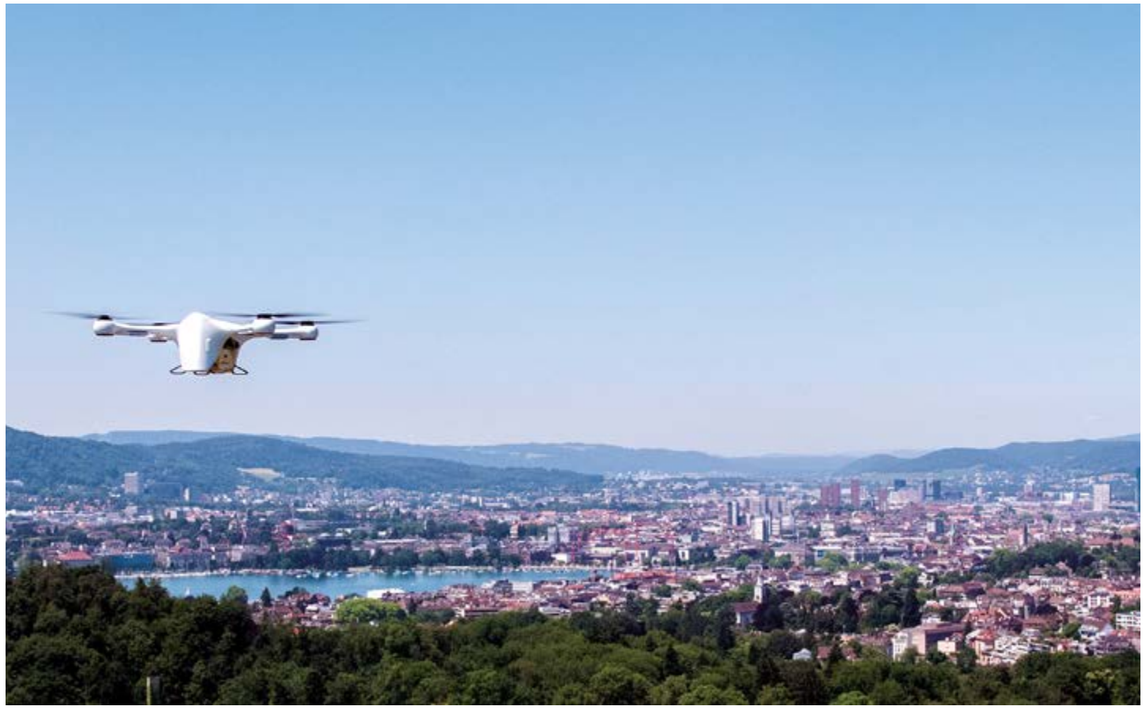
YEAR FOUNDED

2011

WEBSITE

www.mttr.net

Health · Drones · The Internet of Things (IofT) · Robotics · Transport



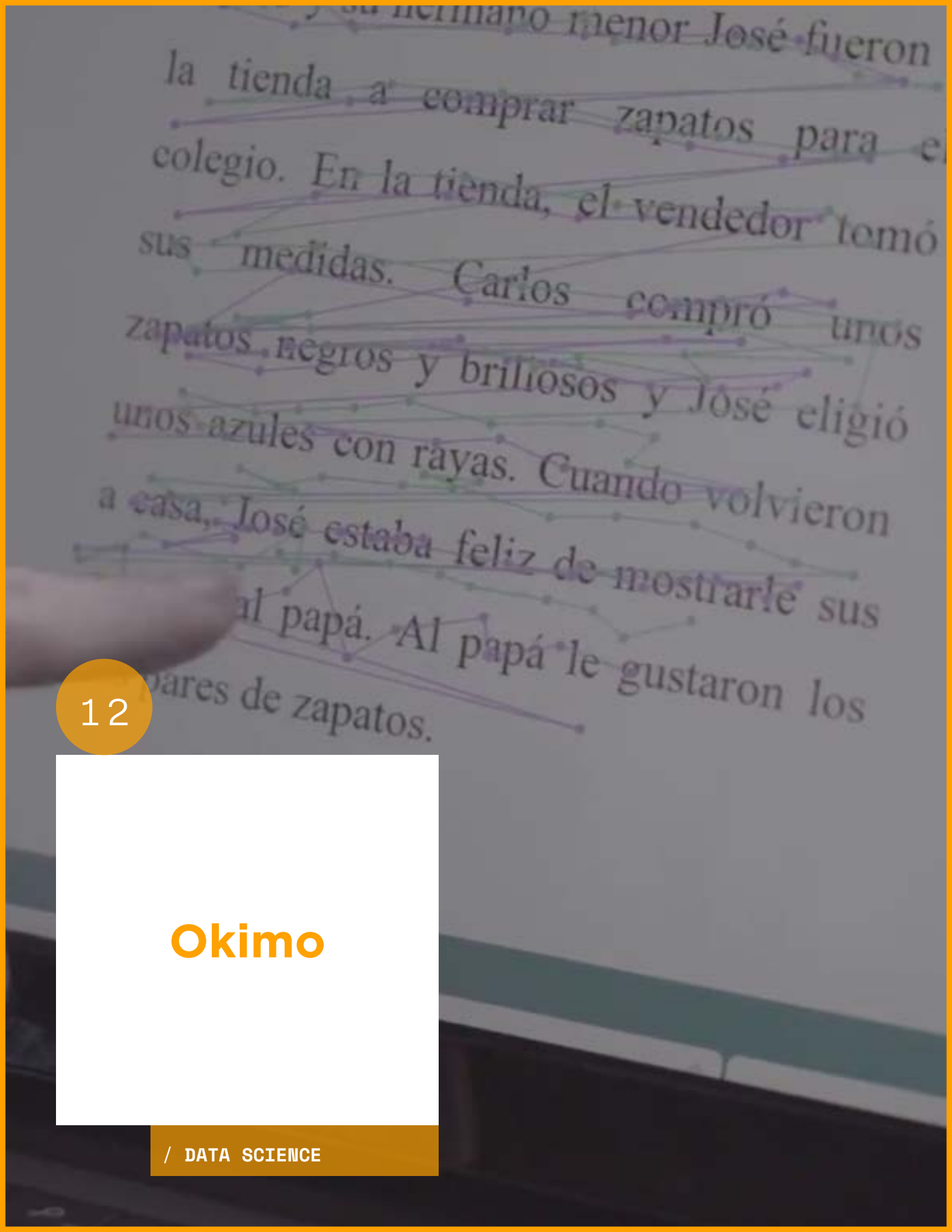
The process is completely automated, which allows for easy, reliable and on-time deliveries.

WHY IT WAS DEVELOPED

The use of drones is a way to optimize the delivery of light-weight packages, containing important contents such as medicines and documents to remote areas with limited access. This alternative greatly speeds up deliveries in these environments where delays are caused by rough terrains or heavy urban traffic.

HOW IT MAKES LIVES BETTER

Blood samples, medicines and some types of diagnoses must often be delivered or processed urgently. In zones that are densely-populated or difficult to reach, however, a lot of time is lost in making deliveries by land. Matternet completely transforms the process of delivering laboratory samples, medical supplies and documents by using a completely automated system to transport them in a radius of up to 30 km in less than 30 minutes.



12

Okimo

/ DATA SCIENCE

OKIMO

Paraguay – England

Okimo is a software for evaluating reading and visual skills with an eye tracker sensor that captures bio-metric data on how the reader acquires and processes visual information from texts.

Okimo can timely detect visual and developmental problems which could affect the reading ability of school-age children. With this system, children can directed to adequate treatment for their vision.

FOUNDERS

Gabriela Galilea, Bhavin Shah and Nahum Dam

YEAR FOUNDED

2014

USERS

Pilot project with 500 children

WEBSITE

www.okimo.co

Education · Health · Machine Learning · Data Science · Ed-tech · Reading · Visual Skills · Bio-Metric Data · Vision · Early Detection · Behavior Tracking

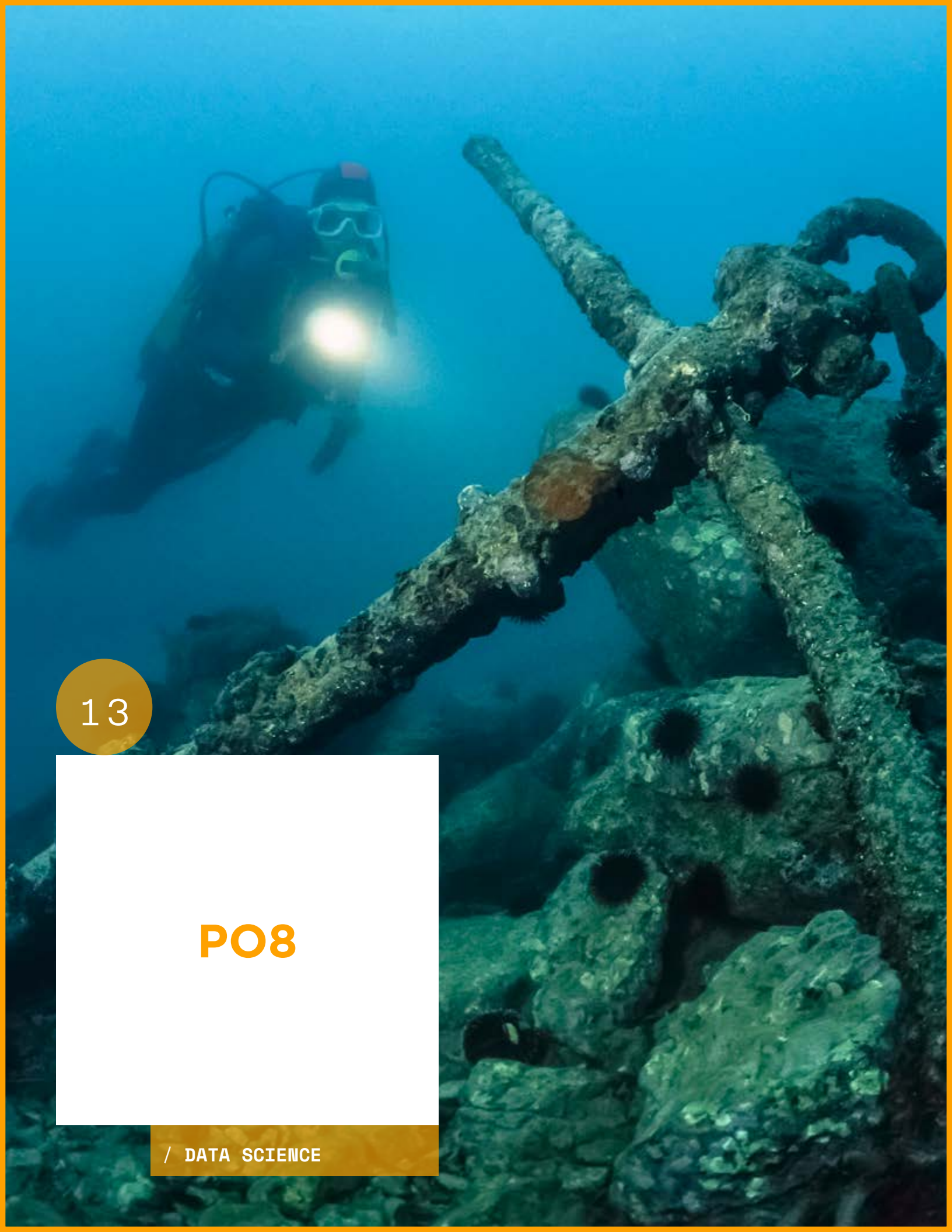
Okimo gives visibility to ocular deficiencies, giving school children access to early detection.

WHY IT WAS DEVELOPED

Under-performance in school is caused by many factors, but when they occur at an early age, many of them fall under the category of visual deficiencies. Sight is one of the senses that is most closely linked to learning, memory, the understanding of mathematical logic, concentration and development. Okimo's aim is to give more children access to early detection and adequate treatment, thus reducing those challenges that limit their personal, social and professional development.

HOW IT MAKES LIVES BETTER

In Latin America, because parents are either uninformed or lack resources, 85% of children are not given eye tests before entering school. Early detection of visual problems is crucial, because if caught at an early age, the visual system is still plastic and malleable enough to be corrected. Okimo raises awareness of this problem, making it easier for children to receive early detection and treatment and for parents to be conscious of the importance of good eyesight for the integral development of their children.



13

PO8

/ DATA SCIENCE

PO8

Bahamas

PO8 developed a Blockchain ecosystem that democratizes and decentralizes the marine archaeology industry.

FOUNDERS

Matthew Arnett
Raúl Vásquez

YEAR FOUNDED

2017

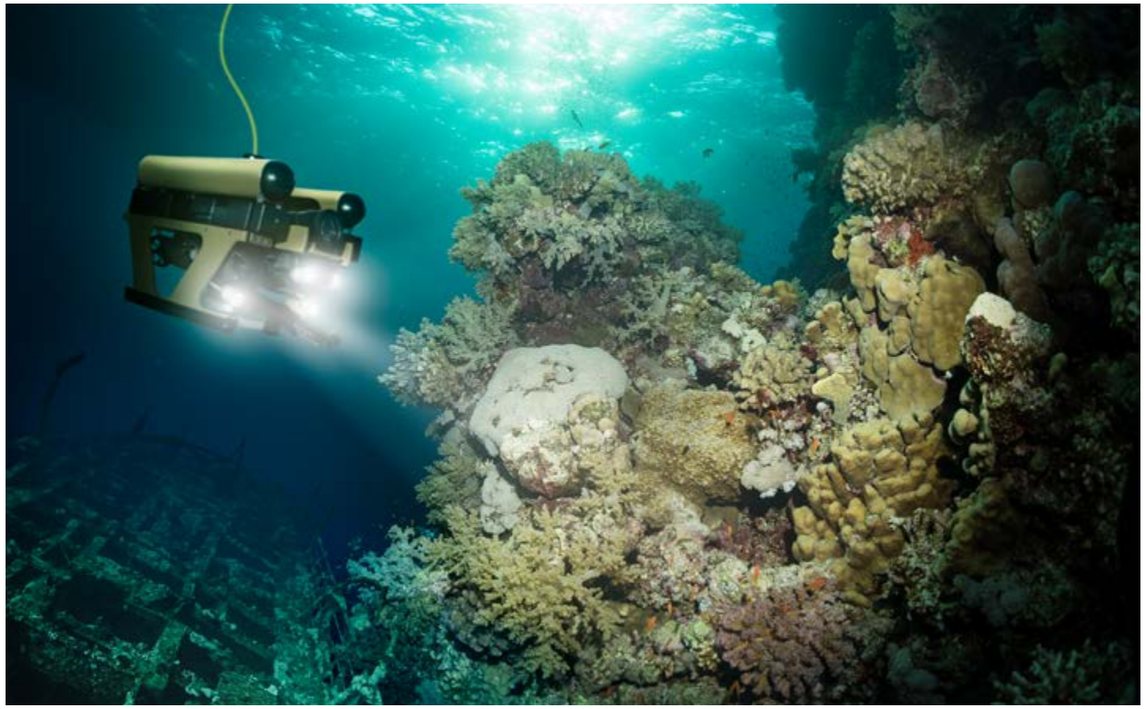
USERS

BETA

In addition to using Blockchain, PO8 uses artificial intelligence, robotics and virtual reality to recover sub-aquatic cultural assets. These assets are digitalized as Non-Fungible Tokens (NFT) so that they remain in the geographic location where they are found.

The purpose of this project is to bring back maritime archaeology, valued at over US$100 billion dollars and make the Bahamas not only an economy based on tourism but also on technology.

Sustainable Tourism · Blockchain · Tech · Non-Fungible Tokens · Blue Economy · Robotics · Non-fungible Tokens · Cripto Currency · Artificial Intelligence · Virtual Reality



In the Bahamas, many coral reefs are being illegally destroyed by locals and foreigners.

WHY IT WAS DEVELOPED

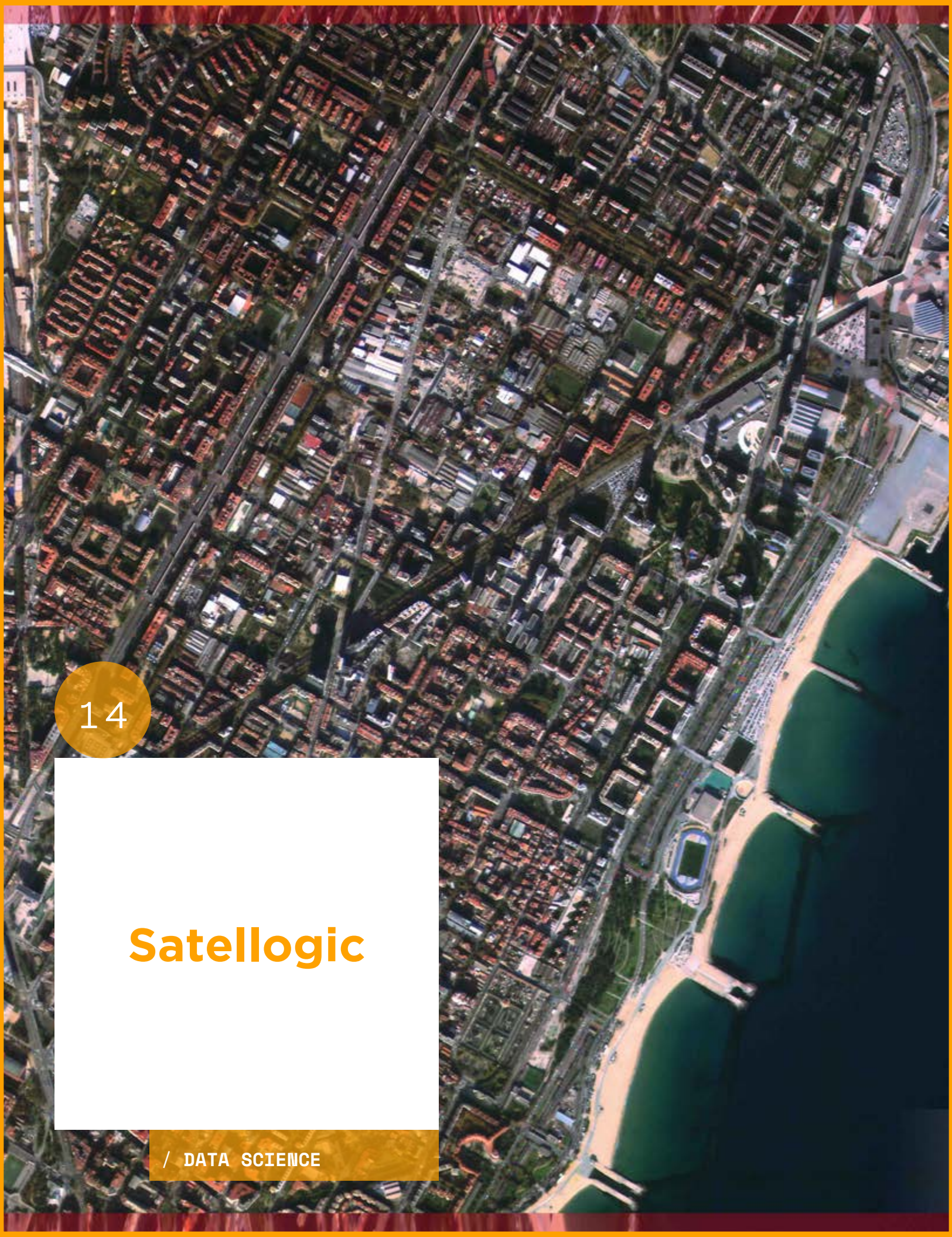
The monetization of digital assets can generate unexploited sources of income which can then be used to finance social programs, create jobs and stimulate local economies. At the same time, it can protect marine habitats.

The Blockchain technology of PO8 will allow greater transparency after an 18-year moratorium imposed on the industry of maritime salvage in the Bahamas.

HOW IT MAKES LIVES BETTER

A moratorium was imposed 18 years ago to stop bad management and illegal activity related to the maritime archaeology industry. Today, many Bahamians and foreigners still illegally destroy reefs, the ocean floor and the artifacts that are found in those places, since there are no adequate standards, codes of conduct, oversight or best practices established for the industry.

Access to the maritime archaeology industry could create jobs and establish new world standards. This would open the way for the rehabilitation of reefs and artificial planting of old and new shipwreck sites that will create new habitats for undersea life.



14

Satellogic

/ DATA SCIENCE

SATELLOGIC

Argentina

Satellogic is a leader in high-resolution satellite imaging, making it possible and affordable to obtain and analyze valuable information about the earth.

In addition to building satellites, Satellogic manages the large quantity of information it captures with machine-learning and deep-learning techniques, enabling them extract the greatest value for their clients in each industry.

They have already launched several of their high-resolution satellites and their aim is to reach a total of 60 satellites in 2019 and 300 more over the next decade.

FOUNDER

Emiliano Kargieman

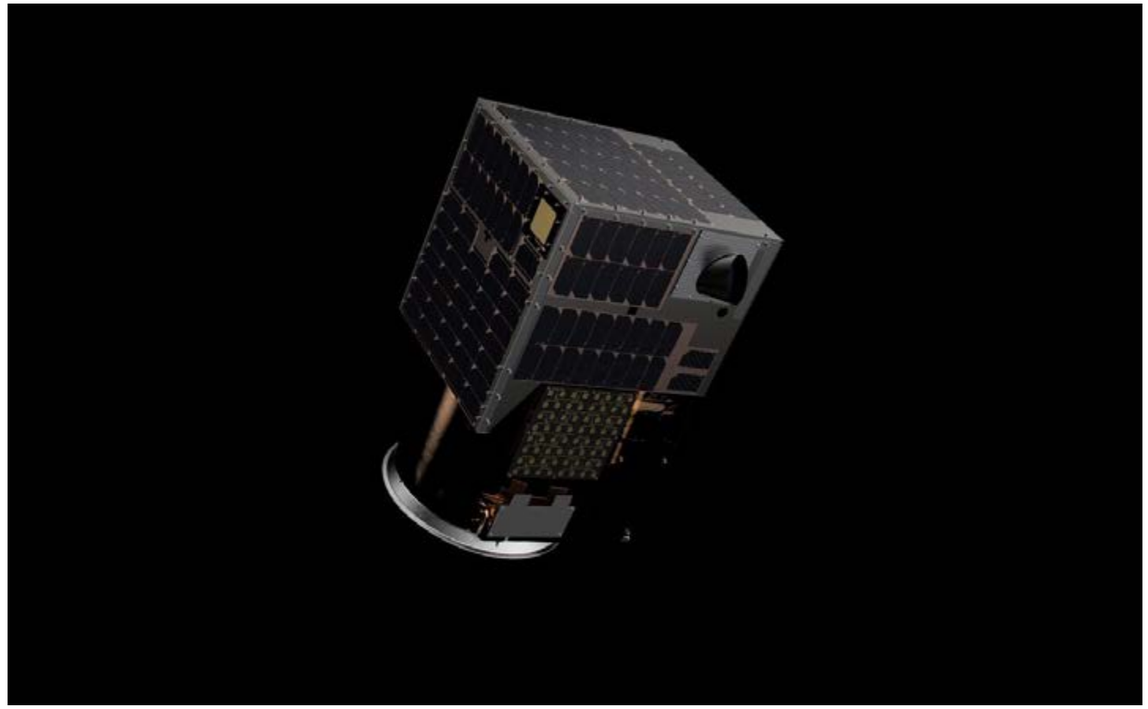
YEAR FOUNDED

2010

WEBSITE

www.satellogic.com

- Science and Technology
- Micro-satellites
- Hyper-spectral Imaging
- Machine Learning
- Deep Learning
- Space Science
- Data Analysis
- Process Optimization
- Business Intelligence
- Data Science



Traditional satellites take years to manufacture and their launch mass averages 1,250 kilograms.

WHY IT WAS DEVELOPED

With a fleet of micro-satellites, Satellogic plans to produce affordable commercial quality earth observation data for daily decision making,

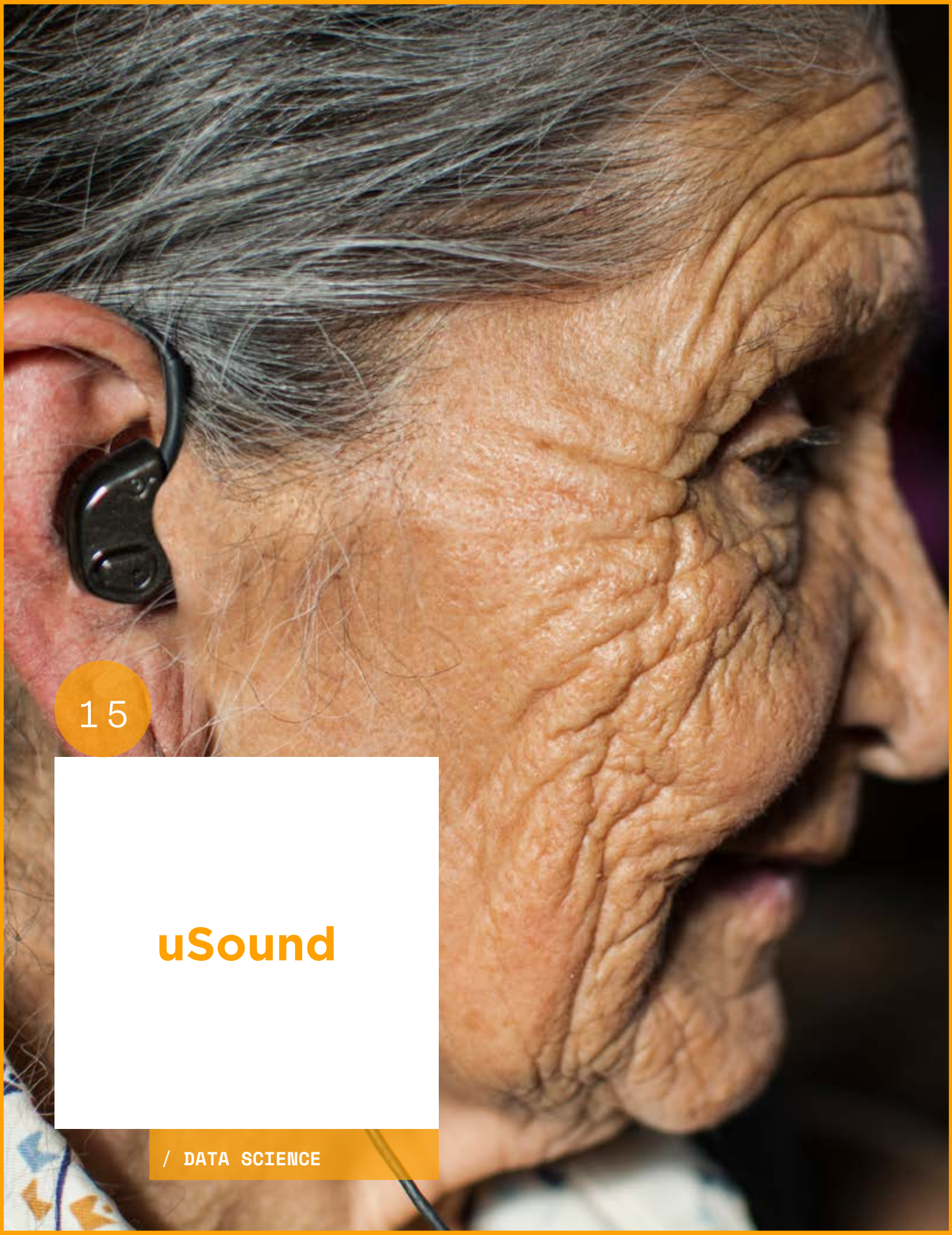
Traditional satellites take years to manufacture and their launch mass averages 1,250 kg. Satellogic's micro-satellites, on the other hand, take only months to build and weigh around 40 kg.

The company would like to unblock the value of live geographic information analysis to improve how day-to-day decisions are made by each branch of government, each corporation, each small firm or each person on the planet.

HOW IT MAKES LIVES BETTER

Satellogic could democratize access to space-based services, drastically reducing the barriers to obtaining satellite data in real time. Eventually it could create a vast network of these micro-satellites that would revolutionize daily life.

Hyper-spectral imaging captures data from the entire electromagnetic spectrum being observed (materials, chemical compositions and molecular processes) which aids in the prospecting of mineral deposits, agriculture and petroleum and in the monitoring of forests and climate change.



15

uSound

/ DATA SCIENCE

USOUND

Argentina, Brazil, Spain, US

uSound is an application which converts smart phones into a system that improves hearing quality.

uSound uses different earphones and pre-loaded programs that improve the quality of hearing and adapt to the environment of the user.

FOUNDERS

Ezequiel Escobar and Patricia Sánchez

YEAR FOUNDED

2014

USERS

Over three thousand downloads for the first version of the application.

WEBSITE

www.usound.co

Health · Wearables · Data Science · Machine Learning · Hearing System · Hearing Quality · Disability · Social Inclusion · Software Development · Product Design · Applications

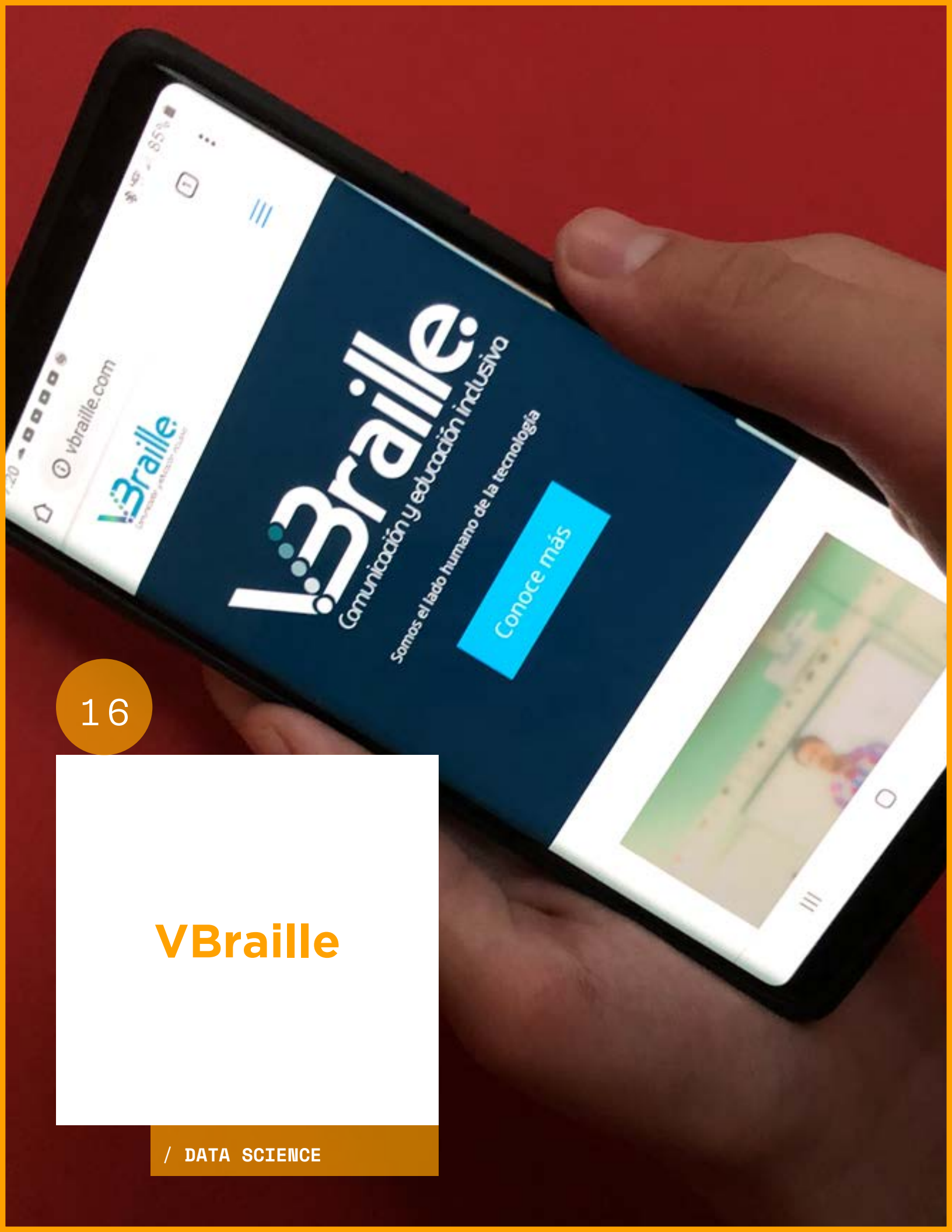
According to the WHO, 64 million persons were suffering from hearing loss in 2012.

WHY IT WAS DEVELOPED

According to the World Health Organization (WHO), in 2012, 64 million persons were suffering from hearing loss and 80% of them lived in developing countries. Deafness limits communication and education, and due to their high cost, only one in 40 persons can have access to a digital hearing aid. uSound provides an alternative to costly hearing aids. The application is free and together with the headphones, it converts smartphones into a personalized, dynamic, and intelligent hearing aid.

HOW IT MAKES LIVES BETTER

uSound improves the quality of life in vital areas such as communication and education. In addition, the system prevents further hearing loss since it adjusts the intensity of the sound frequencies to an optimum level for each user. uSound technology currently reaches places where there is no professional audiometer that detects the risk of hearing loss in low-income school children, adolescents or adults.



16

VBraille

/ DATA SCIENCE

VBRAILLE

Colombia

VBraille is an inclusive communication and education platform which enables deaf and blind persons to use vibrations to communicate with others.

This device is designed for users who already read Braille and it consists of a keyboard with six buttons, one for each of the positions of the alphabet. By pressing them in different combinations, it is possible to compose any letter or number. The device transmits the message with vibrations from a deaf-blind person via Bluetooth to a receiving device, which is currently a portable computer, where it can be seen by another person.

FOUNDERS

Jennifer Rodríguez Esparza y Escuela de Ingeniería de Antioquia EIA.

YEAR FOUNDED

2016

USERS

It is used in the José Félix de Retrepo Library in the municipality of Envigado, Antioquia

WEBSITE

www.vbraille.com

Health · Education · Product design · Disability · Social Inclusion · Open Code

In Colombia there are over 200,000 disabled school-age persons.

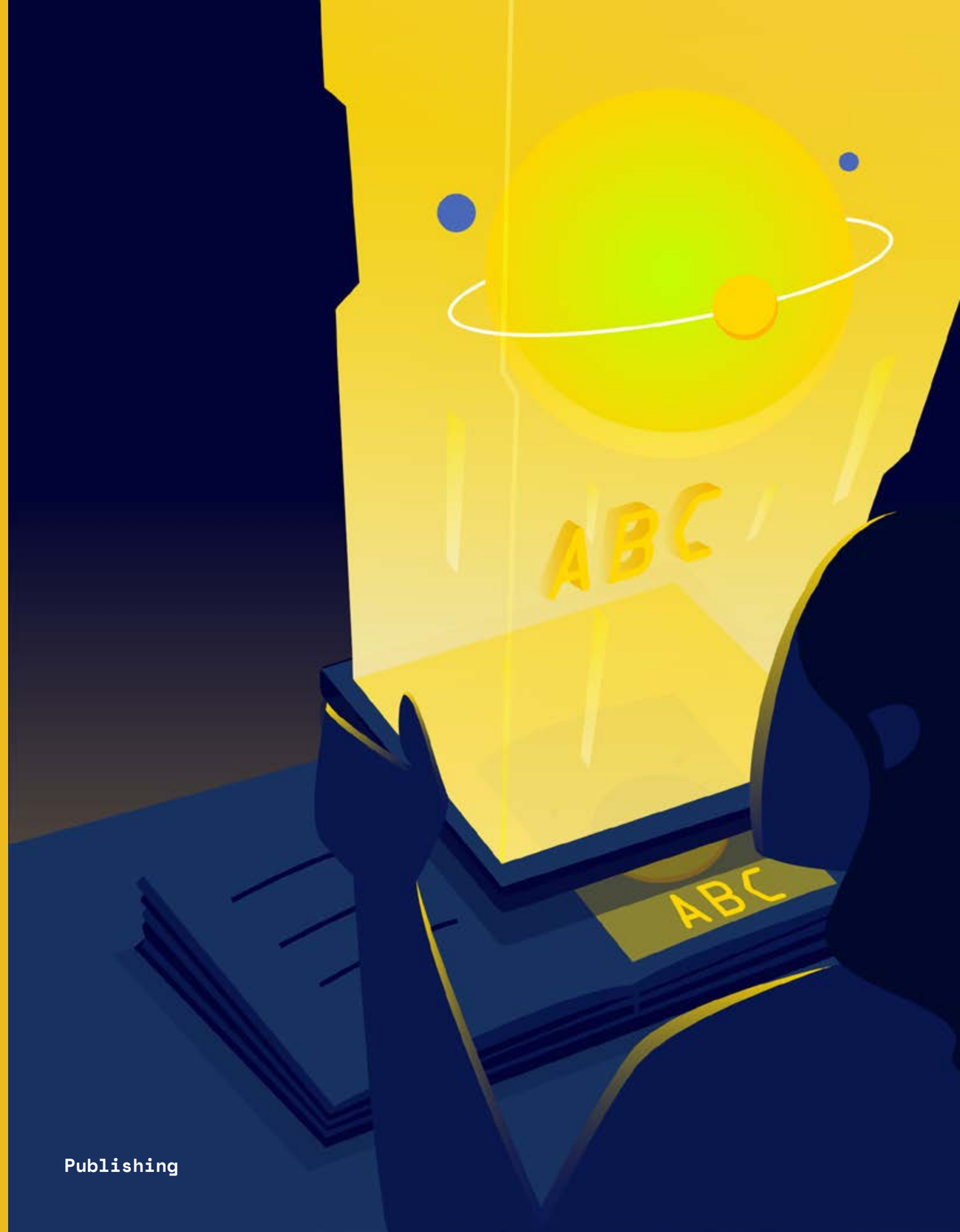
WHY IT WAS DEVELOPED

The communication capacity of some 15 out of every 100,000 persons is severely affected by deafness or blindness since they take away two of their most used senses: eyesight and hearing. VBraille is based on the research findings of EIA University in Medellín Colombia, which was investigating new solutions for disabled students so that they could have the tools necessary to enter and continue in an educational environment.

HOW IT MAKES LIVES BETTER

In Colombia there are over 200,000 disabled school-age persons. Unlike other products, this platform was developed jointly with its potential users. The result is a perfect combination for converting technology into an emancipating tool that enhances the development of the students and improves their well-being and quality of life.

Publishing



CATEGORY

Publishing

Independent Digital Publications

represent over 34% of book sales in the US[32] and over 7% of ebooks in Spanish.[33]

Latin America

accounts for 34% of world sales of digital content in Spanish.[34]

The Spanish-speaking market

of digital and audio books grew by 110% in Latin America in 2017.[35]

The largest sales of audio books in Spanish

are in Spain, Mexico and the US, followed by the rest of the countries in Latin America, with 60% recorded with Latin American accents.[36]

GLOBAL VISION

The publishing industry generates US$143 billion dollars in the world, although it has been forced to evolve to adapt itself to technology. Only a decade ago, printed publications were still the most important media,[37] occupying one of the 10 major positions in the creative and cultural industries.

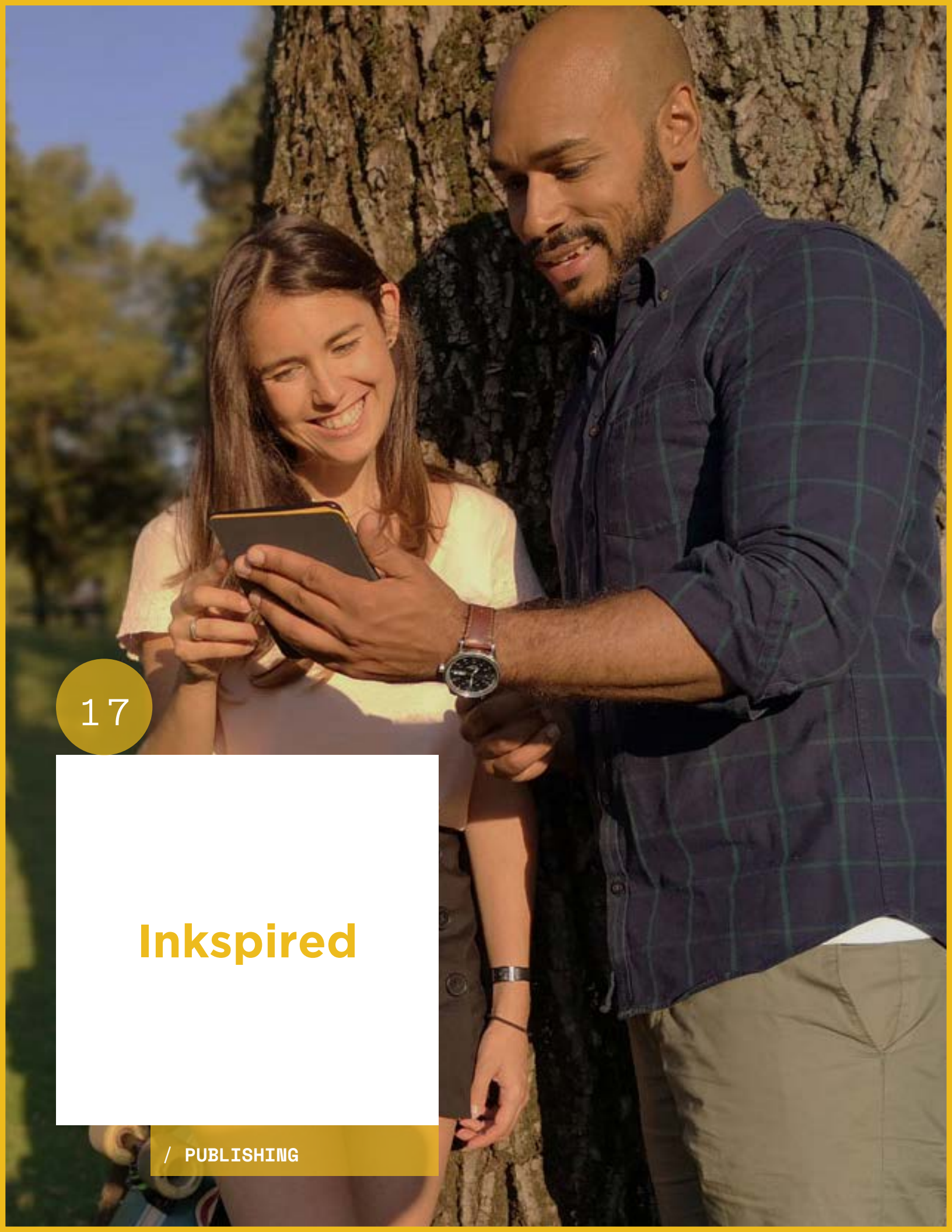
Adapting to new channels (smartphones, tablets, electronic books) and new media (newsletters, blogs, podcasts) has been indispensable for the industry. The most drastic changes have focused on how content reaches users; content must be available immediately and user experience is critical. Important factors behind the user adaptation of digital media have been to have portability, freedom to adapt the size of the text, keep notes, complement the reading with images, download a book from the Cloud, receive an audio version or purchase only single chapters.

The publishing industry has faced big challenges and it has only been by adopting technology that the industry has been able to continue growing and reach a greater number of users.
Piracy, for example, represents losses of US$600 million dollars per year.[38] It is considered the Achilles's heel of the sector. In the era of Blockchain, however, we see new solutions, such as Po.et, and Draft2Digital, platforms that bet on decentralizing and distributing content and helping independent authors to receive more just pay for their works.

LATIN AMERICA AND THE CARIBBEAN

The digital revolution represents great advantages for Latin American publishers who continue to face high costs for copyrights, exports, distribution and dissemination of printed publications, as well to fight piracy. Technology has allowed digital development and consumption to open the doors to new local and emerging authors. In 2016, independent publications accounted for 7% of the global market in Spanish, covering mostly academic and educational content.[39] This translates into 34% of sales of digital content in Spanish in the world, where Mexico leads with 16%, followed by Argentina, Colombia and Chile.[40] In spite of piracy and the relatively low demand for books, the publishing industry in the region is still considerably large.[41] The Spanish-speaking market for digital and audio books grew by 41% in Spain and 110% in Latin America in 2017, largely due to more affordable prices and the ample supply of local authors.[42]

The big opportunity, however, comes not only from focusing on sales but also on production. In 2019, 60% of audio books in Spanish are being produced with a Latin American accent.[43] Platforms for interacting with the reader are also betting on innovation, as can be seen in the case of the start-up, The Wawa, from Ecuador, which makes reading a more interactive and entertaining experience through augmented and virtual reality. Another case is Inkspired, an online publication platform where authors, with or without experience, have an agile means to publish their creations.



17

Inkspired

/ PUBLISHING

INKSPIRED

Ecuador, Germany, UK, US, Canada, Brazil, Spain, and Luxembourg

Inkspired is a platform for independent authors which enables them to publish their literary texts without needing a publisher.

This platform uses algorithms to distribute new content to the right audiences and supplies authors with the necessary metrics to make their stories more attractive. Inkspired has developed an ecosystem of multiple applications for iPhone, Android, Windows, and MacOS, along with tools that help authors write and publish better stories. Inkspired has made an alliance with Entel, one of the largest telephone companies in Ecuador, to have them pre-install the Inkspired application in their brand of cellphones.

FOUNDERS

Galo Vargas and
Nicolás Pérez

YEAR FOUNDED

2014

WEBSITE

www.getinkspired.com/es

Art and Culture

New media · Editorial

Publisher

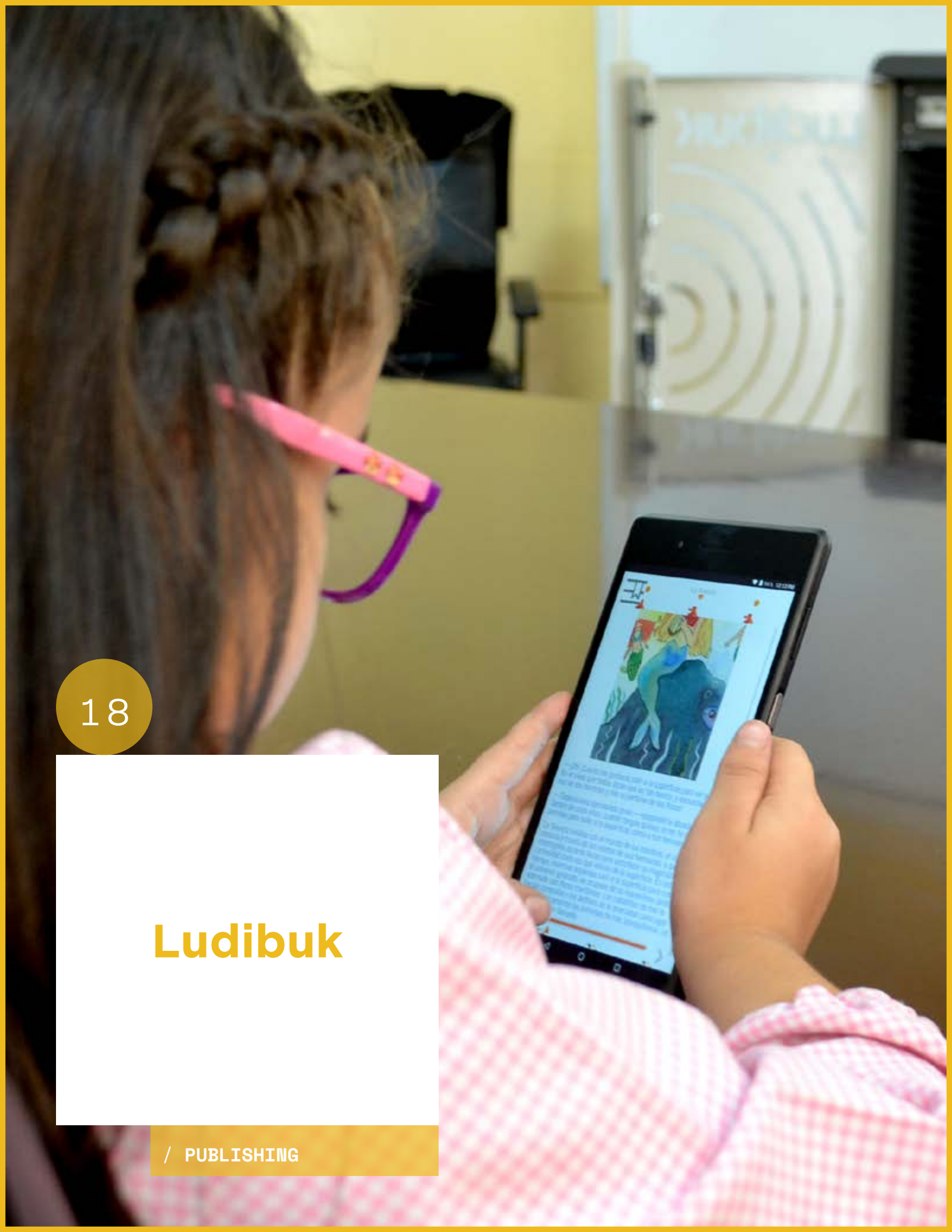
Inskpired cuenta con un ecosistema de múltiples aplicaciones para iPhone, Android, Windows y MacOS.

WHY IT WAS DEVELOPED

Its mission is to democratize writing by making the publication process an easier, more intelligent, flexible and just process for authors. Inkspired targets new or unknown writers of novels, bloggers, scriptwriters and journalists.

HOW IT MAKES LIVES BETTER

It generates impact and development in Latin America by promoting culture through literature and creating a universe of new readers and writers.



18

Ludibuk

/ PUBLISHING

LUDIBUK

Colombia, Peru, Mexico, Chile

Ludibuk is an application for tablets and telephones that motivates children to be interested in books while helping them improve their reading comprehension. It also helps teachers monitor the progress of their students.

This application provides reports to teachers which enables them to develop pedagogical strategies that are complementary to the regular curriculum. Ludibuk is already operating, in over 100 public and private schools in four countries. It contains an extensive catalog of classic literature, fiction, non-fiction and modern literature that is especially selected for school-age children.

FOUNDERS

Rubén Arias and
Felipe Pastenes

YEAR FOUNDED

2016

USERS

Over 19,000 active users in more than one hundred private and public schools.

WEBSITE

www.ludibuk.com

Education · Data Science · Gamification · Artificial Intelligence · Machine Learning · Software

According to the Ludibuk's data, this solution increases reading comprehension by 11% in eight weeks.

WHY IT WAS DEVELOPED

Today, one out of every two children in Latin America do not comprehend what they read. The lack of reading comprehension detains the development of other educational capabilities since most learning takes place through books. Ludibuk offers a different approach to the traditional model of reading by adapting to the rhythm, level and tastes of each student to keep him or her motivated. With this solution, the student can change letters, colors, underline texts and even add music to improve concentration. Once the passage is read, the application generates comprehension exercises such as challenges and rewards. The results are analyzed through artificial intelligence and reach the teacher in real time. According to the Ludibuk's data, this solution increases reading comprehension by 11% in eight weeks.

HOW IT MAKES LIVES BETTER

One of the main challenges facing education in Latin America is the motivation of children to read at an early age. Ludibuk was created to stimulate the enjoyment, the habit and the comprehension of reading among children and young people.

Furthermore, since 80% of students have access to electronic devices, Lukibuk has detected a great opportunity for using familiar technology to help children in their development.

19

The Wawa

THE WAWA

Ecuador

Wawa Technologies developed Marty the Martian, a book which transforms the experience of reading, stimulates the reader and invites him or her to interact with the characters through augmented reality and interaction with the physical products.

Wawa Technologies are developed completely in house. Each book contains animations and virtual games that are not only related to the book's contents, but also to other subjects, such as mathematics, English and Language.

FOUNDERS

Adrián Armijos and Marco López

YEAR FOUNDED

2016

USERS

Over 3,500 units sold

WEBSITE

www.thewawa.com

Education · I+D · Virtual Reality · Augmented Reality · Computational Vision · Research and Development · Reading · Virtual Games · Animated Content

Wawa Technologies are developed completely in-house.

WHY IT WAS DEVELOPED

According to the Ecuadorian Book Chamber, in developing countries such as Ecuador, the average person reads between one-half and one book per year. Wawa Technologies creates solutions for children who are digital natives by encouraging reading while playing with cutting-edge technology.

HOW IT MAKES LIVES BETTER

Studies undertaken by the same company show that the books and technologies developed by Wawa Technologies increases children's retention of concepts and vocabulary, compared with traditional forms of reading. With the use of augmented reality and activities developed with the support of psychologists and pedogogists, the founders hope to both foster a love of books as well as a transformation in the educational experiences of children.

20

Read To Me

/ PUBLISHING

READ TO ME

Uruguay

Read To Me is a lamp that uses voice recognition to detect the text that is being read in a book and gives life to the words by projecting animations, sound and visual effects onto the wall.

Read To Me functions in real time while the book is being read aloud. Through technologies that include the internet of things, machine learning, and augmented reality, it generates animations that go along with the story.

FOUNDERS

Avedis Boudakian, Juan Ciapessoni and Nicolás Mescia

YEAR FOUNDED

2017

WEBSITE

www.thereadtomeproject.com

Education · Machine Learning · Augmented Reality · Voice Recognition · The Internet of Things · Animation · Editorial · Reading · Applications

First-place winner at South by Southwest SXSW in the Innovation Connected Persons category, 2018.

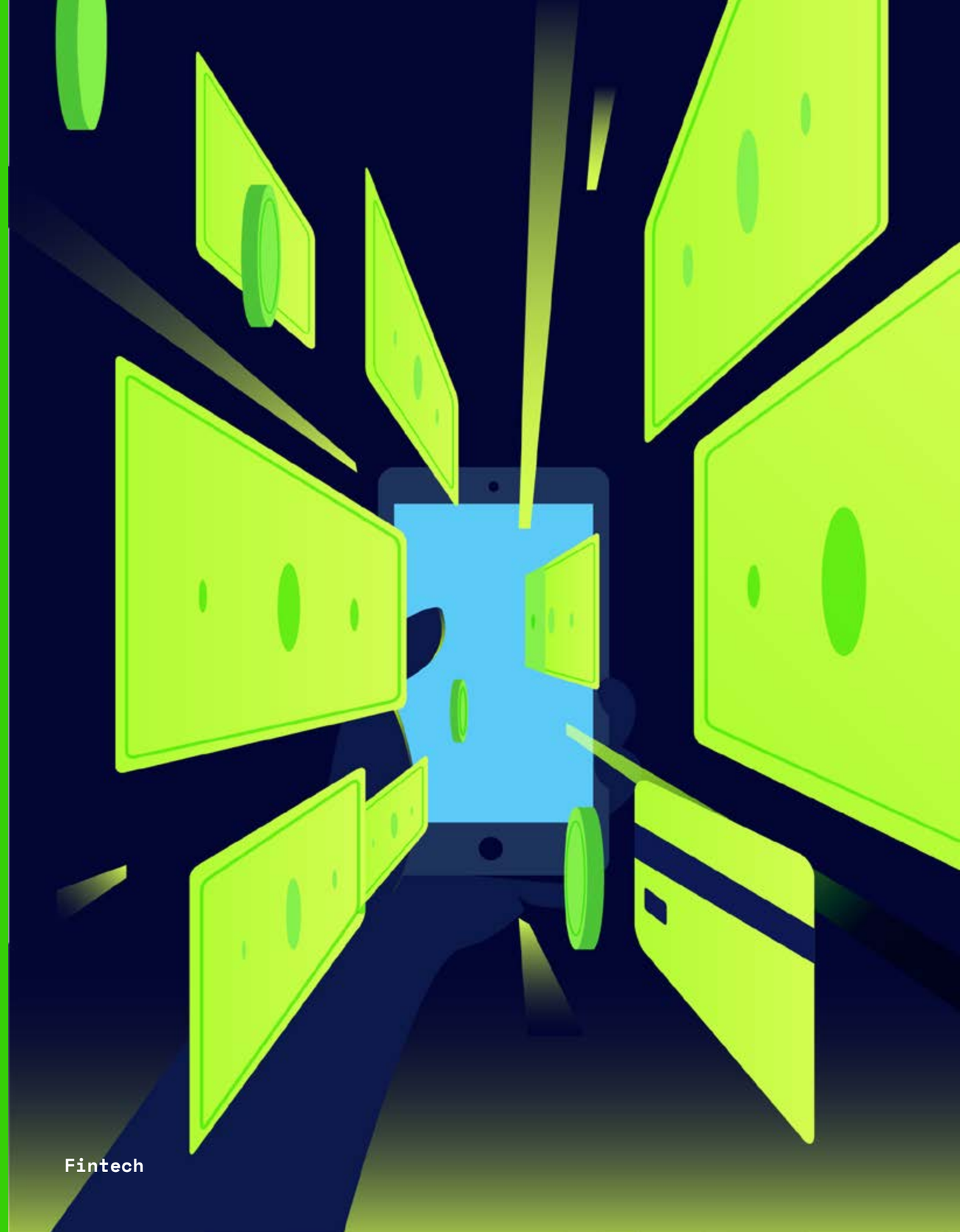
WHY IT WAS DEVELOPED

Reading in Latin America is facing a crisis which mainly affects small children. Technology (applications, games, social networks, and platforms such as Netflix and YouTube) have replaced more traditional forms of entertainment, as well as how family time is spent. Read To Me offers a solution where both parents and children can reconnect through the world of books in an innovative manner, using non-invasive technology. By projecting what is being read in real time, the lamp turns reading into a family activity adapting to a new lifestyle.

HOW IT MAKES LIVES BETTER

Reading during childhood is crucial for development. Read To Me uses the human side of technology to build a bridge to connect parents and children. Unlike what happens with smartphones and tablets that tend to isolate the user, this product offers an immersive experience. It returns us to those unforgettable moments of play and learning offered by books that are centered on human relations and not on technology for its own sake.

Fintech



CATEGORY

Fintech

US$233 billion dollars

of sales was generated by the Fintech industry in 2018 and by 2022 the figure will reach US$411 billion in the world.[44]

Brazil, Chile and Uruguay

head the list of countries with the greatest numbers of banking system users in Latin America and the Caribbean.[45]

Smartphones

represent a great opportunity for the adoption of Fintech technology in Latin America.

GLOBAL VISION

The term, Fintech, may sound new but for decades it has been part of the financial technology sector—in the form of payment processors, credit cards, invoicing, currency transfers, insurance and remittances. More than being a new business model for these industries, Fintech applications use technology to reach more markets more quickly, especially those of new generations.

The main objective of the Fintech apps is to improve user experience and reduce the time and cost of financial services.[46] A recent study predicts that this industry will generate US$223 billion dollars in revenues in 2018, which will reach US$411 billion by 2022. This means an average annual growth rate in the world of some 16.5%.[47] The creative and cultural industries will join with the financial sector to support millions of users the world over with innovative solutions, as can be seen in the case of PayPal, the first virtual wallet in history and now a world leader for making safe and easy payments by internet and transferring funds on line between users.

LATIN AMERICA AND THE CARIBBEAN

In Latin American there is an opportunity in the banking payment space: currently 60% of the population of the region do not have banking services and 70% only make payments with cash. Integration into the banking system through technology is key: in the region there are more smartphones than bank accounts and this indicates a clear opportunity for the digital Fintechs to reach more markets without having to greatly increase infrastructure or incur in high operating costs. The countries with the highest banking penetration are Brazil (80%), Chile (78%), Uruguay (51%) Honduras, (47%), Paraguay (40%), and El Salvador (40%).[48] This means that more than 41.8 million persons have bank accounts.

New technologies are not only a matter of commercial opportunity, but also a matter of social responsibility where digitalization and mobility can become an alternative for financially empowering the population who live in poverty. This is a key factor for the sustainable development of countries.[49] Even though there are more than two million adults who do not have a bank account, most of them have savings, loans or micro-credits in the informal market,[50] which demonstrates market potential in spite of the lack of access. Latin Americans also have the need to carry around less cash to reduce risks and facilitate operations. Two projects have arisen to meet this challenge, City Wallet from Venezuela, a sticker that can be used to make immediate payments without using physical currency or credit cards and Atar Band, a smart wrist band used to make payments in any business in Brazil that accepts credit cards.

21

ATAR Band

/ FINTECH

ATAR BAND

Brazil

ATAR Band is a wristband for payments that uses Near Field Communication technology. ATAR, which is accepted in 85% of financial terminals in Brazil, allows payments to be made without a credit card or bank account.

To make a payment with the ATAR Band, it is enough to bring it close to the terminal and input the pass-code. The band is integrated with a mobile application that allows the user to receive notifications for each purchase and a statement for each payment. It is not necessary to have a bank account or credit card to put credit into the band.

FOUNDERS

Orlando Purim Junior, Mike Allan Pellin and Luiz Fernando Heidrich Duarte

YEAR FOUNDED

2016

USERS

Highest pre-sale of a Brazilian technological product.

WEBSITE

www.wearatar.com

Fintech | Wearables | Internet of things | Approach Technology | Electromagnetic Induction | Software

With the ATAR band, it is enough to bring it close to the terminal and input the pass code.

WHY IT WAS DEVELOPED

Brazil has 55 million adults who do not use the banking system and 20 million who do not have access to banking services. This limits the penetration of credit card services in the country, since a person outside the banking system cannot opt to obtain a credit card. ATAR Band was created to offer an option to all the Brazilians outside of the system, as well as to those who do not want to carry around cash.

HOW IT MAKES LIVES BETTER

ATAR's encryption technology makes it more secure and practical to make payments than carrying around money or credit cards, which can easily be stolen or cloned. Another benefit for the users of ATAR is that in case it is lost of stolen, it can be easily blocked to avoid any type of fraud.

22

City Wallet

/ FINTECH

CITY WALLET

Venezuela

City Wallet is a mobile payment sticker which is ecological, practical and accessible and functions via recharging with Near Field Communication technology.

FOUNDERS

Ramón Ginez, Atilana Piñón and Félix Fernández

YEAR FOUNDED

2016

USERS

7.000 users

WEBSITE

www.citywallet.net

Fintech
Wearables
Blockchain
The Internet of Things
Cloud Computing
Near Field Communication (NFC)
Product Design

This solution is very discreet, very economical and makes people feel safer.

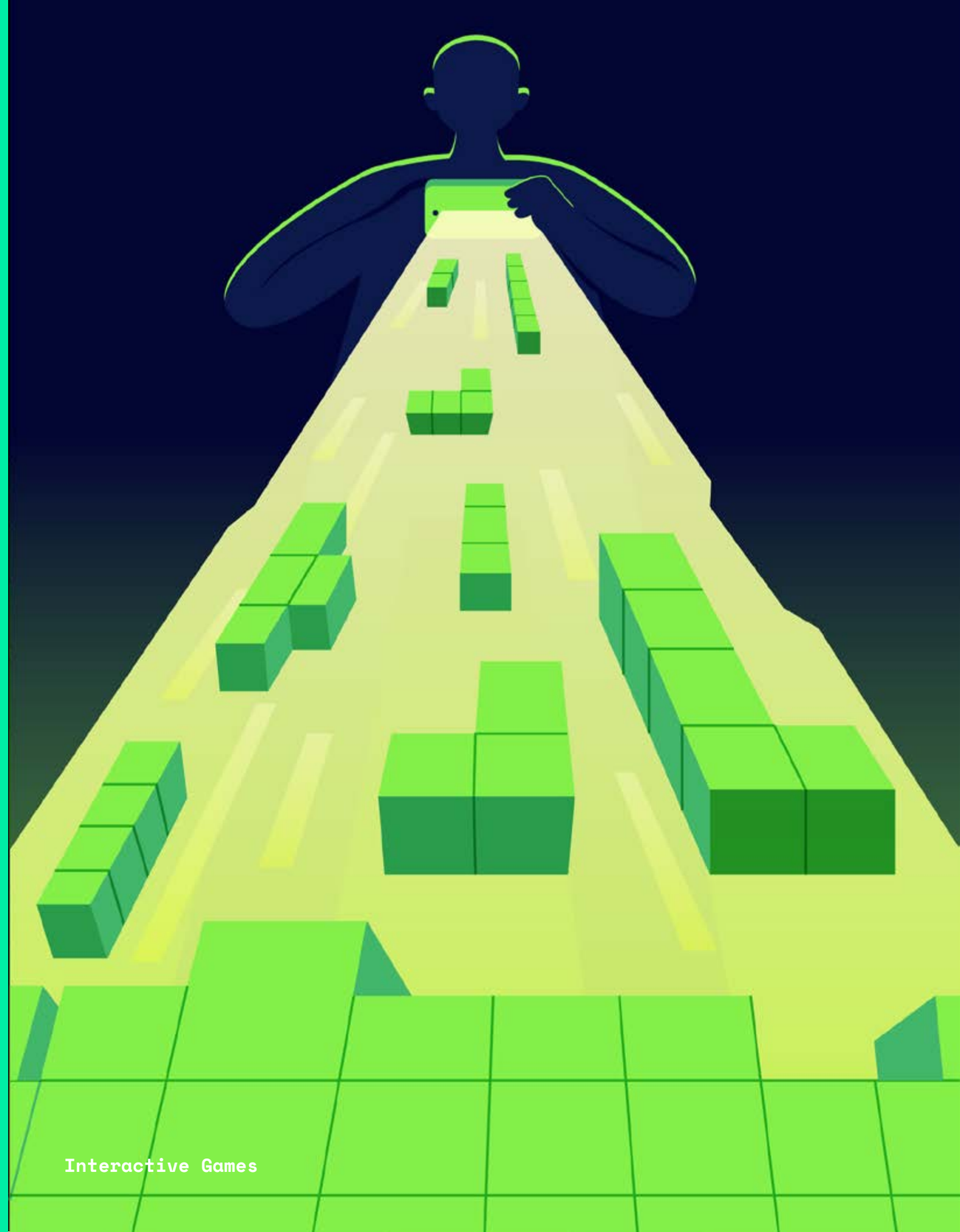
WHY IT WAS DEVELOPED

City Wallet was created because the scarcity of cash and the constant variations in prices make even the simplest of payments, such as for public transportation or parking, turn into practically an odyssey in Venezuela. For this reason, the founders of City Wallet decided to create an alternative to paying cash in small establishments in Venezuela. In Latin America, the market for cash micropayments is estimated to be around 36 billion, making City Wallet a prime solution that can expand and take this Venezuelan development into other countries.

HOW IT MAKES LIVES BETTER

The main way that City Wallet improves the lives of Venezuelans is that without carrying cash, it allows them to pay small transactions using the sticker. This solution is discreet and very economical and makes people feel safer, since they do not have to carry cash around and can spend less time in line to make payments.

Interactive Games



CATEGORY

Interactive Games

Interactive Games

have become the leaders in sales and growth in the entertainment industry in the entire world, tripling the earnings of the motion picture industry.

Of the

46

sub-sectors of the creative industries, video games is the one growing the fastest.

Latin America

represents 4% of the world market of digital games and it is the third market after Asia (52%) and North America (23%)[51]

GLOBAL VISION

In the last five years, video games experienced a growth of 56% and in 2018 reached US$134.9 billion dollars, tripling the projected profits for the motion picture industry.[52] As for portability, games for smartphones and tablets held 42% of the market in 2017, and are projected to reach 50% by 2020.[53]

For many developers it appears clear that the future of video games lies in being a social activity, breaking with the perception that time in front of a console isolates people. According to Anna Sweet, Head of Development Strategy at Oculus, trends point towards team activities (in person or virtually), augmented or virtual reality, indie games and co-creation, where the user becomes part of the story of games in the future.

Numerous studies have demonstrated that the moderate use of video games helps to improve logical skills, problem solving and eye-hand coordination faster than traditional educational methods.[54] Consequently, it is becoming more and more common to see educational video games or gamified didactic programs with diverse objectives.

LATIN AMERICA AND THE CARIBBEAN

The trend to use video games to approach fields such as education, health and culture, has been key to boosting the growth of the industry in the region—based on creating didactic games that entertain at the same time they add value. Even though it currently represents only 4% of the world market, Latin America is the zone with the highest growth rate, with over 13.9% annually.[55]

The video game industry in the region is attractive and holds a great potential, both on a local and international level. One clear example is Papumba, an Argentinian start-up in educational games for children which, in only three years, has surpassed more than 10 million downloads in 143 countries.

23

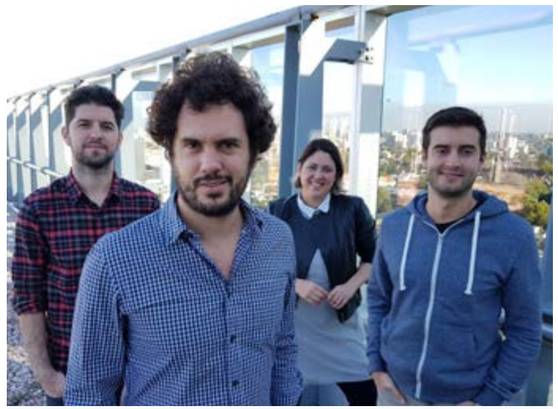
Papumba

/ INTERACTIVE GAMES

PAPUMBA

Argentina – Available in 18 languages

Papumba is a firm whose mission is to democratize quality early childhood education by using educational toys that stimulate cognitive and social development in children between the ages of 1 and 6.



Papumba is available in 18 different languages and has been downloaded more than 10 million times in 143 countries. With over 10 years of experience in the world of video games, the team has recently launched Papumba Academy, an early-childhood education platform with a complete curriculum for children between the ages of 1 and 6, which can be accessed with a cell phone or tablet.

FOUNDERS

Gonzalo Rodríguez, Santiago Capurro and Pablo Capurro

YEAR FOUNDED

2015

USERS

10,123,829 application downloads
750,000 users per month

WEBSITE

www.papumba.com

Education · Edu-Tech · Educational Video Games · Applications · Software

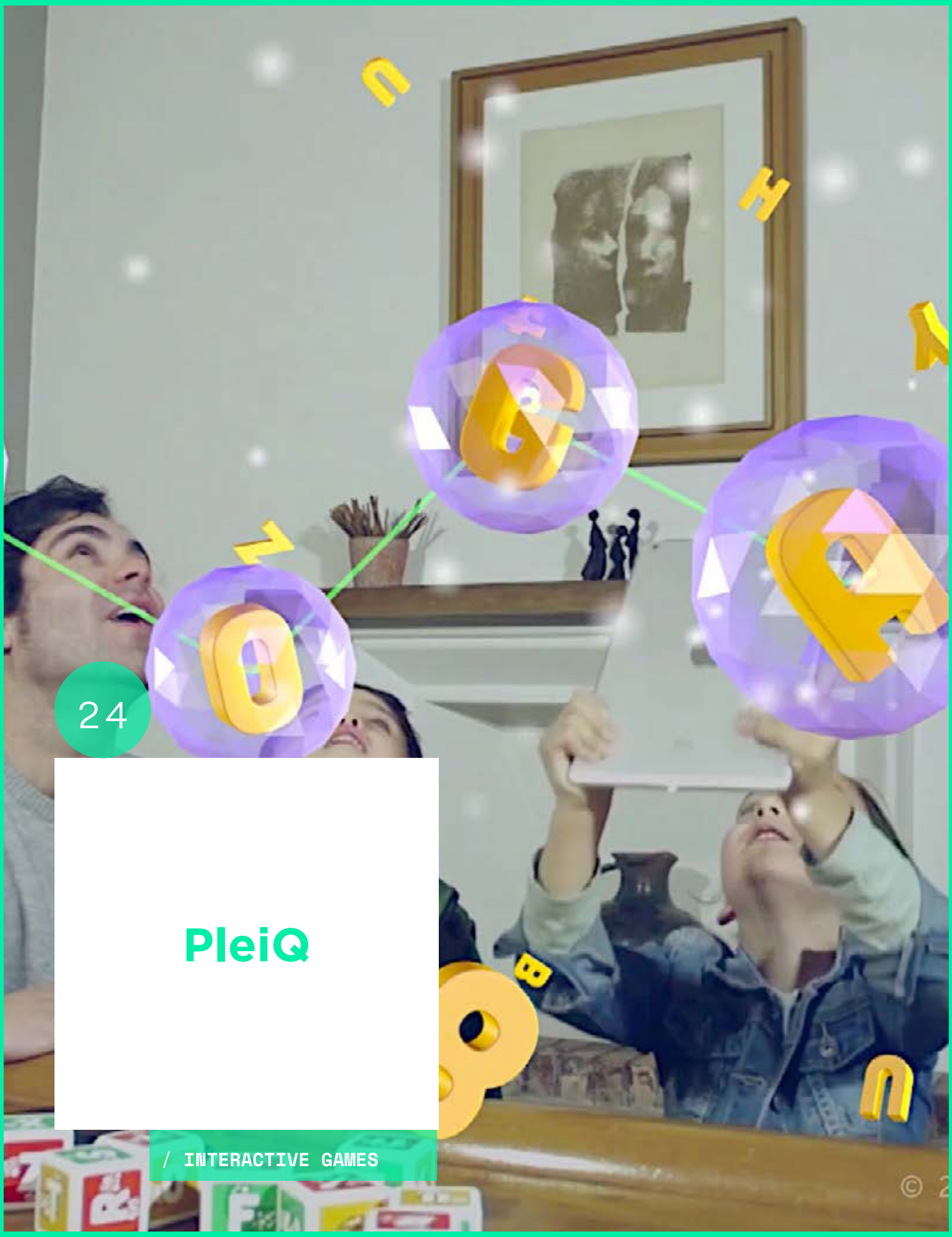
To date, Animal Sounds is the most used learning application among children in the world.

WHY IT WAS DEVELOPED

The team had been noticing that children were using technology purely as entertainment. The applications contained no cognitive stimulation and they were continuously being interrupted by advertisements. To top it off, the children were consuming video games in other languages. The team decided that it was time to work on an application that would be entertaining and adapted to the context and language of each country. It would also serve as a connection between children and their parents and teachers. Today, Animal Sounds is the most-used application to learn about animals among children in the world.

HOW IT MAKES LIVES BETTER

In this age when children are born surrounded by technology, it is crucial to put it to good use so that their lives can be impacted in a positive manner. With an intuitive focus that is personalized for each country, Papumba helps stimulate the imagination and fosters development and learning in pre-schoolers while they play. It also combines off-line experiences with the use of applications to promote enjoyment to be shared by the whole family.



24

PleiQ

/ INTERACTIVE GAMES

PLEIQ

Chile and Venezuela

PleIQ combines the physical world with the digital world to reinvent educational toys for children.

FOUNDERS

Edison Durán Lucena, Antonio da Rocha, Nastassja Palmiotto, Alejandro Pérez and Ilan Durán

YEAR FOUNDED

2016

USERS

Over 3,000 users

WEBSITE

www.pleiq.com

PleIQ consists of an application and a traditional toy made of eight cubes. It helps stimulate the development of capabilities in areas such as linguistics, music, logic, synaesthesia (corporal intelligence), visual and interpersonal skills, through 48 activities that use interactive 3D, augmented reality, and artificial intelligence. It also has a platform for parents where they can monitor the performance of their children and receive personalized recommendations to help them work on their weaknesses. PleIQ also offers a group version for teachers and schools.

Education · Edu-Tech · Interactive Toys · Augmented Reality · Initial · Video Games · Applications · Web Platform

PleIQ helps close the educational gaps among little ones.

WHY IT WAS DEVELOPED

Less than two-thirds of children in Latin America receive early-childhood education, according to a 2015 UNESCO report. Given the high penetration of mobile technologies, soon there will be more children in Latin America with smart phones and tablets than with access to pre-school education. PleIQ helps close the educational gap among little ones.

HOW IT MAKES LIVES BETTER

Early childhood education (between 0 and 5 years and up to age 8) has a fundamental impact on the cognitive development of children. During this crucial stage, they develop the majority of their functional skills, which tend to have a great influence on the rest of their lives.

Music

Music

CATEGORY

Music

In

2018

Latin America represented the highest growth rates for combined physical and digital revenues in the world.[56]

Latin America
is the region where revenues for recorded music have grown—increasing by 48.9% between 2017 and 2018.[57]

39,3%
Brazil

16,3%
Chile

14,7%
Mexico

9,0%
Colombia

The highest digital growth rates, specifically for streaming.[58]

GLOBAL VISION

Streaming undeniably occupies a privileged position in the music industry. In 2017, on an average day the amount of streaming (1.67 billion) doubled the number of downloads carried out during the entire year (563.7 million)[59] In 2018, the total number of transmissions of on-demand audio songs reached 611 billion, a considerable 49% increase, compared to the same period of 2017.[60] During the last 15 years, the music industry has suffered a loss of nearly 40% of its income.[61] With the arrival of streaming services, however, the industry rebounded, reaching an annual growth in income of over 5.9% with more than 100 million users all over the world that pay for subscriptions. In this context, digital music accounts for 50% of global profits for pre-recorded music.[62] Production houses, distributors, concert organizers and different actors in the industry are now obliged to direct the digital evolution, by continually innovating to find better ways for artists to distribute their music and connect with their fans.

LATIN AMERICA AND THE CARIBBEAN

Latin America experienced the highest growth rate in the world for revenues from the combination of physical and digital music. In 2018, music industry profits grew by 16.8% and by 39.2% in profits from streaming. In June of 2018, the most listened to artist on Spotify in the world was the Colombian, J. Balvin and in September he became the first Latin American artist to reach one billion on-demand transmissions on Apple Music. What was surprising to many was that these achievements were made by an artist in Spanish.[63]

Some of the most used platforms in the region are Spotify, Deezer, Apple Music and Tidal. In spite of this, the biggest challenge for Latin America is to change the form of monetization for this industry, because income generally comes from the advertisements in the free versions of streaming, instead of from the number of users that pay subscriptions. In 2018, Will Page, the economic director of Spotify, had already noted the power of Latin America, where Mexico and Brazil outrank Germany and the United Kingdom in terms of the number of users. Today (2019) he recognizes that they have been able to build a market that they never expected. For example, Chile is now one of their fastest-growing markets, even though the company has no employees in the country.[64] The influence of users in Latin America has reached the point where now some 6 out of every 10 of the “best music videos” the world over are predominately in Spanish. In the region, this way of consuming music has created an appetite for living new musical experiences. Weeshing in Chile, for example, is a crowdinvesting platform for music lovers that makes it possible to collectively invest in the organization of a concert with their favorite artists. Another example is Filmtrax from Peru, a platform that offers a large audio library with licenses for video musicalization professionals, filmmakers and producers, enabling them to more easily acquire licenses and make artists more well known.

bquate

is not a record label

25

Bquate

/ MUSIC

BQUATE

Colombia, Mexico, Peru, US

Bquate is an artificial intelligence platform which assists established record labels, publishers, managers and creators to administer the music business on a global level.

FOUNDERS

Yoly G. Ávalos and David Ogden

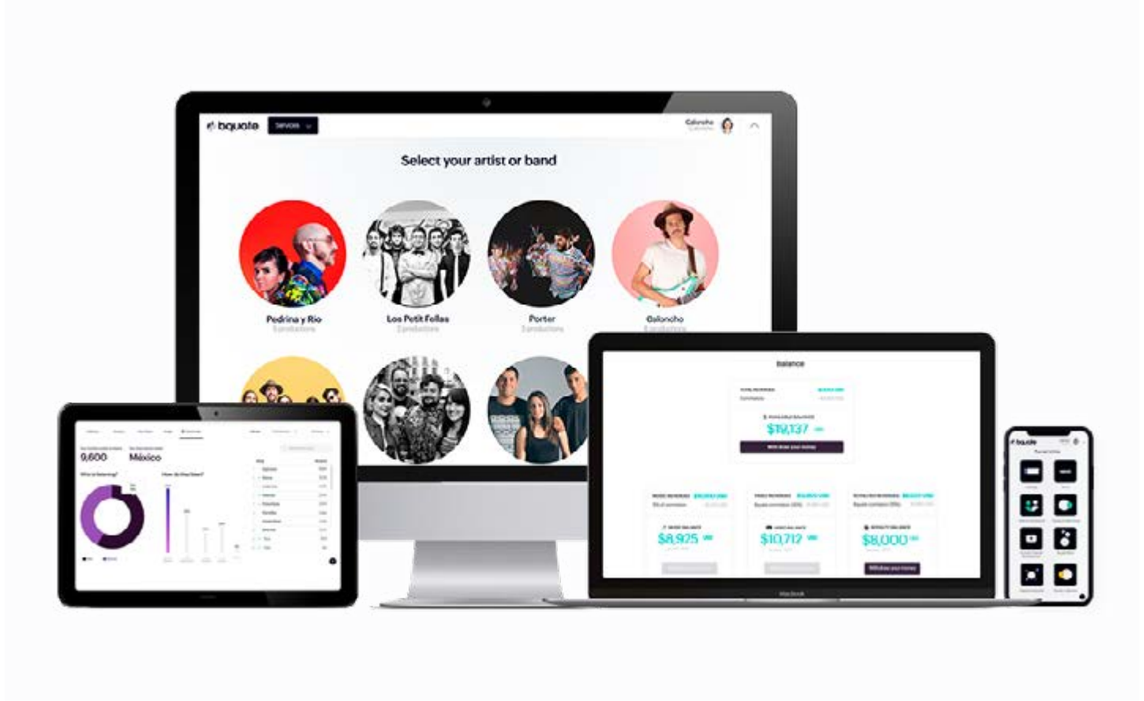
YEAR FOUNDED

2014

WEBSITE

www.bquate.com

Art and Culture | Music | Music Market | Support Media for Digital Content | Artificial Intelligence | Digital Distribution | Copyrights



Artists focus on their creations and cannot necessarily distribute them and protect their rights.

WHY IT WAS DEVELOPED

Artists tend to focus on their creations and do not necessarily have the ability to distribute and protect their rights, much less easily manage all the aspects of the music business.

HOW IT MAKES LIVES BETTER

Bquate offers a solution to thousands of artists, record labels, managers, composers and publishers so that they can connect and administer their creations, royalties and the distribution of profits in a transparent manner.

26

Filmtrax

/ MUSIC

FILMTRAX

Peru

Filmtrax offers an online catalog of independent Latin American musicians, which can be used by interested buyers to obtain the rights for movies, videos, social media, educational materials and other similar products.

Filmtrax has made it easier for a vast number of Latin American musicians to sell their music, since it is associated with several distributors around the world and its online system makes it possible to obtain the rights to music in accordance with international regulations. This Peruvian firm has been the first to participate in the renowned Cannes MIDEM event, the international B2B musical event for key players in the music business.

FOUNDERS

Carlos Vidal Paulinich, Camilo Riveros Vásquez and Patricia López Cabrera

YEAR FOUNDED

2015

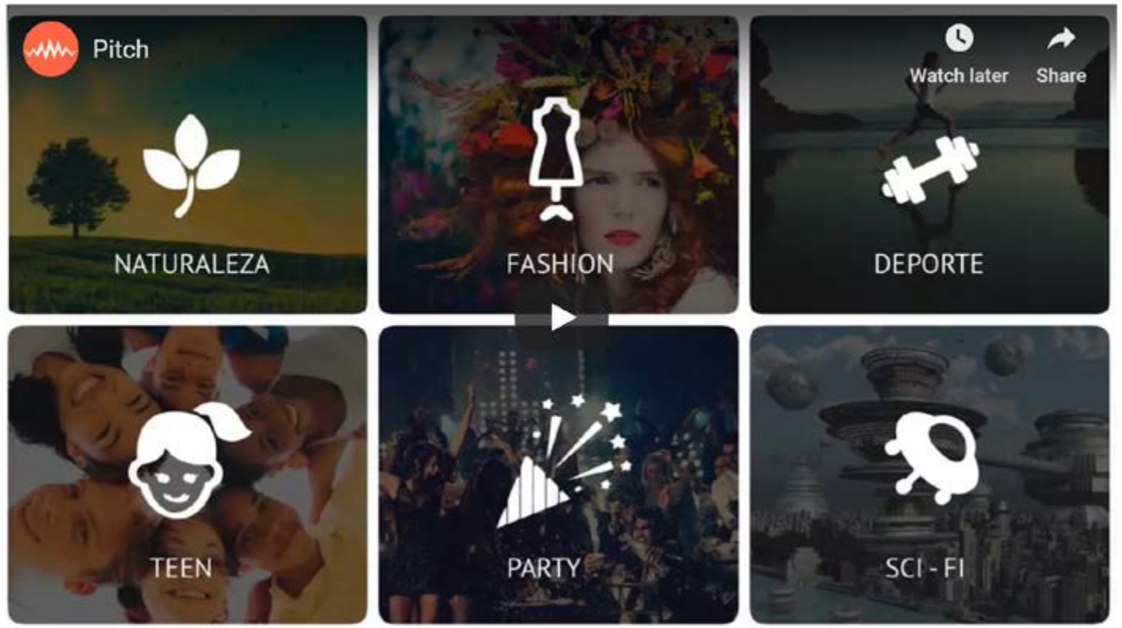
USERS

400 audio-visual creators registered on the platform

WEBSITE

www.filmtrax.com

Art and Culture | Music | Online Publisher | Support Media Intellectual Property | Propiedad Intelectual | Movies | Copyrights and Related Processes | Digital Distribution | Television and Video



Filmtrax has allowed a vast number of talented Latin American musicians to sell their music.

WHY IT WAS DEVELOPED

Copyright protection continues to be overlooked in Latin America and the Caribbean. More than 65.2% of authors do not register their creations. Filmtrax facilitates the process by professionalizing the music licensing of audio-visual works, such as movies, series and commercial videos.

HOW IT MAKES LIVES BETTER

The centralization of the process to use music for cinematographic works and television makes it easier to acquire the licenses to use musical pieces. At the same time it helps the artists and creators to make themselves known, profit from their creations and take advantage of copyright protection.

27

Weeshing

/ MUSIC

WEESHING

Chile, Argentina, Colombia, Costa Rica, US, Mexico, Peru, Uruguay

Weeshing is a crowd-investing platform for music lovers to collectively invest in their favorite artists and obtain a return on their investment.

Crédito NXTP Labs

FOUNDERS

Cristian Urrutia, Rodrigo Segal,
Javier Hasbún and Juan Pablo Duc

YEAR FOUNDED

2014

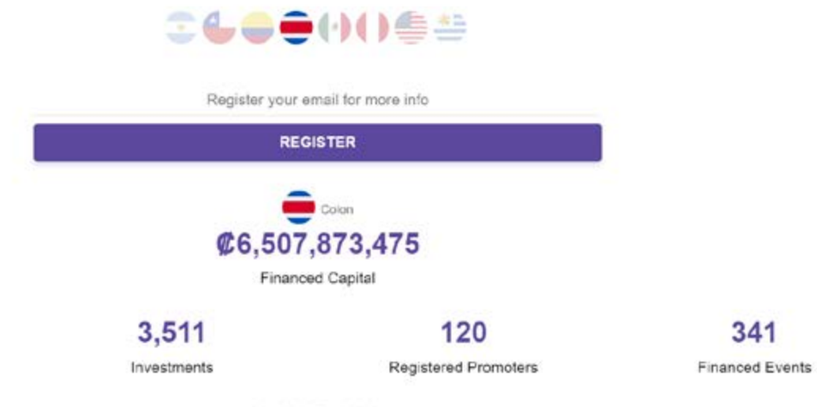
USERS

Over 16,000

WEBSITE

www.weeshing.com

Art and Culture | Music | Blockchain | Crowdsourcing | Concerts | Crowdinvesting



Weeshing has been able to raise more than US$10 million dollars through more than 240 concerts.

WHY IT WAS DEVELOPED

Weeshing creates a space for those who have a proposal for an event, even if they do not have the contacts necessary to obtain economic backing.

HOW IT MAKES LIVES BETTER

This is a profitable enterprise that has been able to raise more than US$10 million dollars through more than 240 concerts. It provides fans with a simple way to invest in their favorite bands by sharing in the risks of putting on a show but they can also obtain returns when a sufficient number of tickets are sold.

New Media

CATEGORY

New Media

At the world level, users prefer to receive news through:

71% text and images

14% text and video

9% video

6% do not prefer one format over another.[65]

74% of information is consumed through smartphones in Mexico, Argentina and Chile.

Social networks are the main source of information and news in Latin America and the Caribbean.

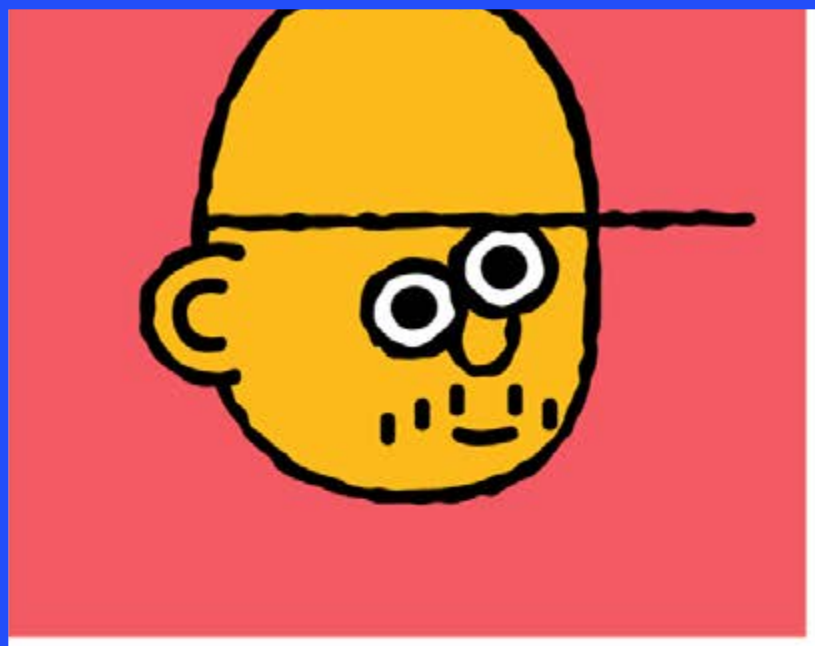
GLOBAL VISION

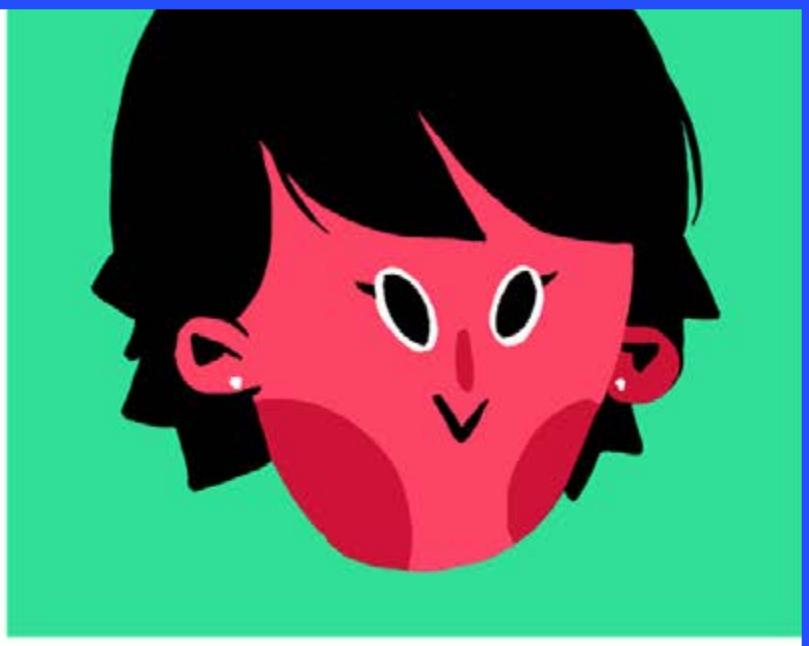
Internet has gained ground over traditional media to become the preferred newsource, given that it is easy to connect to it from any place in the world, at any hour and find information on any topic. Mobility is one of the factors most responsible for the dominance of internet in media. People are spending less time in front of the television and in turn, most people take advantage of time commuting to work, in the bathroom, in a waiting room, or in bed, to check the news on their smartphones or cell phones.[66]

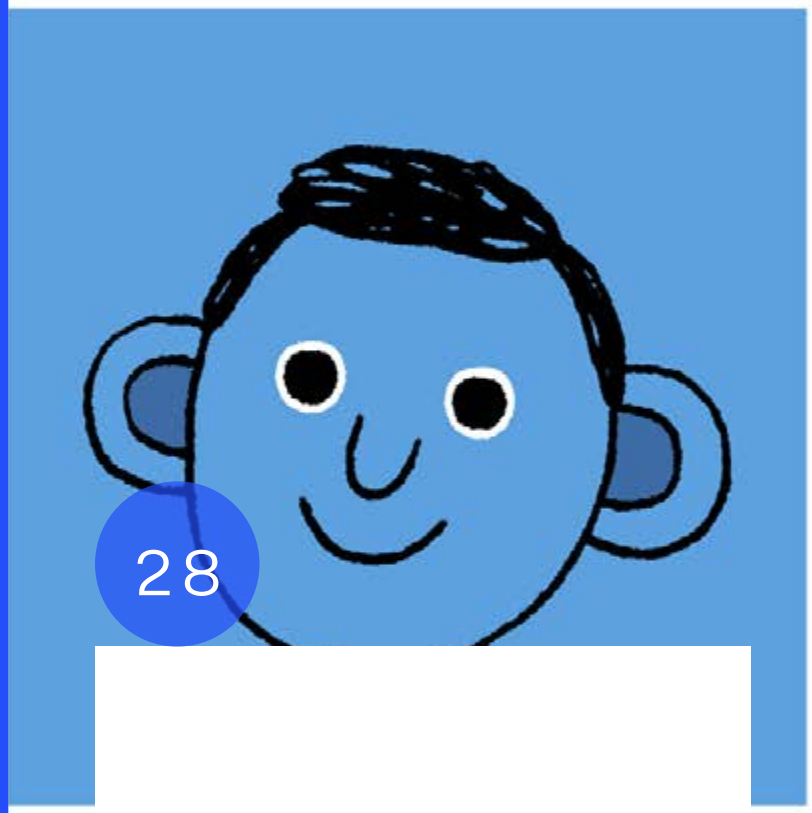
Currently, 71% of users prefer to receive news by means of texts or images; 14% via text and video; 9% by video, and 6% have no particular preferred format. Therefore, new proposals are being offered for presenting, distributing and consuming the news. This is the case with Google News or Reddit, two of the most-used information applications in the world, which in some cases have become the newsources for traditional media.[67]

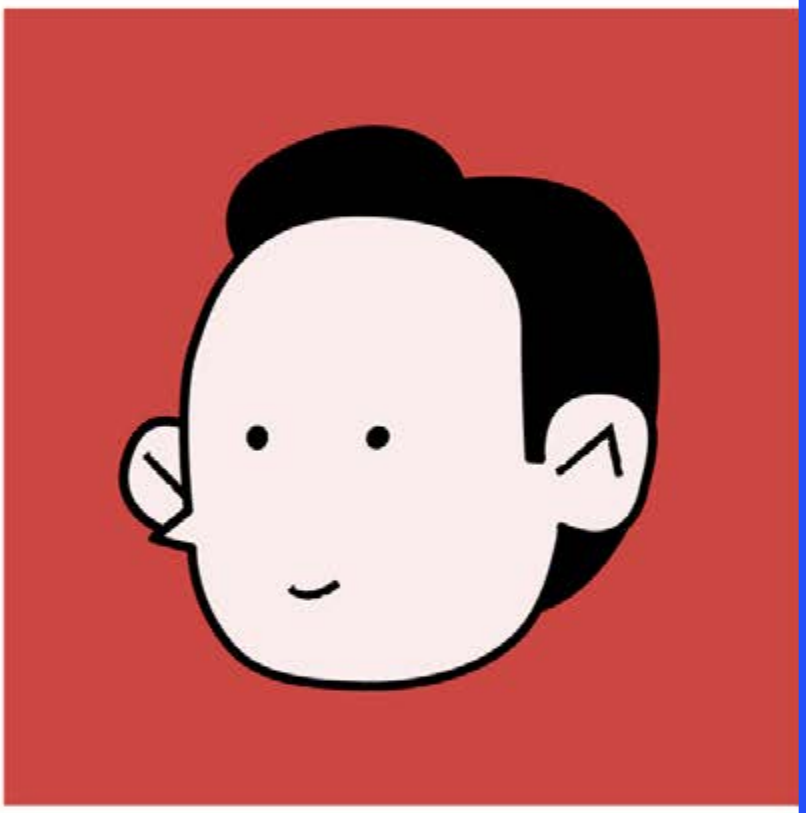
LATIN AMERICA AND THE CARIBBEAN

In Mexico, Argentina and Chile, 74% of information is consumed via mobiles. Outside of social networks, most users connect to foreign applications to see the news.[68] Technology is becoming increasingly more important for the information media in Latin America. For the most part, content to inform the user varies from live transmissions and content in real time on social media the to use of augmented and virtual reality and artificial intelligence. Proposals such as Pictoline is one of the most creative trends to show complex content, such as news, science, medicine and economics in a simple way that attracts attention by means of comic strips or Gifs. Another application is SkyAlert, which warns users of approaching seismic activity on their mobile devices, 120 seconds before it occurs. Both start-ups are from Mexico.









28

Pictoline

/ NEW MEDIA

PICTOLINE

Mexico, US and Spanish-speaking countries of Latin American

Pictoline is an information design company created to tell a story in only a few seconds.

Pictoline converts science, medical, economic, historical news and relevant data from other disciplines into info-graphics, comic strips or GIFS, which the team calls bacons. In a little more than a year after entering the market, it became one of the highest-impact visual communication projects in the world. It has become the benchmark for information media in Spanish-speaking countries with more than four million followers on social networks.

FOUNDERS

Eduardo Salles and
Gustavo Guzmán

YEAR FOUNDED

2015

USERS

2.7 million followers on Facebook and
1.3 million on Twitter

WEBSITE

www.pictoline.com

Communication · New Media · Visualizations · Information Design · Visual Communication · Platform Online · Social Network

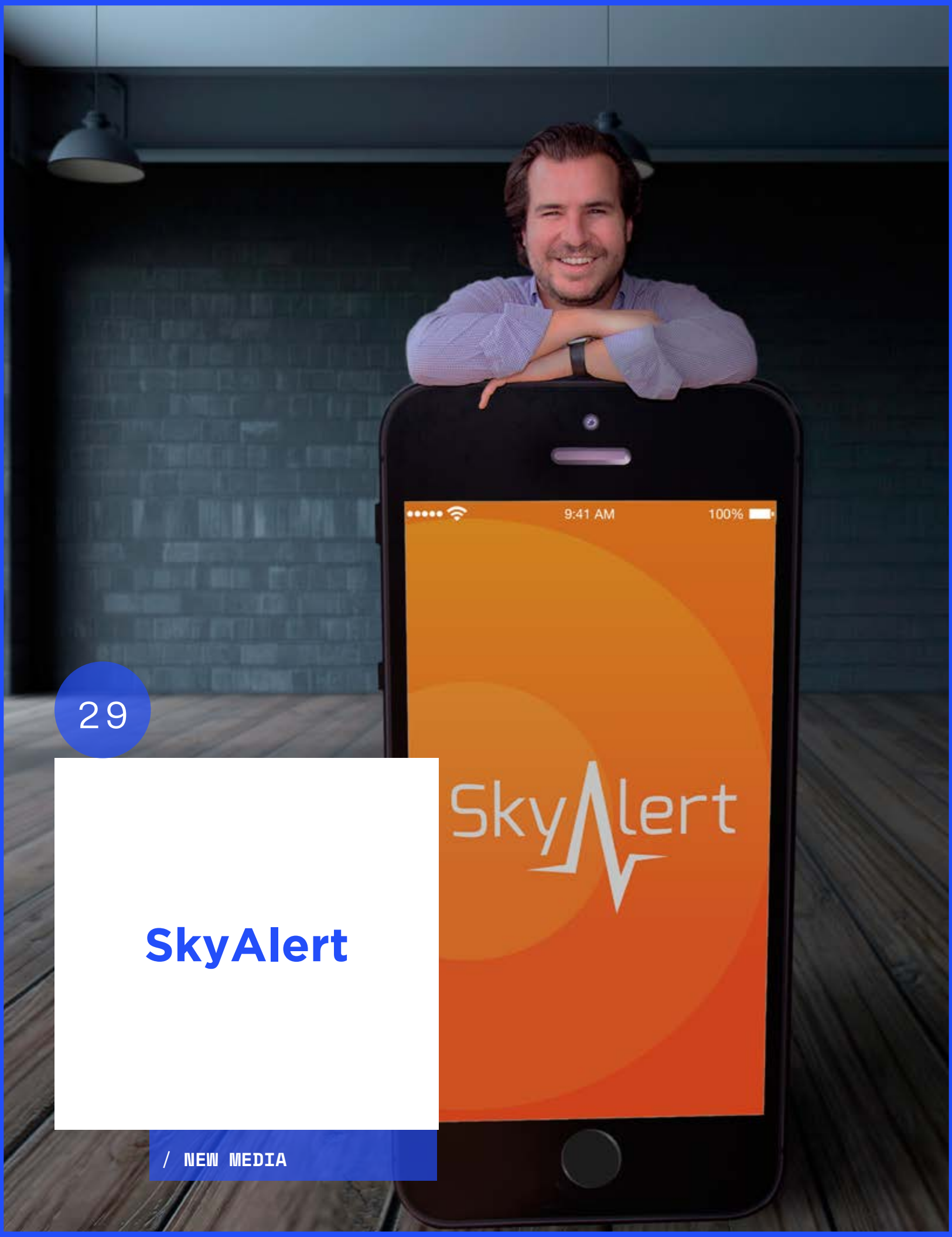
Pictoline uses a very creative method to synthesize relevant content.

WHY IT WAS DEVELOPED

In Latin America, 74% of information is consumed via smartphone, primarily through Facebook and WhatsApp. Technology has been crucial for the evolution of media and news channels, although the saturation of irrelevant content has been a challenge. Pictoline manages to synthesize content in a very creative manner.

HOW IT MAKES LIVES BETTER

Pictoline is a reliable medium for keeping track of what is happening in one's country and in the world. Through the "design of information", the ability to synthesize and fast publication, Pictoline has assumed the task of explaining complex concepts and situations through easily assimilable images.



29

SkyAlert

/ NEW MEDIA

SKYALERT

Mexico, US

SkyAlert is the most advanced earthquake warning system for Mexico and for California, Oregon and Washington in the US.

SkyAlert has its own network of sensors that can detect an earthquake some 120 seconds before it actually begins. This gives enough time for users to move to a safe place. Users can receive warnings with SkyAlert's different products. The application is for personal use and for companies that have Epicenter.

FOUNDERS

Alejandro Cantú Segura and
Alvaro Velasco

YEAR FOUNDED

2011

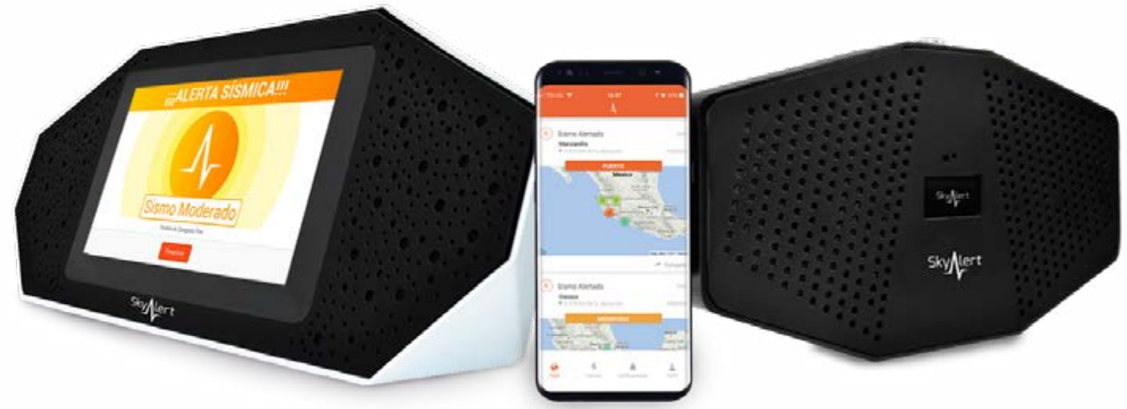
USERS

Over 2.4 million active users per month

WEBSITE

www.skyalert.mx

- Environment and Natural Disasters
- Earthquake Warnings
- Earthquake Prevention
- Earthquake Sensors
- Business Security
- Seismic Warning Apps
- Meteorological Warnings
- Prevention Technological Platforms
- IP Software
- Sensors
- The Internet of Things



The application is for personal use and for companies that have Epicenter.

WHY IT WAS DEVELOPED

In zones with high earthquake activity, it has been necessary to invest in infrastructure to warn citizens of possible earthquakes that could harm them or endanger their lives. Unfortunately, the infrastructure has not always functioned efficiently, at times failing to provide any warning. SkyAlert was created to fill this void with an application and with equipment for firms.

HOW IT MAKES LIVES BETTER

Persons who have installed the SkyAlert application or companies that have the Epicenter Service receive continuous information on seismic movements that could affect various cities in Mexico, or those connected to the system in the US.

30

The Other Guys

/ NEW MEDIA

THE OTHER GUYS

Costa Rica, Argentina

The Other Guys is a video game studio with more than a decade in the game industry. It has created successful applications that break out of the mold, with interactive series where the user makes decisions to define the characters and course of the story.

FOUNDERS

Augusto Petrone, Pablo Mayer and Nicolás Cuneo

YEAR FOUNDED

2013

WEBSITE

www.other-guys.com

Art and Culture · Storytelling · Video Games · Art and Technology · Applications

The vision of The Other Guys is to become the Netflix of video games.

WHY IT WAS DEVELOPED

The Other Guys see an opportunity in the fact that there are already enough balloon-popping and farming games on the market. It concentrates on providing episodic adventures that are shaped by the users. Their vision is to become the Netflix of video games.

Robotics

CATEGORY

Robotics

In the last

decade

the robotics market has experienced annual growth rates of between 12% and 16% at the world level.[69]

The main applications

of robotics in Latin America are in health, education, and the manufacture of drones.[70]

GLOBAL VISION

In the last seven years, robotics has been one of the most disruptive and innovative areas in the industry of technology.[71] Between 2000 and 2015, the demand for industrial robots, to be used mainly for manufacturing, construction, medicine, logistics, marketing and agriculture, went from 99,000 to 434,00 units.[72] Because of robotics, South Korea, Singapore, Germany and Japan are the most automated, with an average of 74 robots for every 10,000 employees.[73] For the next decade, it is projected that the main sectors of this technology will be for the building of humanoid robots, for the military industry, education, and healthcare.[74]

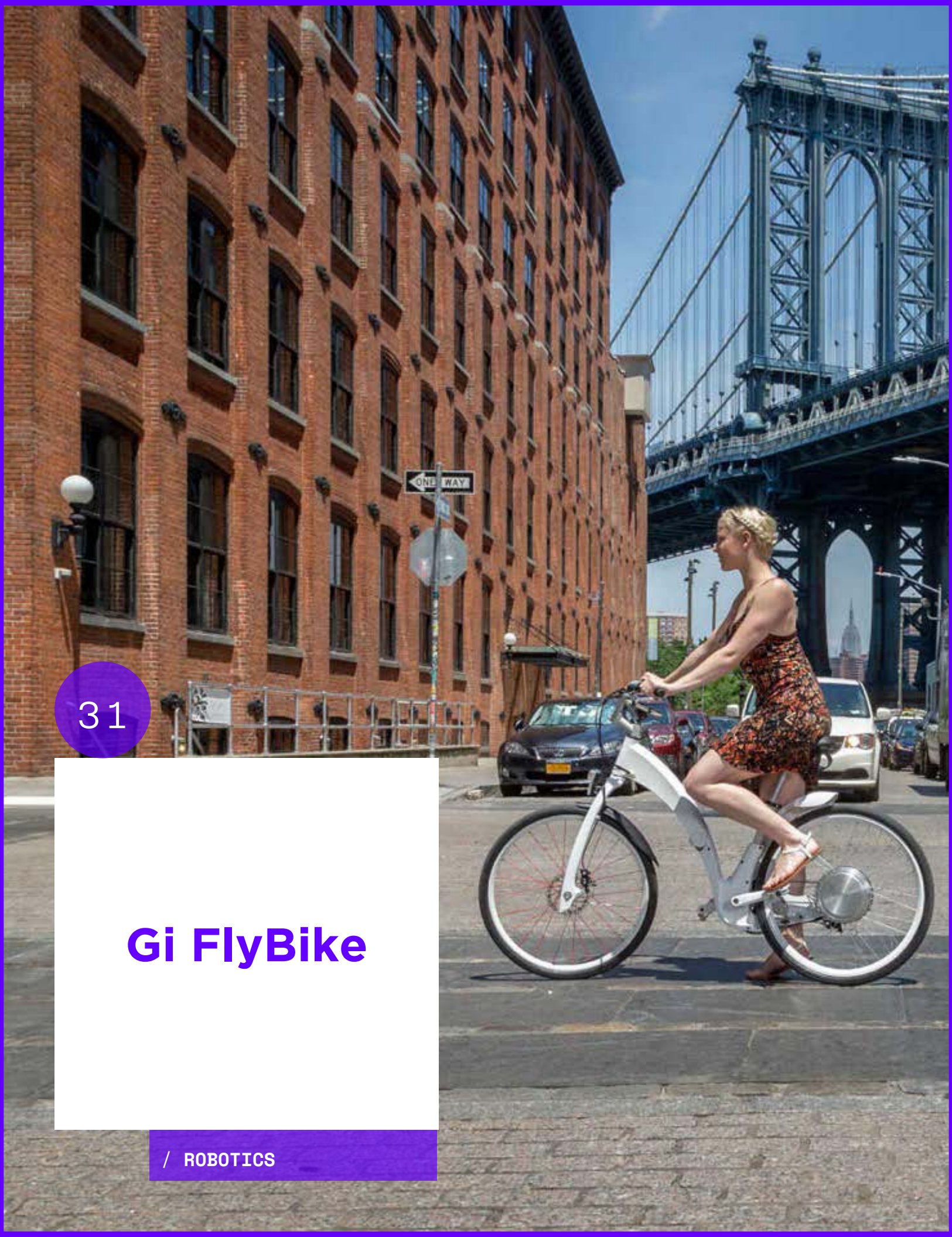
According to a report from the International Robotics Federation, emerging companies are concentrating on: 25% in aerial logistics, security, military use, energy and science; 9% in domestic cleaning and security; 7% in medicine, surgery and rehabilitation; 6% in agriculture; 5% in education and recreation and 3% in personal service.[75] Furthermore, the report asserts that the four factors for determining success for start-ups in robotics are: to focus attention on user experience, affordability, size and practicality and the development of open source software.[76]

LATIN AMERICA AND THE CARIBBEAN

The manufacture of drones and applications in health and education are key areas for the advance of the robotics industry in the region.[77] Mexico is the main emerging robotics market in Latin America, with 5,900 units sold in 2016,[78] followed by Brazil.

Robotics has also become a tool for learning in multiple environments.[79] One example is that in Mexico and Brazil, nearly 24% of teachers feel that they are not sufficiently well-prepared for their work because of a lack of support tools.[80] Developments such as Tomi7, a robotic teaching assistant, digitalizes classrooms by helping teachers to prepare classes, grade exams, personalize study plans, project in augmented reality and generate student performance reports. Regarding the area of healthcare, Colombia was the first country of Latin America to perform robot-assisted surgery,[81] that is less invasive, permits more precise incisions and results in a faster recovery than normal surgery.

Other developments, such as Po from Paraguay, use 3D printing to create biometrically compatible and low-cost hand prostheses. In manufacturing, it is expected that by 2019, at least 4,700 industrial robots will be installed in the region, mainly in Brazil, to optimize production processes and increase levels of competitiveness in various industries.[82]



31

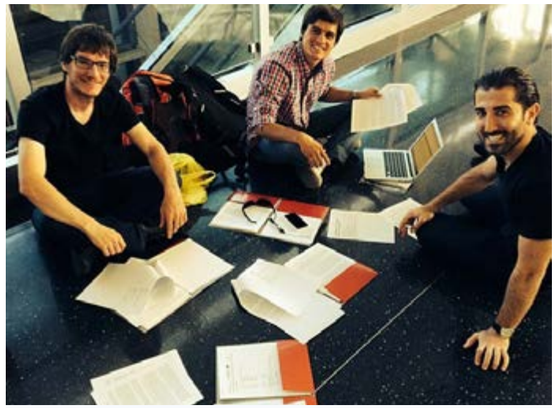
Gi FlyBike

/ ROBOTICS

GI FLYBIKE

Argentina, US and China with exports to more than 30 countries

The first electric bicycle that folds up in a second and that can be controlled via mobile application.



GI Flybikes can be operated through a wireless mobile application which controls all of its functions, including a smart blocking, navigation system, smart lights and electric assistance. In addition to sharing favorite routes on social media and tracking personal physical statistics, GI FlyBike is made of a totally recyclable and ultralight aircraft aluminum alloy, that withstands a speed of up to 25 km per hour and a distance of up to 65 km per battery charge.

FOUNDERS

Lucas Toledo, Eric Sevillia and Agustín Augustinoy

YEAR FOUNDED

2014

USERS

450 bicycles sold in five hours on a crowdfunding/Kickstarter pre-sale.

WEBSITE

www.giflybike.com

Sustainable Transport

Smart Technology

Fitness | Recyclable | Electric Bicycles

Cities of the Future | Green Technology

Gi Flybike believes that its design and intelligent technology make it a next-generation vehicle.

WHY IT WAS DEVELOPED

While the founders were living and working in Argentina, a national strike paralyzed public transportation in the entire country. The strike inspired them to think deeply about the problems that face commuters and critically examine alternatives to public transportation. They looked for an agile system that would have the least possible environmental impact. This was the inspiration for Gi Flybike.

HOW IT MAKES LIVES BETTER

Over 35 million electric bicycles were sold in the world last year, making it the fastest-growing type of transportation. Gi Flybike believes that its design and smart technology will make it a next-generation vehicle leading to more effective and environmentally-friendly cities and happier travelers. Its characteristics make Gi Flybike a transportation option that is a sustainable, technologically-advanced, and perhaps most importantly, practical way of improving the experiences of urban commuters.

32

HandsFree Institute

/ ROBOTICS

HANDSFREE INSTITUTE

Brazil

Handsfree Institute designs and develops products with low-cost assisted technologies that give autonomy to persons with physical disabilities.

Among their products are the “module mouse,” a computer mouse that is controlled with head movements, and “residential automatization,” which makes it possible to remotely control televisions, lights and other household electrical appliances.

FOUNDERS

Sérgio Maymone and
Philippe Magno

YEAR FOUNDED

2015

WEBSITE

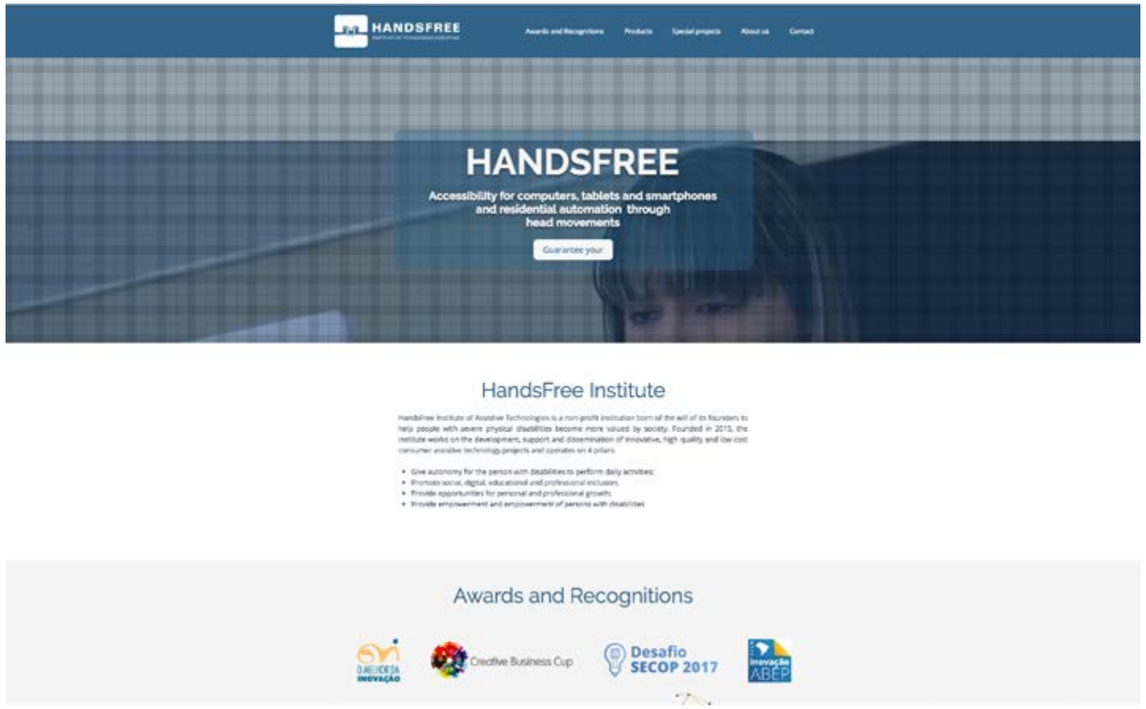
www.institutohandsfree.org.br

Health

Assisted Technology

3-D Printing

Open Source



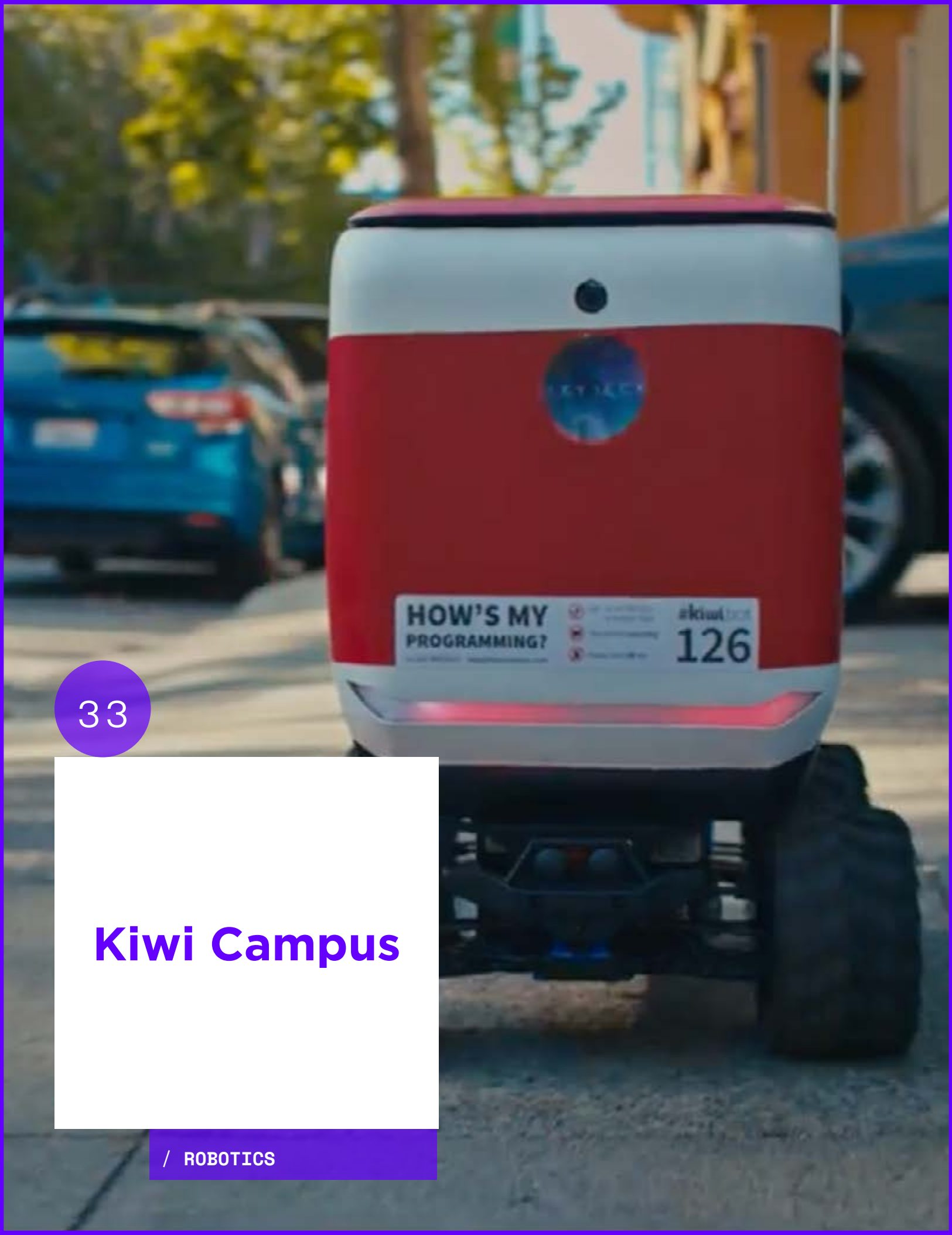
15% of the world’s population has some type of disability.

WHY IT WAS DEVELOPED

The objective of HandsFree is to help persons with physical disabilities to recover the use of a missing limb. These devices provide assistance for everyday activities at home or can also help them return to activities in society, at school and at work.

HOW IT MAKES LIVES BETTER

Some 15% of the world’s population has some type of disability. The products created by HandsFree promote autonomy and digital, social, educational and workplace inclusion for persons with limited or diminished motor skills. These devices allow the user to operate computers, tablets and smart phones, which improve their quality of life and sense of belonging within society.



33

Kiwi Campus

/ ROBOTICS

KIWI CAMPUS

Colombia, US, Mexico

Kiwi Campus is an autonomous robot network that can take charge of food delivery around university campuses. The robot receives the order and uses computational vision algorithms and machine learning to find the way to its destination, assisted by a remote operator in Latin America.

FOUNDERS

Felipe Chávez, Sergio Pachín and Jason Oviedo

YEAR FOUNDED

2017

WEBSITE

www.kiwicampus.com

Transport · FoodTech · College Student · Robotics · Delivery · Industrial Design · The Internet of Things · Computer Vision · Artificial Intelligence · Home Delivery · Machine Learning

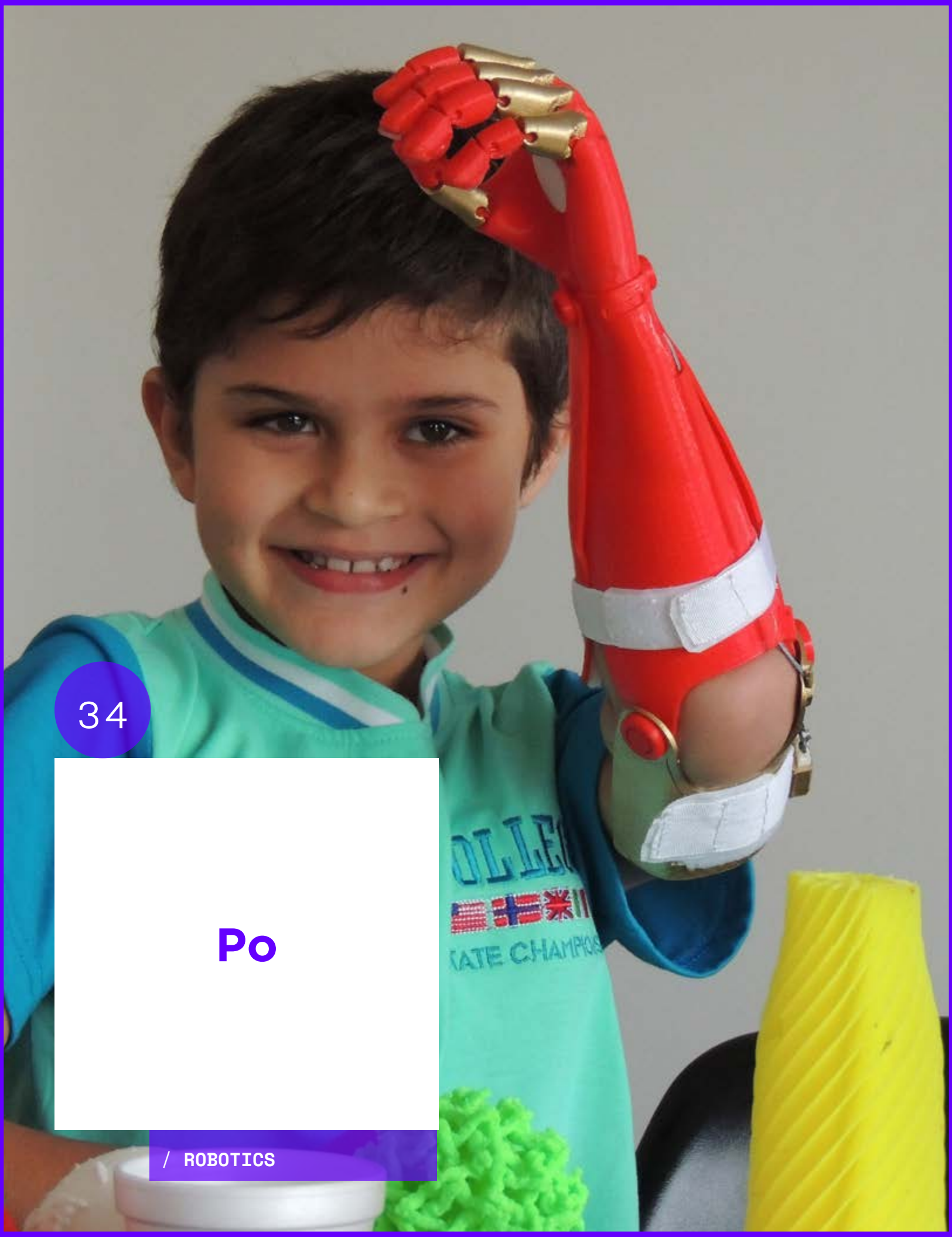
Kiwi Campus plans to create the largest autonomous logistics network for local deliveries.

WHY IT WAS DEVELOPED

This transportation medium is considerably cheaper than contracting food delivery personnel. Kiwi Campus plans to create the largest autonomous logistics network for local deliveries.

HOW IT MAKES LIVES BETTER

It offers a simple and inexpensive way to order food within universities, saving time and money for students.



34

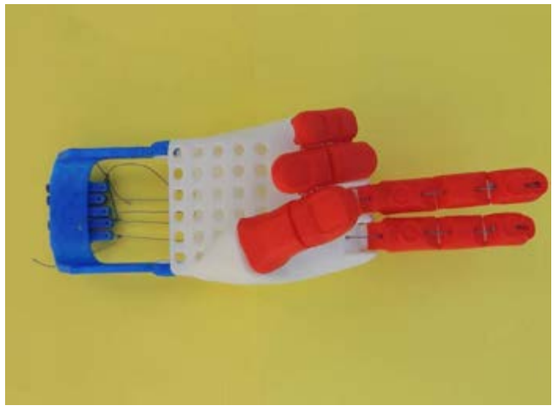
Po

/ ROBOTICS

PO

Paraguay

PO creates hand and arm prostheses via 3D printing. Its products are bio-compatible, long-lasting, water-resistant and can be personalized with the favorite colors and design of each user—all at a low cost.



FOUNDERS

Eric Dijkhuis and
Fernando Vallese

YEAR FOUNDED

2014

USERS

25 prostheses are delivered each month (2016 figure)

WEBSITE

www.po.com.py

Health

Industrial Design

3D Printing

Disability

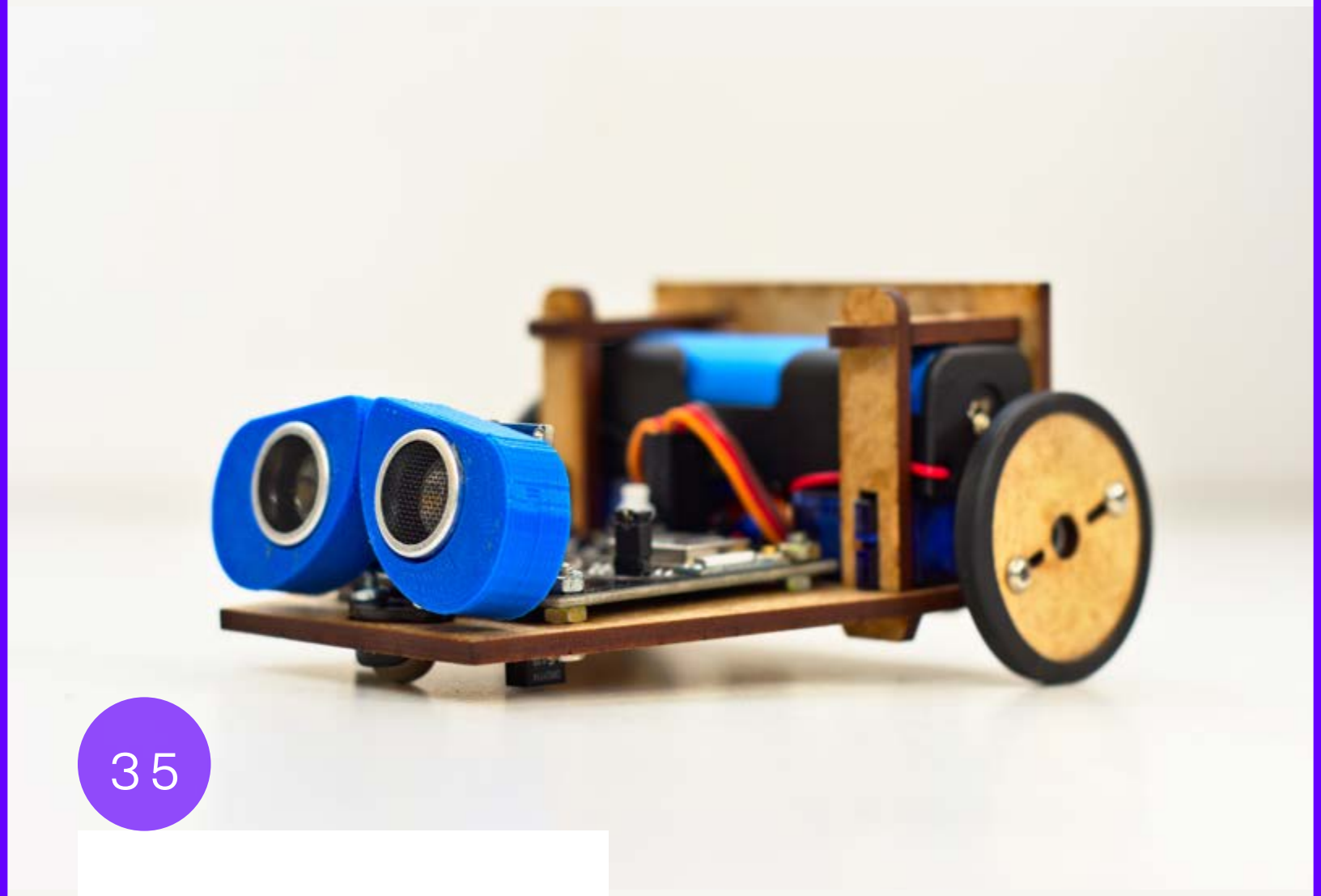
PO creates hand and arm prostheses produced with 3-D printers.

WHY IT WAS DEVELOPED

In Paraguay, less than 1% of persons who have lost an appendage can secure a prosthesis. PO provides a solution. For the cost of a regular prosthesis, Po can produce 100.

HOW IT MAKES LIVES BETTER

Po can fulfill the dream of obtaining a prosthesis in only 15 days, without costly surgery. This favors the most affected population of persons between the ages of 25 and 40. This technology can break the old paradigms of prostheses. A user can have positive feelings that his or her body is unique and above all, that it is possible to experience social inclusion, just like any other person, by recovering physical autonomy at home and in the workplace.



35

RoDI

/ ROBOTICS

RODI

Paraguay

RoDI is a didactic, wireless, small and low-cost robot made with open-source hardware and software.

Its purpose is to promote the development of computational thinking, programming and robotics for its beneficiaries. It connects to a simple wi-fi programming interface to be programmed by the user. Since it is a low-cost, free-source hardware and software proposal, it brings together a network of collaborators, ranging from professionals and technological enthusiasts to educational institutions and civil society organizations at both domestic and international levels.

FOUNDERS

Gary Servin, Patricia Escauriza, Martín Abente, Mauro Gavilán and Rafael Palau

YEAR FOUNDED

2014

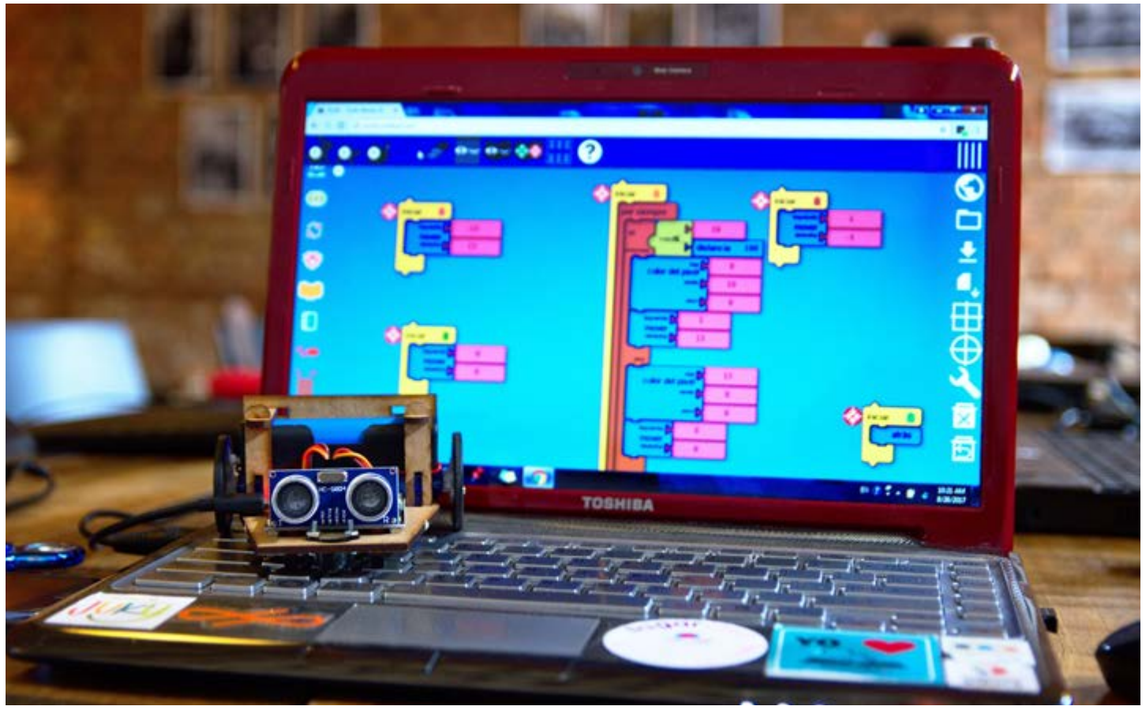
USERS

Over 300 users

WEBSITE

www.rodibot.com

Education · Robotics · Educational Robotics · Computational Thinking · Programing · Steam · Stem · Open Source



Its purpose is to promote the development of computational thinking, programming and robotics.

WHY IT WAS DEVELOPED

The objective is to make the learning of science and technology affordable, interesting, fun and completely didactic—even for those with no previous experience in robotics.

HOW IT MAKES LIVES BETTER

The use of low-cost, open-source hardware and software makes it is possible to bring robotics to more beneficiaries through workshops, courses at educational institutions or by purchasing the robot for personal or group use.

36

TOMi 7

/ ROBOTICS

TOMI7

Colombia

TOMi7 is a product designed to help professors from low-income institutions to give interactive classes without Wi-Fi connections.

Equipped with a Samsung Exynos 5 Octa processor, TOMi7 allows a professor to prepare the class, take role, grade exams, scan notebooks and even personalize a study plan for each student. Furthermore, the device shares internet content to students without the need of a wi-fi connection, projects augmented reality, converts any wall into an interactive screen, and sends performance reports to the parents of the students. TOMi7 gives teachers innovative and attractive digital resources which increase the interaction and participation of the students.

FOUNDERS

Juan Manuel Lopera and Alejandro Sepúlveda

YEAR FOUNDED

2009

USERS

More than 87,000 teachers

WEBSITE

www.tomi.la/es

Education · The Internet of Things · Augmented Reality · Artificial Intelligence · Classroom Interaction

Teachers must reach students who are increasingly more disperse and digital.

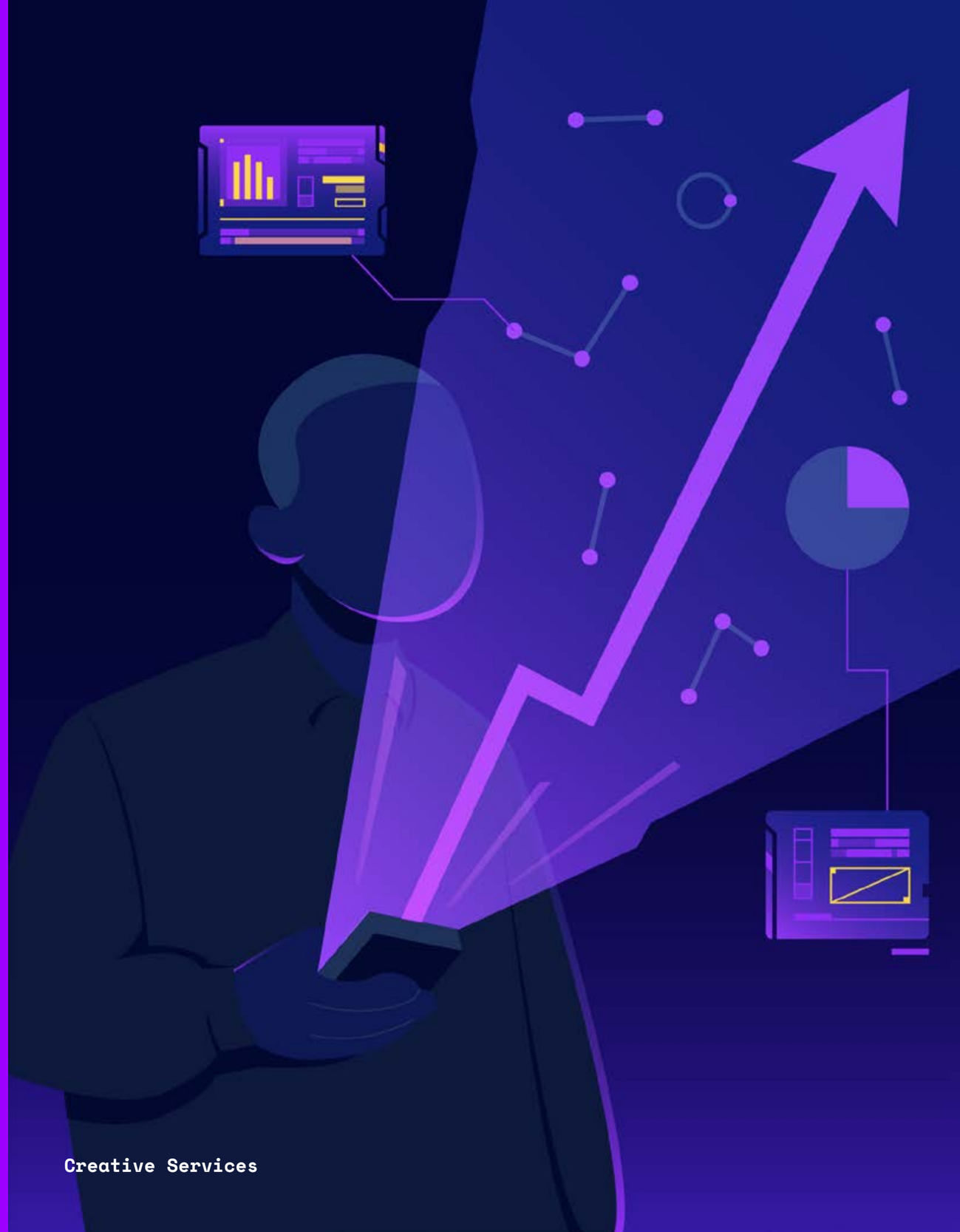
WHY IT WAS DEVELOPED

Teachers reach students who are increasingly more disperse and digital. Schools in poorer areas are the ones who are experiencing the greatest lags in technology and have little or no access to internet—making them fall even farther behind. TOMi7 was created to give professors an accessible tool that improves on the traditional methodology of Latin American schools while guaranteeing improved student output through interactive content.

HOW IT MAKES LIVES BETTER

TOMi7 facilitates and improves the processes of teaching and learning. In an era where students are digital, it is necessary to modify teaching methods to make students participate more in class, hold their attention for longer periods and motivate them to learn. This tool has been developed to be compatible with the Latin American system and is affordable and portable. It can transform any school room into a classroom with cutting-edge technology.

Creative Services



Creative Services

CATEGORY

Creative Services

Between
20% and 30%
of the economically active population works independently (freelance) in the United States and the European Union.[83] By 2020 it is projected that 43% of the world workforce will be freelancers.[84]

29,2%
of the world's free-lancers can be found in Latin America.[85]

The service economy
represents nearly 60% of GDP in Latin American countries and more than 80% in the Caribbean.[86]

GLOBAL VISION

Innovation in services increases productivity in firms, making it possible for small firms and entrepreneurships to be more efficient and thus save money. Currently, creative services are focusing on solutions ranging from project and team management to financial issues that deal with the specific needs of each sector.

According to a survey carried out by the Chicago Tribune, the most popular creative services among small and medium-sized businesses in the US are: Dropbox (data storage in the Cloud), Facebook (social media), Hootsuite (management of social media), Sales force (client services), Constant Contact (email campaigns) and Google Drive (organization of information).[87]

LATIN AMERICA AND THE CARIBBEAN

In Latin America and the Caribbean, one of every three workers is independent or a small employer.[88] Employment by project and freelancing is a trend that grew by 180% in 2016;[89] In Mexico, 58% of the workforce does a freelance job at least once a week and 6% do it full time; in Brazil, the figure is 28% weekly and 6% full time;[90] and in Argentina, there are 45% on a weekly basis and 9% full-time freelancers.
Altogether, it is expected that by 2020, 50% of workers will do their jobs remotely.[91] This growing trend implies that, in order to be competitive, we need to use tools that maximize our productivity. The new forms of working make it easier to form teams with specific and complementary skills to attract more innovation to meet some of the region's greatest challenges: productivity social inclusion and governance.[92]

Some of these solutions have been developed by entrepreneurs who were unable to find a way to complete a task. To solve the problem, they, would end up creating a tool, which would eventually turn into an entrepreneurship.[93] One example is the case of HackerHostel, a platform developed by StartupRobot, which facilitates the creation of start-ups in technology in Jamaica. Another is Workana from Argentina, who with their Freela calculator, helps Latin American freelancers to know how much they should be paid for their work and thus improve their connections with their clients.

37

Aiween

/ CREATIVE SERVICES

AIWEEN

Mexico

Aiween is a digital ideas market for the generation of innovation via crowdsourcing. The mechanism provides a space where companies propose challenges and there is a service to match the challenge with the best proposals for a solution.

FOUNDERS

Felipe Vega, Cecilia Vega, Fernando Gutiérrez, Marcela Velasco and Arturo Galván

YEAR FOUNDED

2015

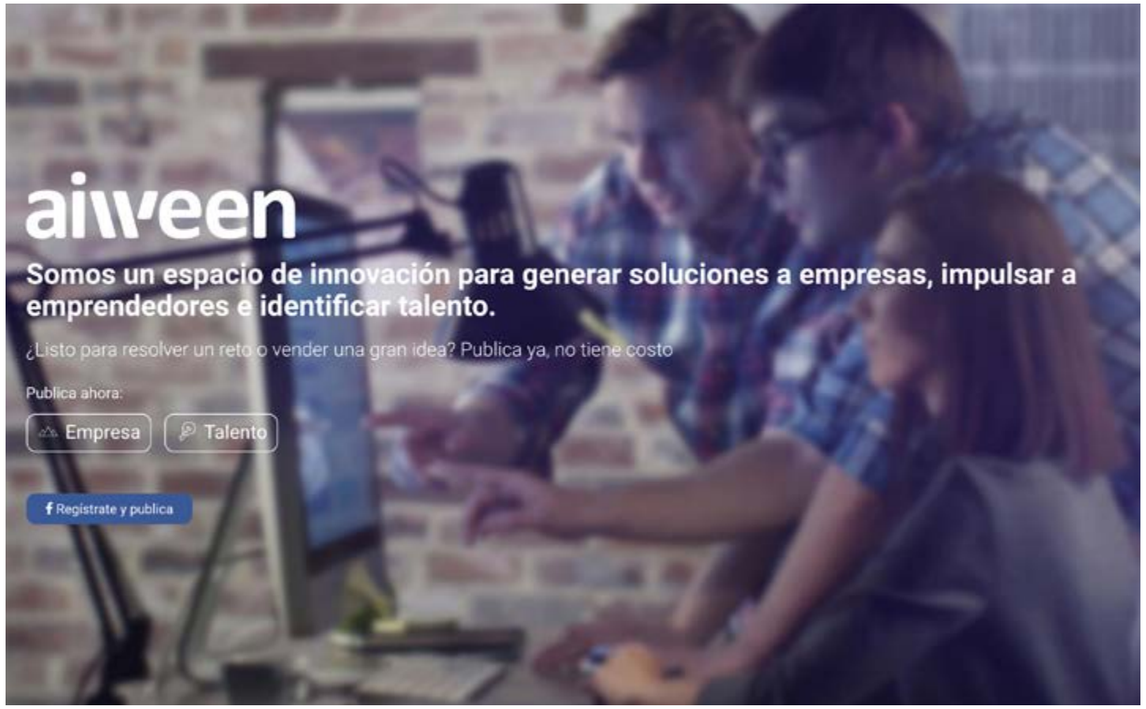
USERS

More than 26,700 users

WEBSITE

www.aiween.com

Innovation | Social Investment | Remote jobs | Equality | Creative Talent | Challenges | Crowdsourcing | Artificial Intelligence | Creative Industry



Aiween is a digital ideas market for the generation of innovation via crowdsourcing.

WHY IT WAS DEVELOPED

Aiween was built to meet the interests of the millennial generation as well as the digital challenges facing firms today.

On the other hand, digital business for firms will represents more than 30% of the world's advertising budget by 2020. The digital scenario is continually evolving and it is a fact that the new generations are the ones who can keep pace with its rhythm. An expansion of more innovative and flexible opportunities for new professionals is the value proposition of Aiween.

HOW IT MAKES LIVES BETTER

The proposal of Aiween is to promote talent and creativity to generate agile and competitive solutions, while achieving the insertion of young people into an economy that creates better firms and more just societies.

38

Alinha Institute

/ CREATIVE SERVICES

ALINHA INSTITUTE

Brazil

Alinha is an online platform that serves as a matchmaker between sewing workshops and brands. It guarantees the improvement of working conditions for textile workers.

Alinha uses blockchain technology to insert transparency into the production process, allowing the consumer to know the stages of the process by inputting the code on Alinha's label to see who was involved in the production of the article.

FOUNDERS

Dariele Santos and Monyse Almeida

YEAR FOUNDED

2014

USERS

350 brands and 60 textile workers

WEBSITE

www.alinha.me

Private Firms and Development of Small and Medium-Sized

Workness

High Fashion Sewing

Formalizing Textile Businesses

Fashion Industry Transparency

Fair Labor Practices

Blockchain

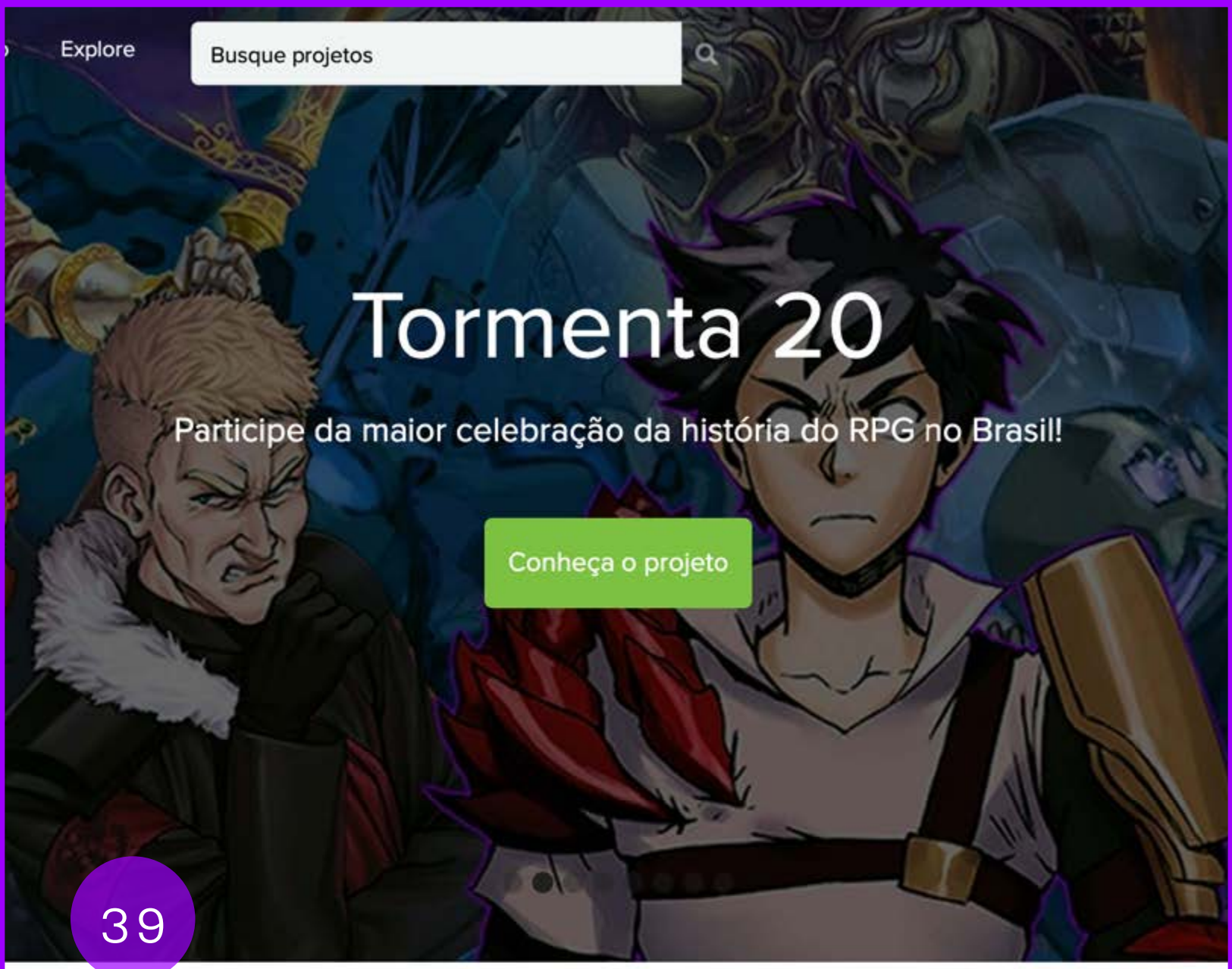
Alinha attempts to change the semi-slavery conditions of thousands of textile workers.

WHY IT WAS DEVELOPED

Alinha attempts to change the semi-slavery conditions of thousands of workers in the fashion industry. The owners of small sewing workshops work about 14 hours a day, 7 days a week to earn about a dollar for each finished piece of clothing and meet the deadlines established by the clothing brands.

HOW IT MAKES LIVES BETTER

Alinha gives a guarantee to more than 350 brands that the workshops on their platforms comply with the minimum requirements for the legal and safety conditions of their workers and assures them fair wages for their work.



39

Catarse

Ice & Fire - Jogo de

ASTOLAT - O Mundo Particular de Parzifal e Elaine

Tormenta 20

por Jambô Editora

/ CREATIVE SERVICES

CATARSE

Brazil

Catarse is the major rewards-based crowd-funding platform in Latin America. Since 2011, over 600,000 persons have backed more than nine thousand projects and more than R$100 million Brazilian reales have been raised.

The Catarse team works on a completely remote basis and projects have included publications, comics, games, music, films, activism, art, technology, photography, journalism and design.

FOUNDERS

Rodrigo Machado, Luis Ribeiro and Thiago Maia

YEAR FOUNDED

2011

USERS

1,079,000 total users

WEBSITE

www.catarse.me

Creative Services

Crowdfunding · Artificial Intelligence

Financing · Art and Culture

Catarse is the major rewards-based crowdfunding platform in Latin America.

WHY IT WAS DEVELOPED

Catarse is envisioned as a virtual space where a community of creators and sponsors can come together to finance projects and make significant connections with persons interested in diversifying creative production in Brazil.

HOW IT MAKES LIVES BETTER

We offer a solution to creatives that allows them to receive payment, communicate efficiently with their audience and build a community around their work.

40

GrooveList

/ CREATIVE SERVICES

GROOVELIST

Chile

GrooveList is the largest creative industry business network in Latin America. This platform facilitates the management, measurement and matchmaking of all the processes and results of the businesses in the industry.

FOUNDERS

Eduardo Garrido, Maximiliano de la Fuente Benítez and Julian Barrera

YEAR FOUNDED

2016

USERS

120 clients and
over 30,000 users

WEBSITE

www.groovelist.co

Art and Culture · Creative Markets · Orange Economy · Matchmaking Platform · Business Forums · Conventions and Festivals · Cultural and Creative Industries · Impact

GrooveList supports all search and process management activities.

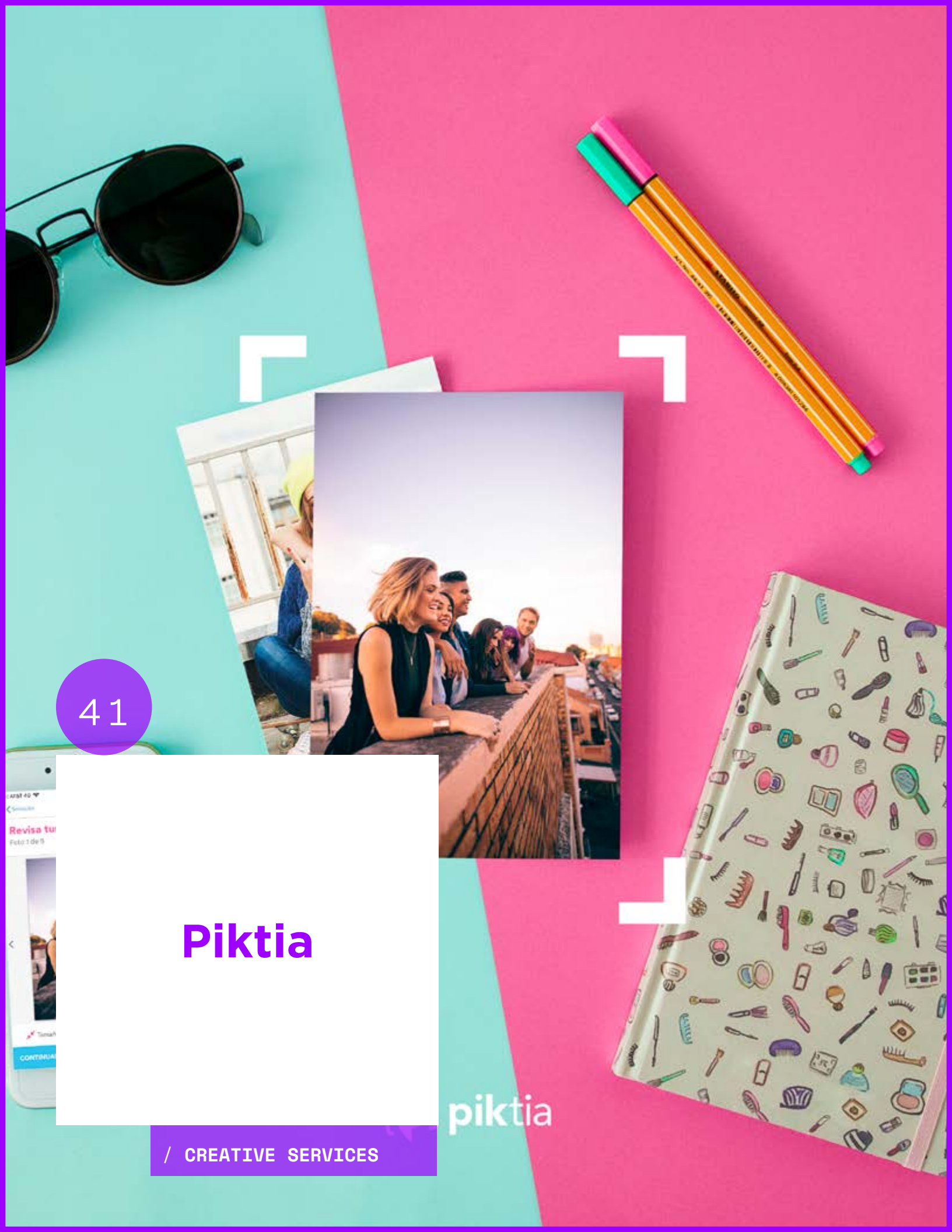
WHY IT WAS DEVELOPED

Organizers of events in the cultural and creative industries pay for various services such as announcements to bring in artists, audiovisual curating panels, matchmaking for business forums, and tools for following up with participants. Although there are many online services that help creators connect with their audiences, there are no tools that specialize in bringing together the most important parts of the value chain: agents, firms and networking events.

GrooveList was established to support these types of search and process management activities, which make up the first step in developing a major business network for the creative industries of the future.

HOW IT MAKES LIVES BETTER

Most firms that work with artists, be it for a festival, a creative industries contest or convention, have neither the economic resources nor the experience to carry out massive communications. Because of this, they loose the opportunity to take advantage of massive dissemination of the project on social media. GrooveList solves this problem, democratizing opportunities for artists by creating a unique collaborative channel for promoting artists.


41
Piktia
piktia
/ CREATIVE SERVICES

PIKTIA

Mexico

Piktia uses artificial intelligence and Machine learning to help conserve photographs in original, long lasting and high quality albums, canvases and calendars, saving time and money for people who look for sophisticated and easy ways to preserve their memories.

At the end of 2018, Apple selected and invited them to be part of their 2019 quality program. This positions Piktia as one of the applications with the most potential in Mexico

FOUNDERS

José Antonio Tena, Sandra Marisa Ojeda, Lorena Sánchez and Ricardo Michel Reyes Martinez

YEAR FOUNDED

2016

USERS

More than 10,000 users

WEBSITE

www.piktia.com

Creative Services | Photography Printing | Photography | Consumer Goods | Design | Small and Medium-Sized Firms

Piktia offers photo printing service in less than 10 minutes

WHY IT WAS DEVELOPED

Every day, more than a trillion photos are taken on smart phones in Latin America and more than a billion dollars is spent on printing photos. In Mexico, the photo printing market grew by nearly 30% in the last three years and it takes Mexicans more than 90 minutes to attempt to print their pictures with obsolete or inefficient printing services. Online photography solutions in Europe and the US have seen a 20% increase in photo printing. Piktia was established to fill this void in Latin America.

HOW IT MAKES LIVES BETTER

Piktia prints photos in less than 10 minutes, one-tenth of the time it takes for traditional printing. It works with printing centers in Mexico, by offering their technology and distribution. Small and medium-sized companies affiliated with Piktia have benefited by obtaining the technological expertise to offer services that are solicited by the market and have experienced an annual growth rate of 30%.

42

Signa

/ CREATIVE SERVICES

SIGNA

Brazil

Signa is an online platform for courses in design, programming and business, created especially for deaf persons.

FOUNDERS

Fabiola da Rocha Borba, Leandro da Cunha and Icaro Queiroz Rezende

YEAR FOUNDED

2016

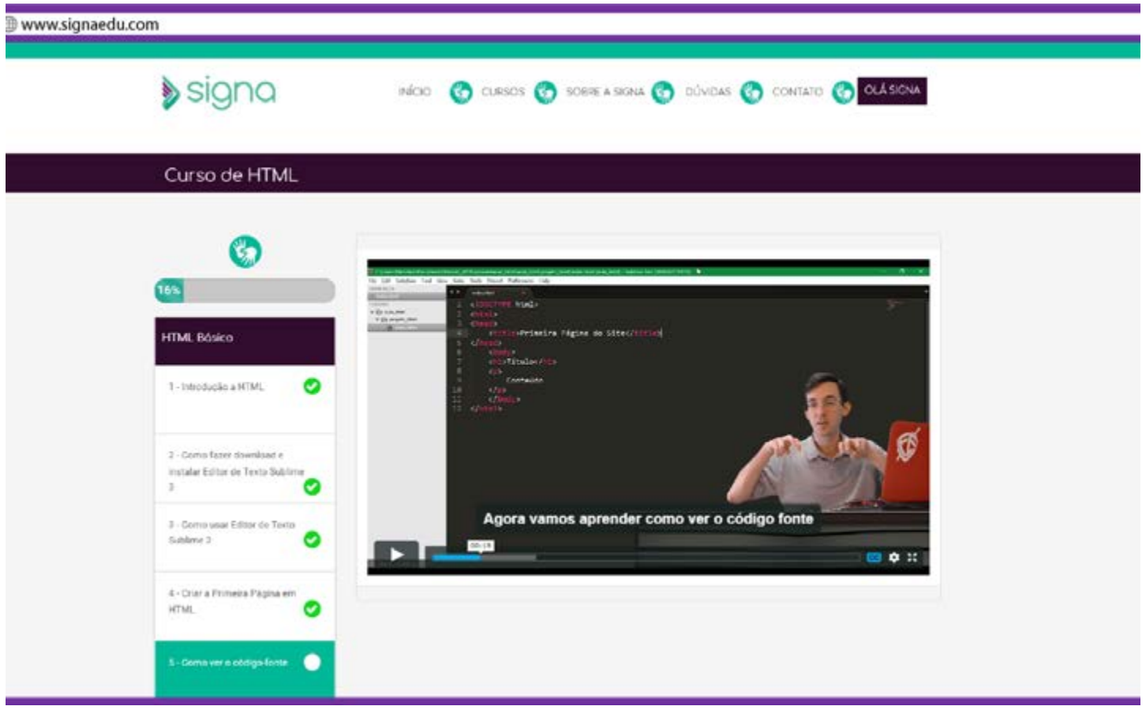
USERS

1.500 users

WEBSITE

www.signaedu.com

Education | Social Investment | Health | Hearing Impairment | E-Learning | Distance Education | Employment



According to WHO studies, 30 million Brazilians have hearing problems.

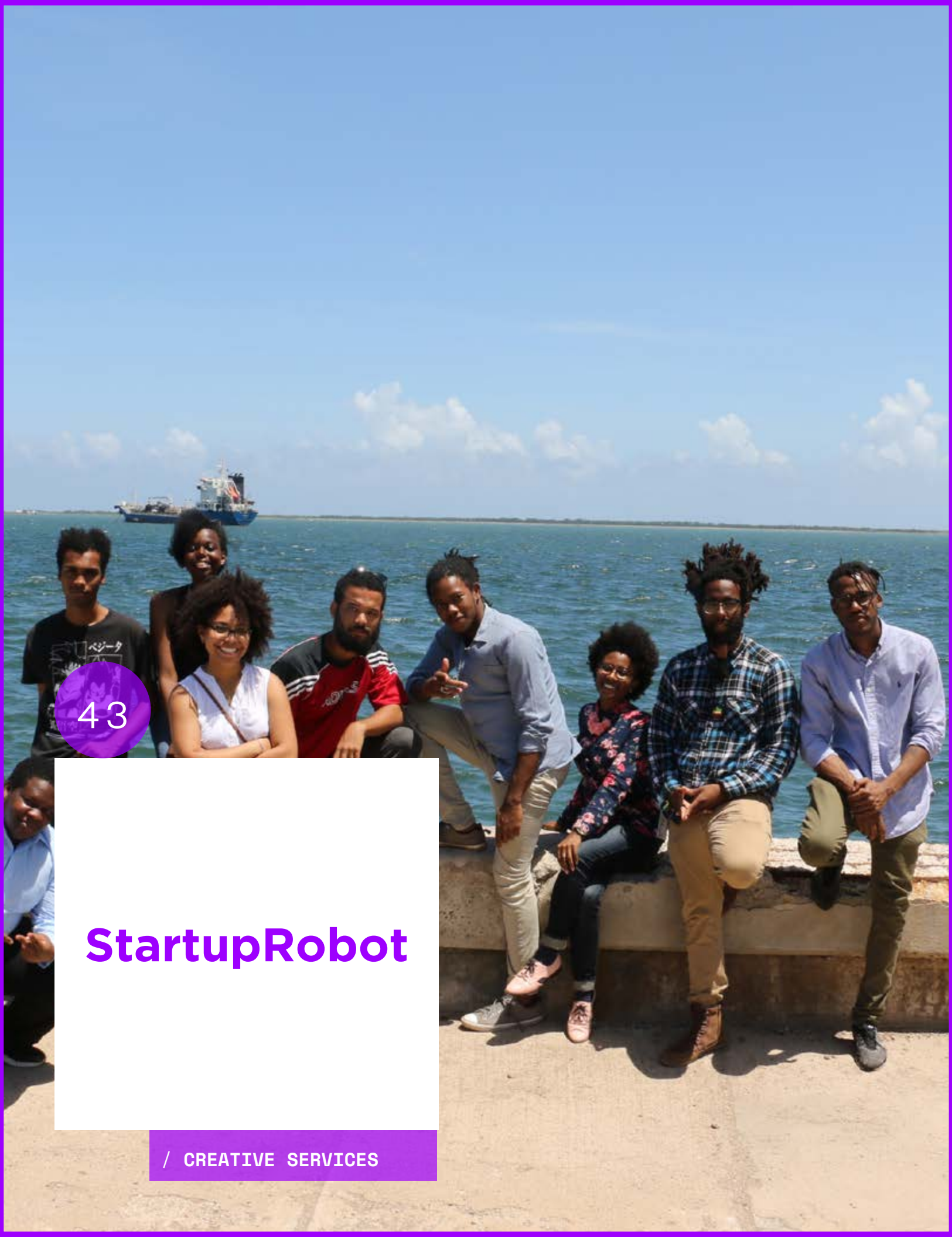
WHY IT WAS DEVELOPED

According to World Health Organization (WHO) studies, 30 million Brazilians have hearing problems and more than nine million are completely deaf. Signa was created to resolve the lack of job opportunities by offering online courses, created by and for deaf persons, using their own culture and language: Brazilian sign language.

HOW IT MAKES LIVES BETTER

Signa prepares deaf persons for the professional world by offering high-quality courses on relevant subjects for the modern world. Among the subjects offered are programming, design, finance, and video editing.

The courses are produced and taught by persons found within the deaf community itself who would like to share their knowledge with their peers. The classes they teach give them the opportunity to generate content and obtain some additional income.



43

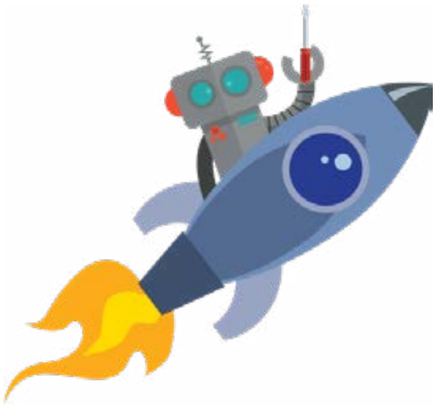
StartupRobot

/ CREATIVE SERVICES

STARTUPROBOT

Jamaica

StartupRobot is a help chatbot that operates via Slack and Messenger to register and follow up on fiscal obligations for businesses in Jamaica.



FOUNDERS

Winston Wilkins

YEAR FOUNDED

2014

USERS

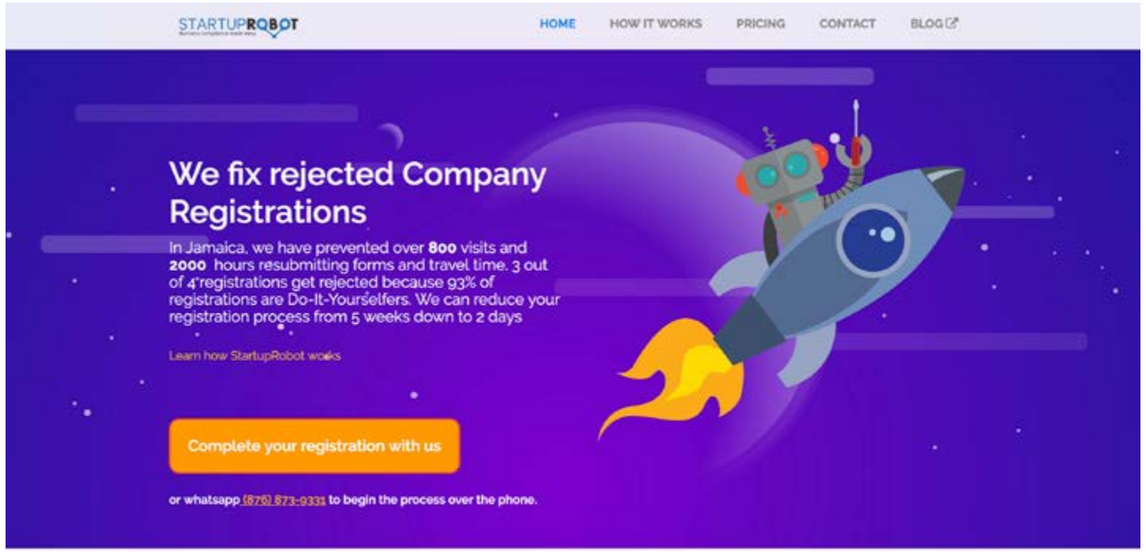
252 businesses

WEBSITE

www.startuprobot.com

Private Firms and Small and Medium Firm Developments

Tax Obligations | Start-up Registrations | Slack | Chatbot | Fiscal Obligations



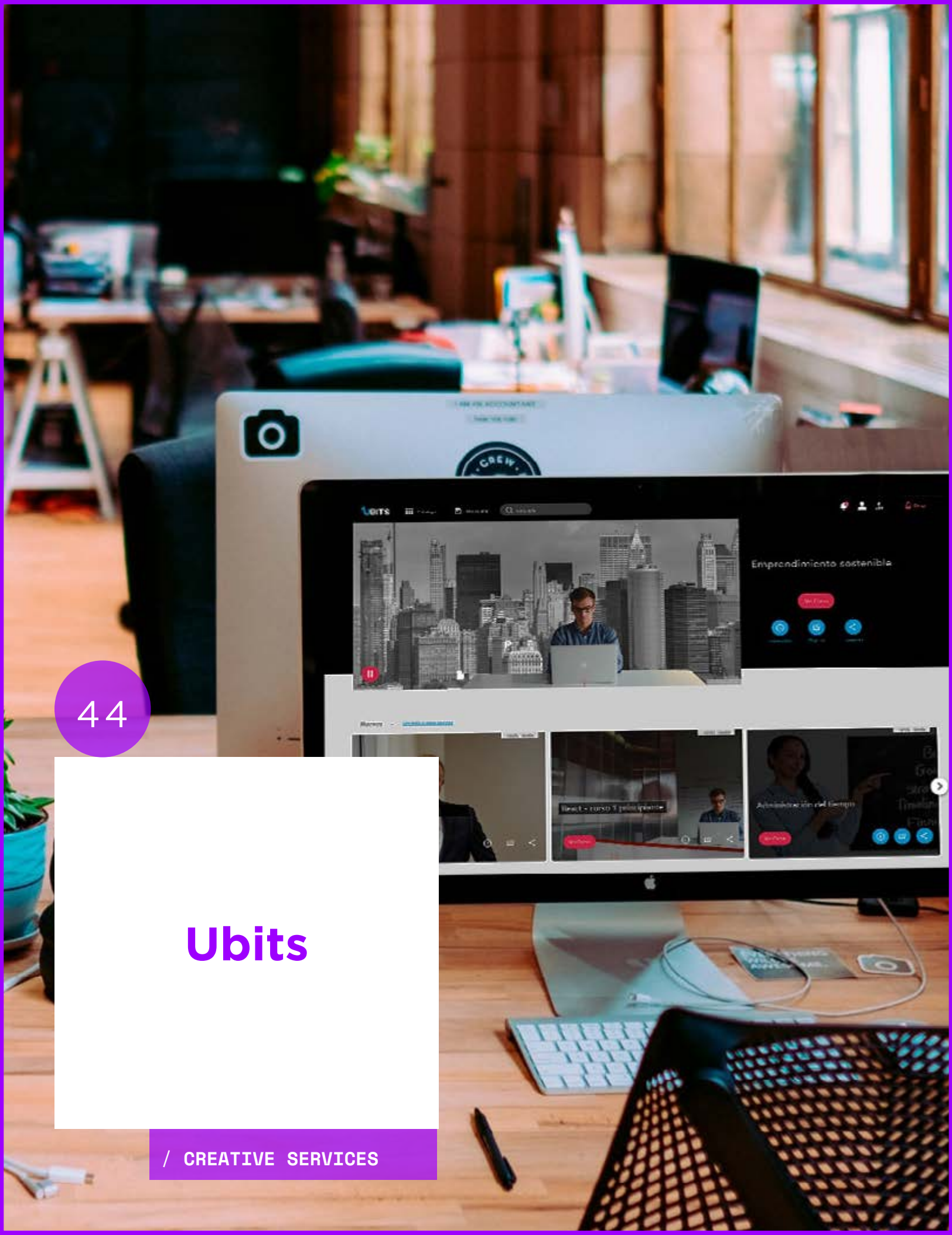
StartupRobot offers a step-by-step guide to formally registering a business

WHY IT WAS DEVELOPED

In Jamaica, some 75% of applications to register a business are rejected and 93% of these registrations are attempted by the entrepreneurs themselves. Official registration as a business, a process which can be quite challenging, is required before start-ups can have access to loans, bank accounts or government grants. StartupRobot provides step-by-step instructions for compliance with all the requirements for registering and meeting market standards.

HOW IT MAKES LIVES BETTER

With StartupRobot, a company can complete the registration process in two days. In general, without this professional guidance, the process can take up to five weeks.



44

Ubits

/ CREATIVE SERVICES

UBITS

Colombia and Mexico

Ubits is an online training platform for businesses. It uses artificial intelligence to provide personalized training while optimizing costs by 40%.

FOUNDERS

Marta Forero and
Julián Melo

YEAR FOUNDED

2014

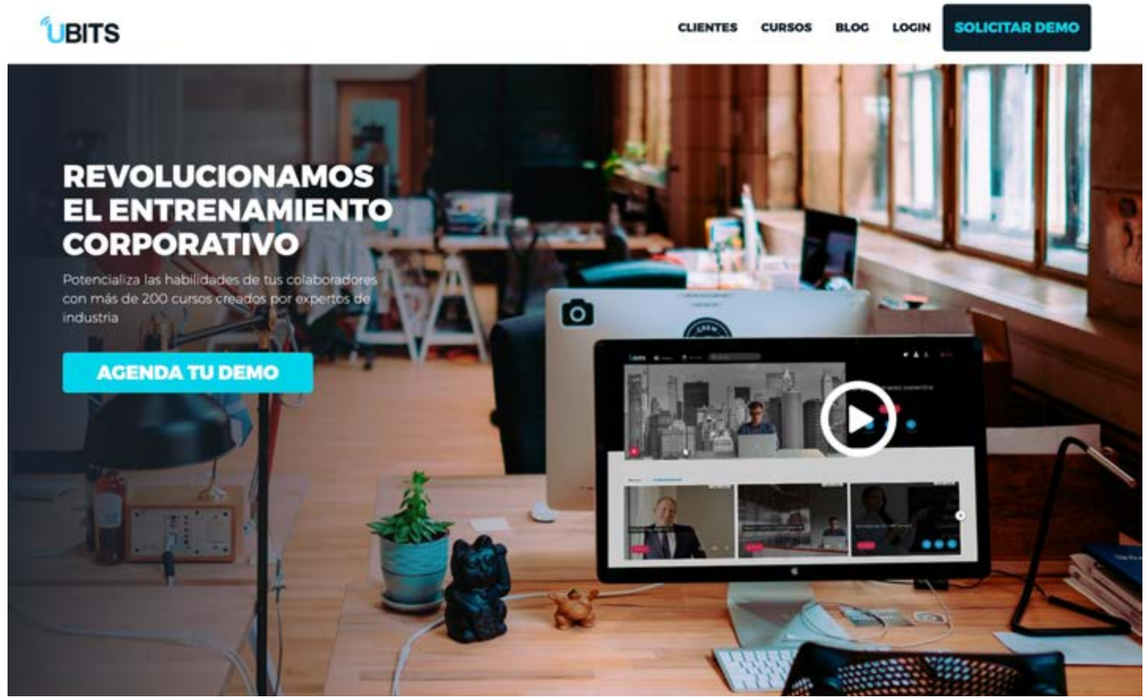
USERS

50,000 final users
Over 80 firms

WEBSITE

www.ubits.co

Education · Artificial Intelligence · Online Training · Learning · E-Learning · TechEd



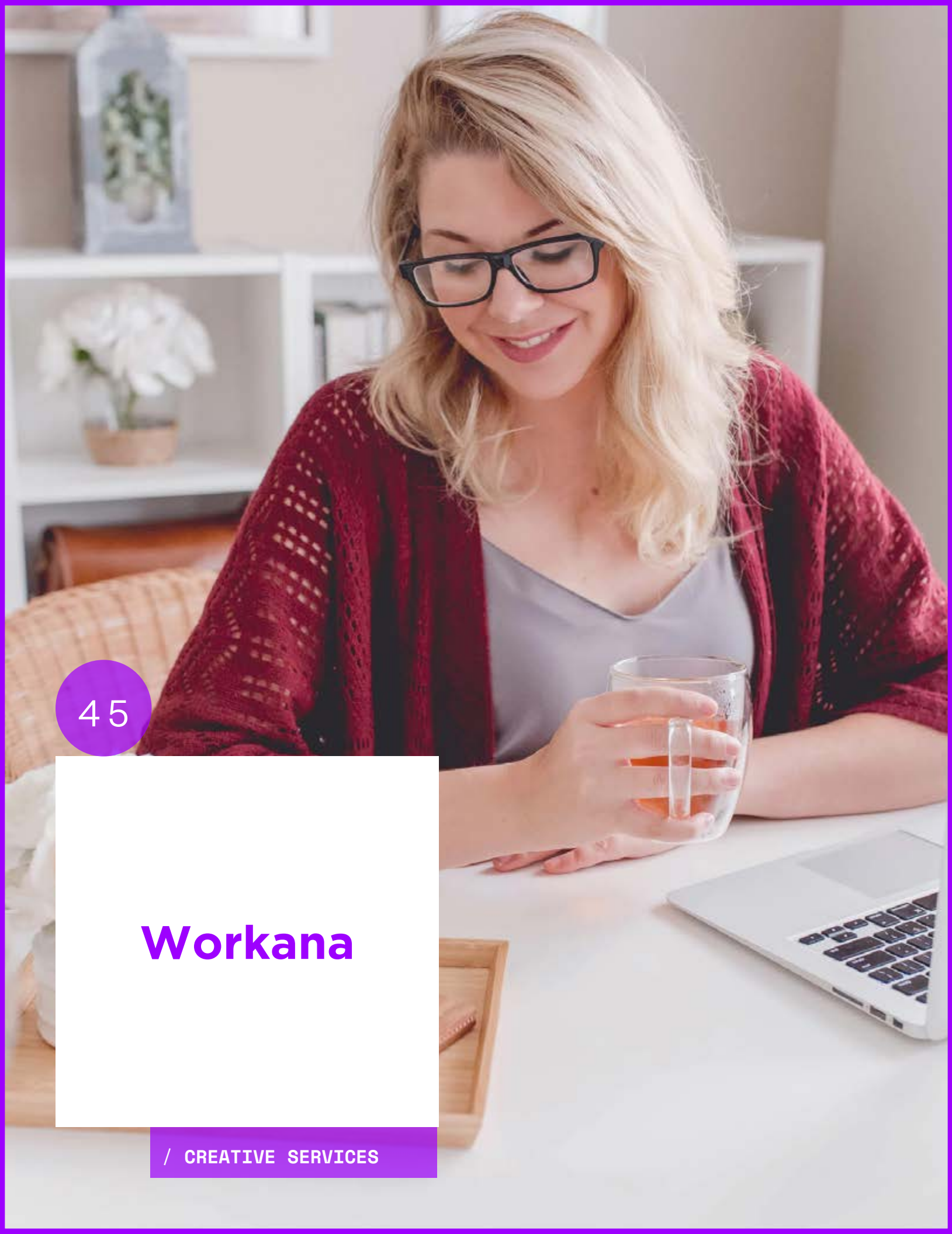
Ubits offers custom-made online employee training.

WHY IT WAS DEVELOPED

Ubits was established as an alternative to overcome three main obstacles to employee training in Colombia. Courses are generally offered in person by professors who are not necessarily familiar with the industry and they cover generic topics without taking into consideration the knowledge, skills and requirements of the employees. Ubits offers online customized training to help each employee to develop the necessary skills to be successful at work. Topics include creativity and innovation, leadership, soft skills, and corporate finance. It also manages a network of more than one hundred opinion leaders in over eight countries.

HOW IT MAKES LIVES BETTER

Ubits concentrates on improving professionals through example and the experience of experts, who have faced the same business situations and have learned how to handle them effectively.



45

Workana

/ CREATIVE SERVICES

WORKANA - CALCULADORA FREELA

Argentina - International

Workana is the first and largest free-lance work platform in Latin America. It has developed the Freela Calculator—an application which offers freelancers a method to calculate how much to charge for their services.

The Freelancer Calculator was created by the Workana Team

FOUNDERS

Tomás O'Farrell, Fernando Fornales and Guillermo Bracciaforte

YEAR FOUNDED

2012

USERS

1,2 million

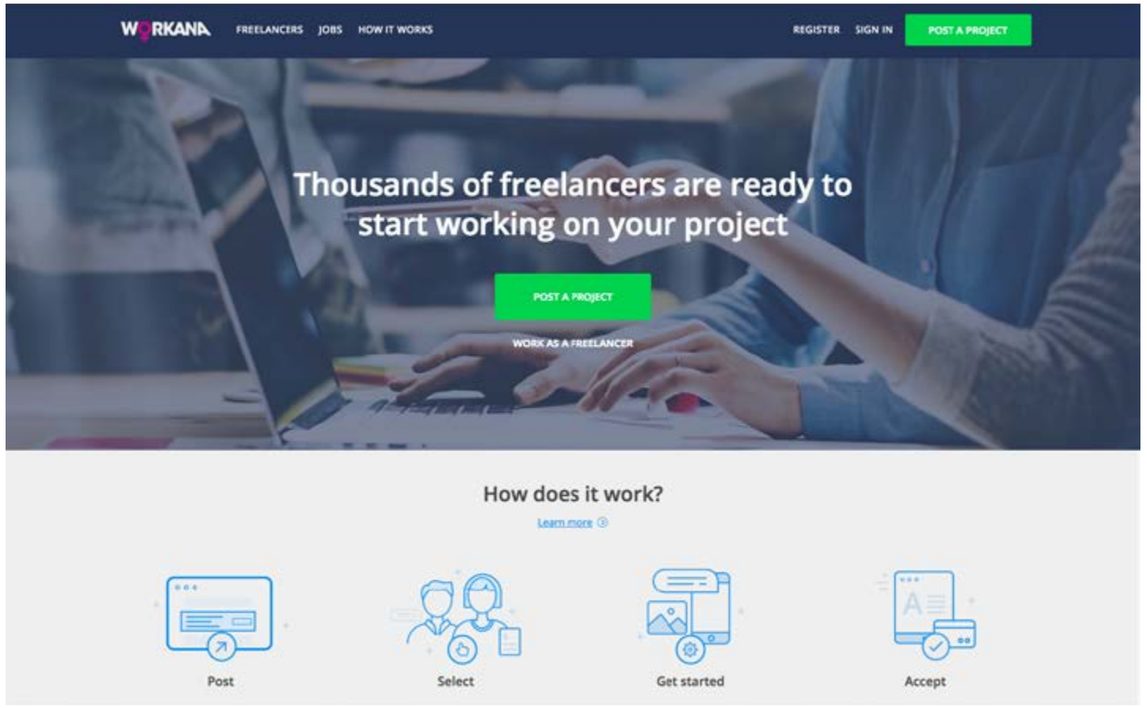
WEBSITE

www.workana.com

Work

Freelancer

Fee Calculation for Freelance Work



It is common for freelancers to charge less for their work than what they should.

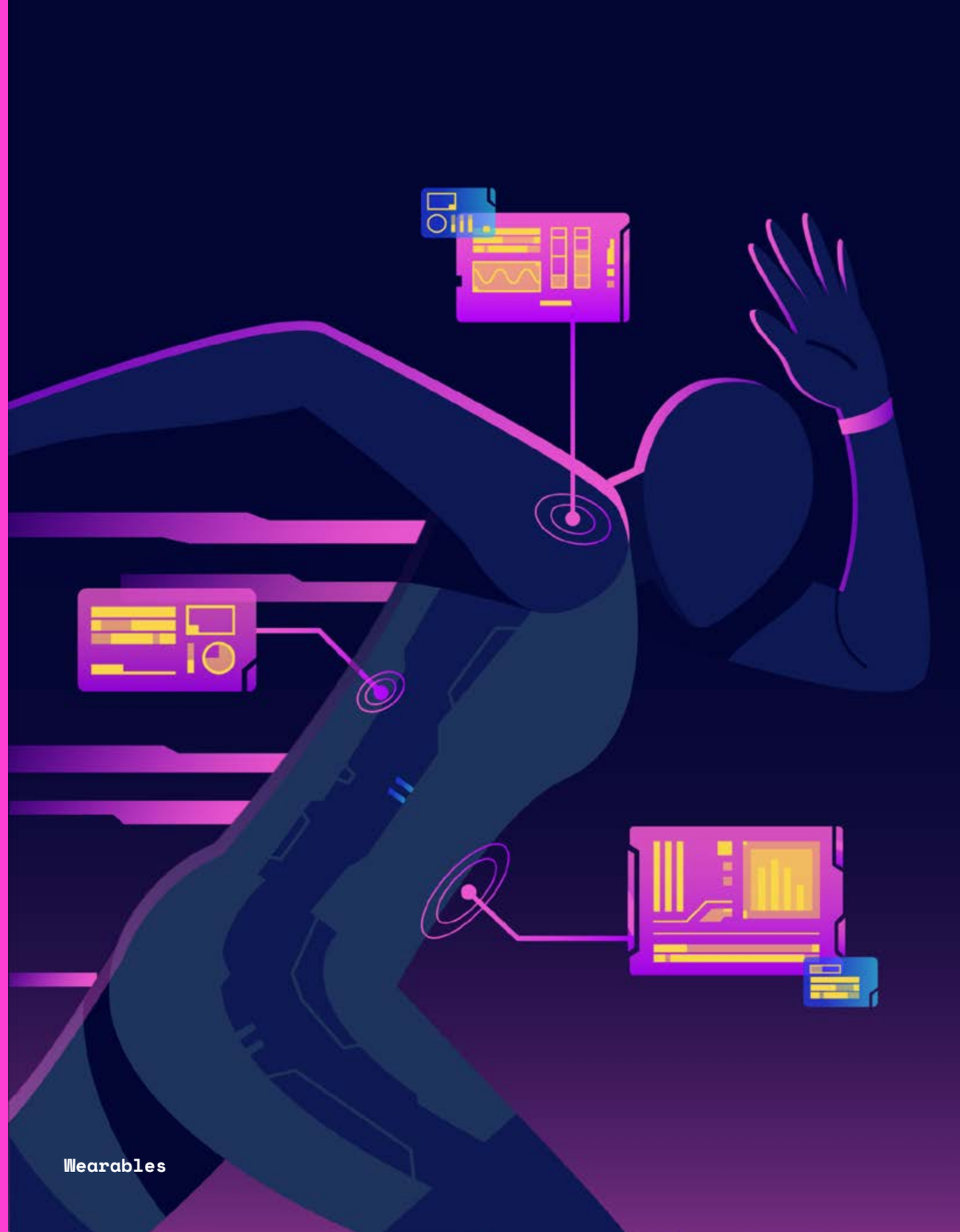
WHY IT WAS DEVELOPED

It is common for freelancers to charge less for their work than what they should. This happens because there is no public data on how much they should charge and they are less protected than full-time workers. At the same time, those looking to hire independent professionals do not know how much they should pay for these services. Freelancer Calculator, created by the Workana team, was established to guide this unstoppable market and calculates costs in seven Latin American currencies as well as the dollar and euro. This application can calculate the hourly wage, taking into account various factors: the number of hours worked per day, the value of equipment and programs, fixed costs, maintenance costs and even days off and vacation days, resulting in a more accurate calculation.

HOW IT MAKES LIVES BETTER

By 2027, freelancers will make up 50% of the workforce. Freela calculator will help those in Latin America know how much to charge for their work in any part of the world.

Wearables



CATEGORY

Wearables

Globally, wearables are designed primarily as tools for

heath and fitness.

325 million

wearables exist in the connected world, that is, that they are active.[94]

By

2020

it is expected that the sale of wearables in Latin America will reach 26 million devices.[95]

GLOBAL VISION

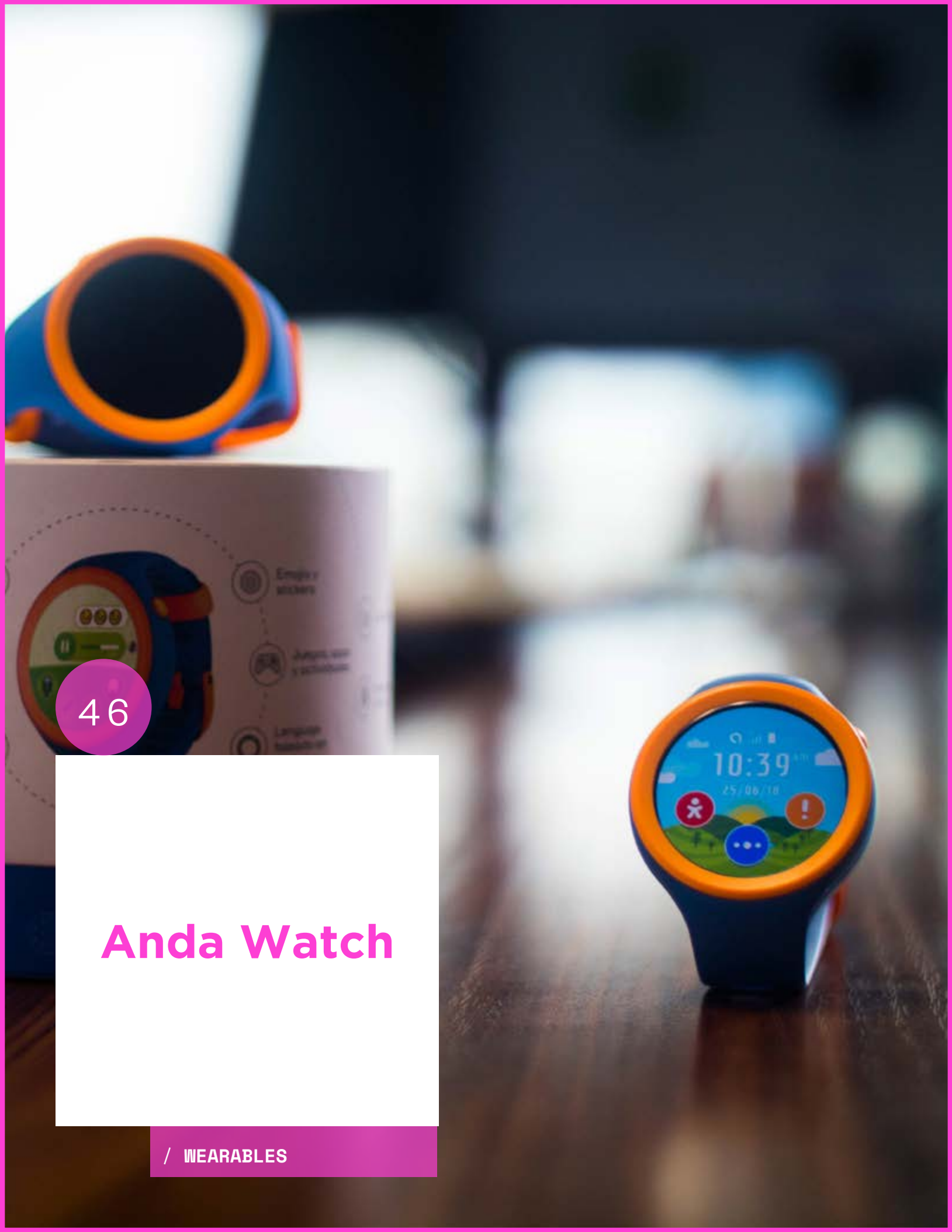
Technology companies are designing products that are becoming more and more integrated into our daily activities and in ways that are almost imperceptible. These products have the purpose of collecting relevant information in real time to help users make informed decisions. Healthcare and fitness have detonated the growth of wearables, which reached sales of 33.9 million units, worldwide, in the final quarter of 2016.[96]

It is predicted that on a world level, these devices will have an important impact on the cell phone market, making it possible for us to have better control over factors such as blood pressure, and the monitoring of the nervous system, stress, and diseases such as diabetes, Alzheimer's, depression, cardiac problems, etc.

LATIN AMERICA AND THE CARIBBEAN

Unlike international trends, in Latin America wearables are still very linked to telephone companies and telephony providers, who facilitate the distribution and adoption of these products by users.[97]

In 2015, 1.83 million wearables were sold in the region; for 2016, the figure rose to 12.6 million and by 2020 sales are expected to surpass 26 million units.[98] In Latin America, we are beginning to see this technology applied to daily life. One example is Annuit Walk, a Brazilian entrepreneurship that develops low-cost smart eyeglasses that resolve mobility, autonomy and social inclusion challenges for persons with visual impairments or blindness. Another is the Peruvian entrepreneurship, Anda Watch, which produces smart watches especially designed for small children so that they can keep in touch with their parents when they are separated from them.



46

Anda Watch

/ WEARABLES

ANDA WATCH

Peru, Mexico, Colombia

Anda Watch is a smart watch for children. It is designed with a language of symbols and made to keep parents in communication with their children.

It offers a user-friendly interface based primarily on symbols and drawings made by children. The use of symbols makes it easy for children, or for someone with a disability, to use them. Parents can personalize the device for phone calls, localization, and to record communication with other children. It also comes with a panic button.

FOUNDERS

José Delmar and
Michael Barclay

YEAR FOUNDED

2017

USERS

500 users

WEBSITE

www.anda.pe

Citizen security · The Internet of Things · Wearables · Geo-localization · Panic Button · Disability

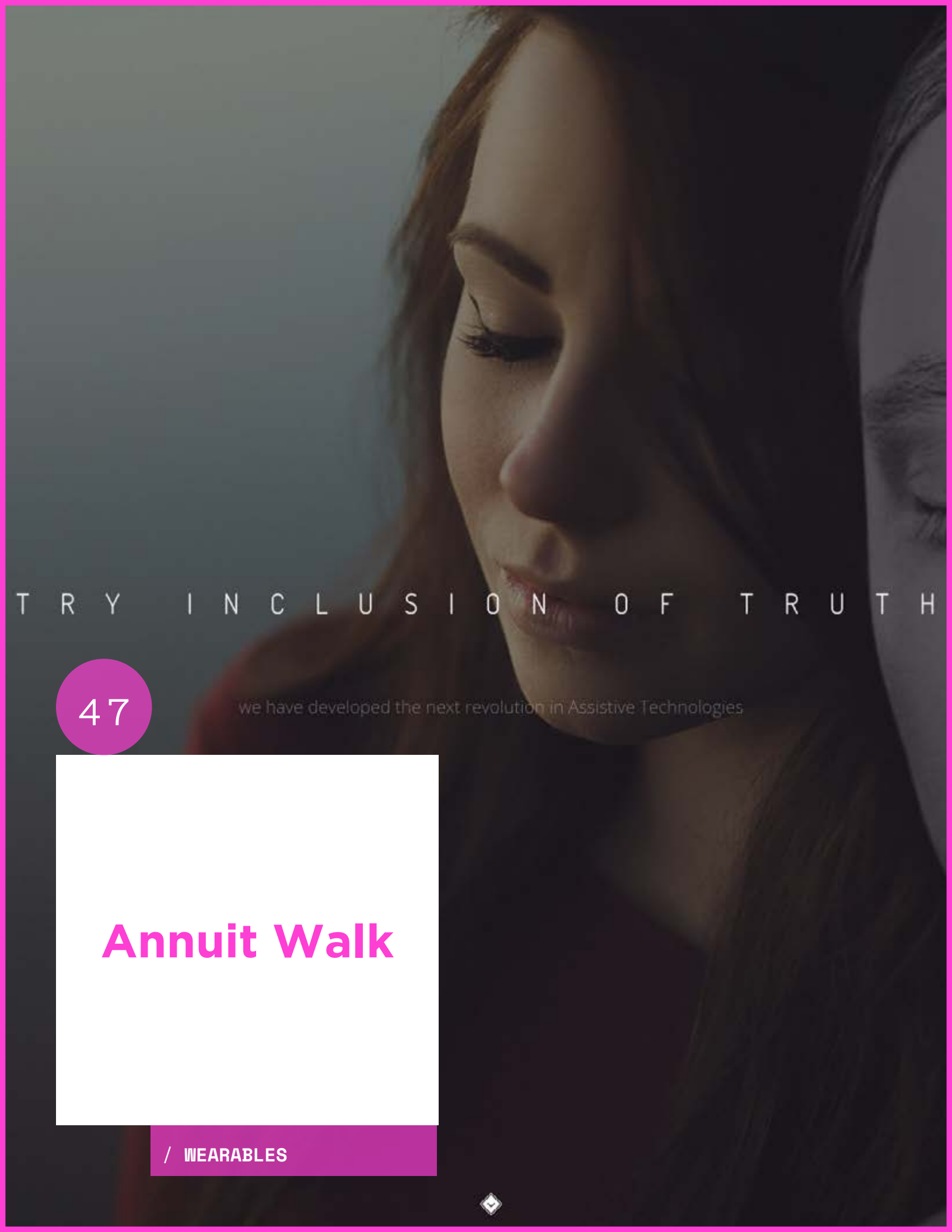
Anda Watch offers a user-friendly interface based primarily on symbols and drawings made by children.

WHY IT WAS DEVELOPED

In this modern world, it is more and more common for parents to spend more time away from home and far from their children and security is becoming an ever more serious issue. Anda watch was created to connect parents with their children by means of a technology that is simple and safe for both. With Anda Watch, parents can know where their children are at all times and if the little ones are in a dangerous situation, they can contact their parents instantly.

HOW IT MAKES LIVES BETTER

Anda Watch keeps parents in touch with their children in a manner that is quick, direct and secure for the little ones. Unlike a smart phone, this watch is easy to use, even for small children from the age of 3 or ones that suffer from some disability.



47

Annuit Walk

/ WEARABLES

ANNUIT WALK

Brazil

Annuit Walk makes smart glasses with ultrasonic sensors to resolve mobility, autonomy and social inclusion problems for visually-impaired persons.

Based on the Internet of Things and ultrasonic sensors, the glasses operate with a mobile application to detect obstacles, map objects and create routes. In this way it offers greater mobility and improves the quality of life for persons with visual impairment.

FOUNDERS

Marcos Antonio Oliveira da Penha, Washington Carvalho and Eduardo Emery

YEAR FOUNDED

2014

WEBSITE

www.awa.social

Health · Visual Impairment · Smart Glasses · Wearables · The Internet of Things · Industrial design

Annuit Walk is like having a discreet personal guide always at hand.

WHY IT WAS DEVELOPED

According to data from the World Health Organization, it is estimated that there are approximately 1.3 billion persons in the world who suffer from visual impairment and 6.5 million of them live in Brazil. According to the IBGE Census of 2010, however, 92% of Brazilian cities are inaccessible for the blind, since they do not comply with accessibility standards in all of their public thoroughfares. AnnuitWalk was invented in order to protect the life of the user and facilitate everyday tasks like going shopping or simply walking down the street, without having to depend on someone else.

HOW IT MAKES LIVES BETTER

AnnuitWalk is like having a discreet personal guide that is always available, since blind people are used to using glasses. Upon detecting obstacles along the way, the device emits vibrations on a bracelet that intensify as the user gets closer to the object. At the same time, these glasses are much more accessible than similar technologies or seeing-eye dogs. This is a key advantage since the majority of blind persons in the country are low-income.

48

Hand Eyes

/ WEARABLES

HAND EYES

Ecuador – With sales in over 15 countries

Hand Eyes has developed Eye Clip, an electronic device with sensors that transmit ultrasound waves to warn of obstacles for visually-impaired persons.

With vibrations and sounds, the devices alerts users to obstacles in their paths and thus avoids accidents. The system is similar to the echolocation sense in some animals.

FOUNDERS

Diego Antonio Aguinsaca, Carlos Canacuán and Fabricio Reyes

YEAR FOUNDED

2014

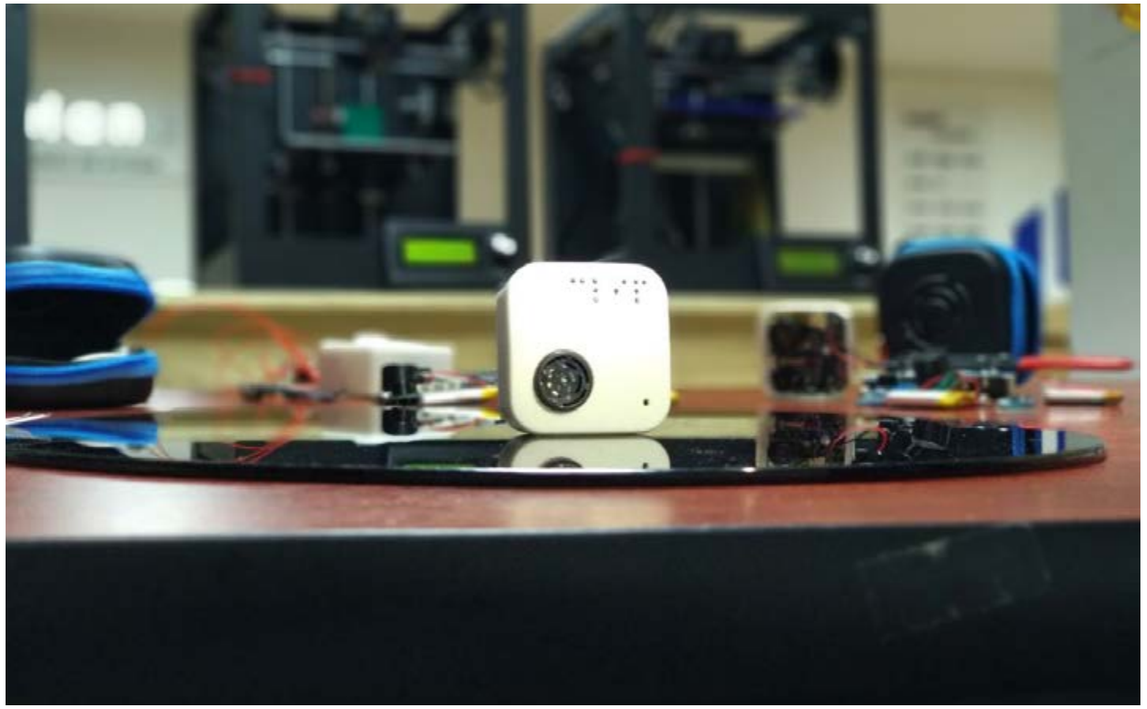
USERS

250 users

WEBSITE

www.handeyes.org

Health · Industrial Design · Visual Impairment · Obstacle Warning · Wearables · Ultrasonic Waves



HandEyes was created after hearing of the stories and experiences of blind persons in Ecuador.

WHY IT WAS DEVELOPED

HandEyes was created after hearing of the stories and experiences of blind persons in Ecuador. The three entrepreneurs realized that the use of a cane was not enough to avoid accidents. Even with a cane, a blind person cannot detect high-placed objects such as signs, cables or tree branches.

HOW IT MAKES LIVES BETTER

This light-weight and completely portable device functions like a robotic assistant that allows the user to avoid accidents and walk with greater security and independence in day-to-day life. It can be connected to clothing or to a cane and has a re-chargeable battery that lasts for 10 hours of continuous use. Given that the majority of visually-impaired persons live in low-income areas, the founders are trying to distribute it for free to those who need it the most and have already begun a permanent fund-raising campaign.

49

EVA

/ WEARABLES

EVA

Mexico

EVA is a non-invasive self-exploration bra for detecting early-stage breast cancer. It functions via sensors that measure the temperature, texture and color of breast tissue to detect any anomalies.

The data monitored by Eva are transmitted by Bluetooth to the web or mobile application where they are evaluated by algorithms and neuro-networks. Then they are sent in real time to the personal oncologist.

FOUNDER

Julián Ríos Cantú

YEAR FOUNDER

2016

USERS

More than 350 patients

WEBSITE

www.evatech.co

Health

Breast Cancer

Artificial Intelligence

Wearables

The data monitored by Eva are transmitted by Bluetooth to the web or mobile application.

WHY IT WAS DEVELOPED

Eva decided to concentrate its efforts and knowledge on developing a quick and efficient diagnostic tool to fill in the gaps left by traditional mammograms and thus give patients earlier warnings so that they can react more quickly.

HOW IT MAKES LIVES BETTER

Because of the Eva technology, hundreds of women have an immediate and precise method for monitoring their breast health on a weekly basis, by using the bra for sixty minutes. The diagnostic wait time is reduced by 95% which means that more cases can be detected at an earlier stage and more lives can be saved.

50

YUCA_TECH

/ WEARABLES

YUCA_TECH

Mexico

YUCA_TECH is a community technological laboratory that generates know-how between technology and handicrafts to create technology with identity.

YUCA_TECH has made handicrafts a more profitable business, with the creation of articles of clothing, and objects that generate clean energy with photo-voltaic threads and a variety of products that store electricity and provide lighting to the communities.

FOUNDER

Amor Muñoz

YEAR FOUNDED

2013

USERS

Artisans in the community of Granada, municipality of Maxcanú and artisans in the Otomí group of Guanajuato, A.C. in the Roma neighborhood of Mexico City.

WEBSITE

yuca-tech.tumblr.com

Art and Culture
Renewable Energy
Social Investment
Work
STEAM
Electronics
Wearables
Conductive Thread
Photo-voltaic Textiles
Open Source
Solar Energy
Handicrafts with Technology

YUCA_TECH was established to show that technology is not in conflict with tradition.

WHY IT WAS DEVELOPED

YUCA_TECH was established to show that technology is not in conflict with tradition. It gives importance to empowering communities while learning from them through technology. YUCA_TECH has worked with communities to create their own technology and handicrafts that make combinations of smart and sustainable materials.

HOW IT MAKES LIVES BETTER

YUCA_TECH, through the transfer of knowledge of electronics, has given many female artisans the opportunity to create value through their handicrafts. These efforts have helped to counteract environmental, social and cultural problems

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