PORTUGAL FINTECH

PRESENTS

Portugal Fintech Report 2019

POWERED BY accenture VISA





MORAISLEITÃO SOARES DA SILVA

We drive our mission by closely engaging with and connecting all the ecosystem

the portuguese financial regulators, Banco de Portugal (BdP), Comissão do Mercado de

Fintech cluster and co-working space in Portugal, aggregating under the same roof

As for the future, we hope this report inspires you to connect with the Portuguese Fintech

into a world class Fintech hub.



EMPOWERING THE FINTECH ECOSYSTEM



- New Fintech startups are emerging and consolidating at an accelerated pace, with
- Leading global Fintech players such as Revolut and Monese established operation

Maria Palurina

JOÃO FREIRE DE ANDRADE

MARTA PALMEIRO



ABOUT PORTUGAL FINTECH

ortugal Fintech is a startup-centric network which brings together the key stakeholders of the industry - from Γ founders, investors, regulators, and academia, to incumbents in banking, insurance, consultancy and law firms - to create the best conditions for the development of the Fintech ecosystem. The main initiatives intend to connect startups with clients, provide them with privileged contact with investors and help them navigate regulatory frameworks.

ACTIVELY WORKING IN FOUR VERTICALS

Portugal Fintech is connecting the ecosystem's stakeholders – promoting a common ground for dialogue and supporting the growth of startups in a sustainable way.

TALENT AND ACADEMIA

Through a close relationship with Universities, Portugal Fintech promotes awareness to the Fintech ecosystem at all layers of talent.

It is the understanding of the startups' needs in terms of talent, along with the proximity with the best professionals and academia hubs, that allows to connect these two for the development of Fintech projects.

CAPITAL AND INVESTORS

We connect the Portuguese Fintech ecosystem with investors at a national and international level, from networking events to 1-on-1 meetings. We have built a network of expert investors, from Business Angels, to Corporate Investors and Venture Capital Funds that can best support each company on its journey.

INCUMBENTS, PARTNERS AND CLIENTS

Portugal Fintech connects Fintechs and Incumbents to foster collaborative win-win partnerships. Entrepreneurs are, then, more prepared to develop products and services that empower incumbents and benefit the consumer. This relation is, hence, imperative for the growth of an innovative financial system.

OUR INITIATIVES



WHERE WE STARTED We were founded in 2016, as the first FinTech organization in Portugal.



FINTECH MEETINGS

Networking and pitch event - celebrating the launch of Portugal Fintech and a side event during the Web Summit composed by pitching sessions and a discussion panel.

2017

THE PORTUGUESE FINTECHS & EVENTS

Release of Portugal Fintech's first report for the event Lisbon Welcomes Fintech. It includes an overview of the Portuguese Fintech Startups. Three community events: Pay-Challenge with CIONET and Banco de Portugal, BNP Pitch Competition inside Web Summit and the networking event Lisbon Welcomes Fintech.

INDUSTRY REPORT & EVENTS

2018

Release of the Portugal Fintech Report at Banco de Portugal in the event FinLab Meets; Accenture Pitching Competition inside Web Summit; and Lisbon Welcomes Fintech.

SEP. 2018 TO FEB. 2019

PORTUGAL FINLAB

Responsible for the organization of a privileged communication channel between fintech innovators, as startups or incumbents, and all the Portuguese Financial Regulators (BdP, CMVM, and ASF) in the portuguese Innovation Hub.

REGULATION

Collaborating with regulatory agencies and legislators to help create an easier, faster and clearer environment for innovation is a priority for us. It was with that in mind that Portugal Fintech co-created the Portugal FinLab – a communication channel with the Portuguese financial regulators (BdP, CMVM and ASF) which aims to provide regulatory clarity to financial innovation projects.







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KEY INSIGHTS

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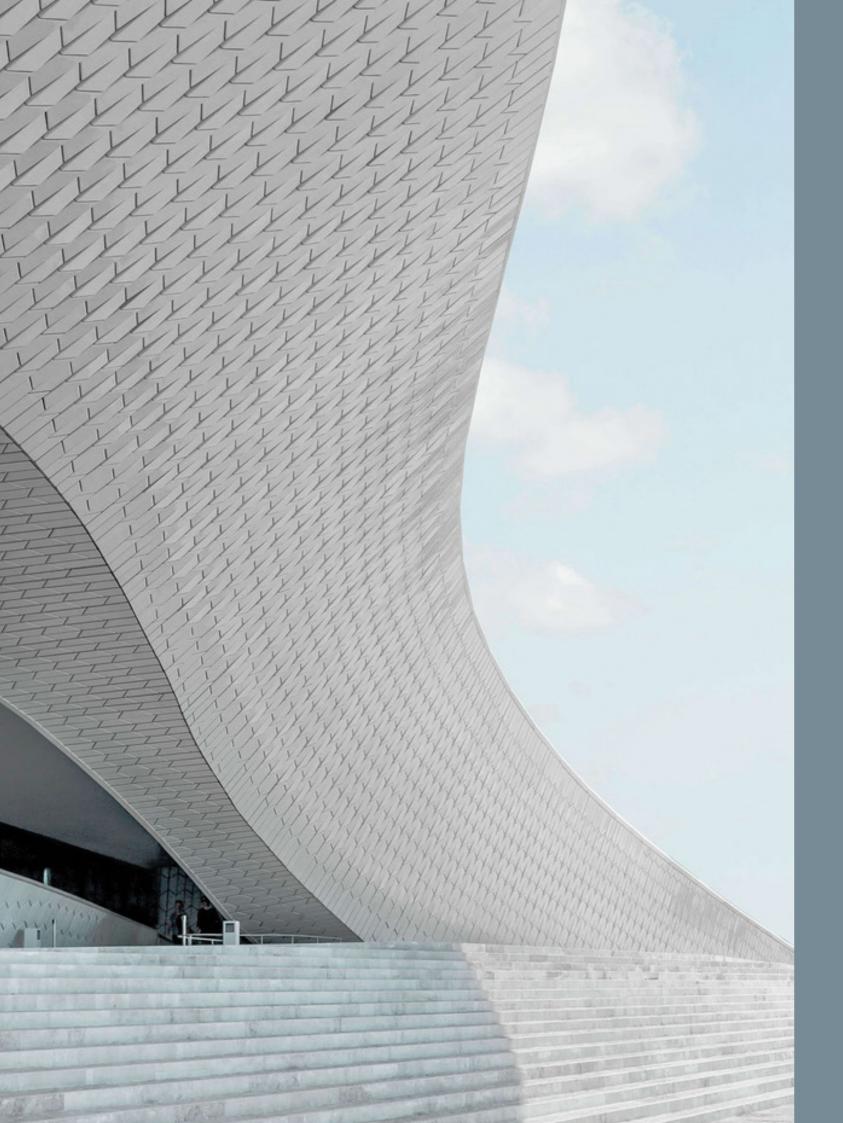
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TOP 30 PORTUGUESE FINTECHS

76 Nikolay Storonsky and Ricardo Macieira *Revolut*80 Natasha Miller *Accenture* **84** Francisco Veloso Imperial College London **94** William McQuillan Frontline Ventures

FINTECHS ENABLING INCUMBENTS:





INDUSTRY OVERVIEW



A VIBRANT ECOSYSTEM UP AND UP WE GO

The Portuguese ecosystem is moving at an accelerated pace. Disruptive solutions created by Portuguese are raising the interest of partners and investors as Portugal becomes more and more a reference as a Fintech Hub.

The Portugal FinLab – the 1st innovation hub – has announced a second edition, after the outbreaking success and demand for the first one. Portuguese regulators are showing their openness to listen to the market and help entrepreneurs, which is a crucial tool for the sustainable growth of the industry.

International Fintechs are looking to Portugal as a quickly emerging Fintech Hub in Europe and have announced to move their operations to the country as part of their strategy.

Conditions are in place, and this ecosystem shows no signs of slowing down.





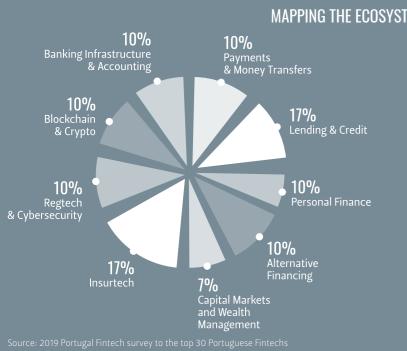
PSD2's Regulatory Technical Standards become mandatory SEPTEMBER 2019

Revolut announces expansion to Portugal creating 400 new jobs SEPTEMBER 2019

Portugal's tax authority announces that crypto trading and payments would not be subject to value-added tax (VAT) AUGUST 2019

Institutional crypto custodian Anchorage, founded by the Portuguese Diogo Mónica, raises \$ 40 M AUGUST 2019

ECOSYSTEM SNAPSHOT



MAPPING THE ECOSYSTEM

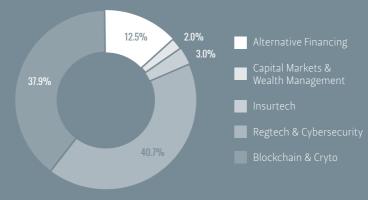
• **16** of the top 30 companies founded

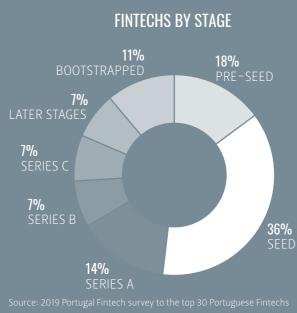
Insurtech and Lending & Credit as the most popular segments;
More than € 210 M raised from both national and international VCs;

• More than **1.100** employees;

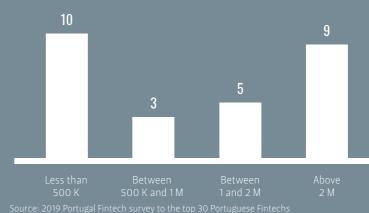
• **70%** of the top companies are remaining are either double-based or based outside national territory; • Almost **80%** operate under a B2B

TOP VERTICALS BY AMOUNT OF FUNDING



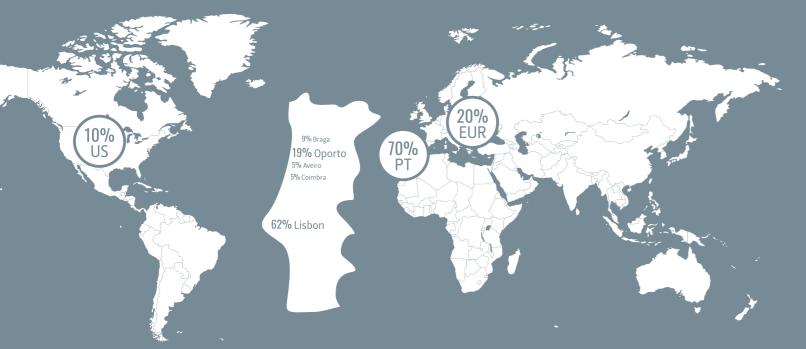


AMOUNT OF FUNDING TO DATE

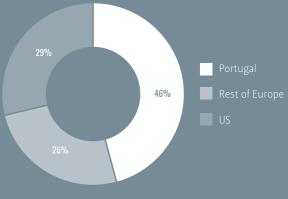


followed by Blockchain & Crypto;

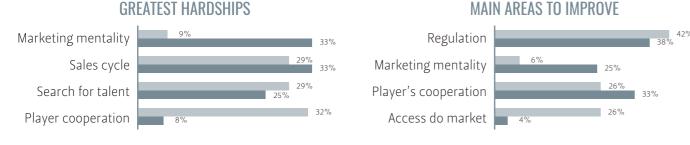
- 22% of the total amount of funding comes from US-based Fintechs, which are 10% of the sample;



REGION BY AMOUNT OF FUNDING



THROUGH THE LENSES OF THE STARTUPS

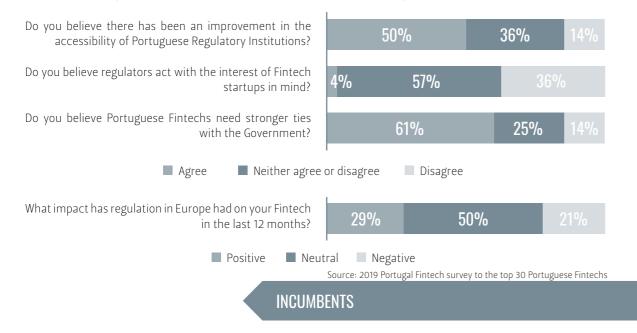


2019 2018 Source: 2019 Portugal Fintech survey to the top 30 Portuguese Fintechs

The top 30 Portuguese Fintechs indicated that the greatest hardship faced this year is Player Cooperation, a different topic from the ones pointed out in 2018 which were both the Marketing Mentality and Sales Cycle. On the other hand, the main area to improve in the ecosystem is, similarly to last year, Regulation.

POLICY AND REGULATION

Policy and Regulation have a large impact on the Fintech ecosystem – in order for the system to be prepared to accommodate innovation, Policy and Regulation need to evolve hand in hand with technology.



The relationship developed with incumbents can be crucial for the survival of a startup. At the same time, incumbents frequently find themselves in need of tech-driven solutions with which they can partner with. Collaboration is, without doubt, essential for the ecosystem.

Do you believe working with incumbents has become easier? Do you see them more open to Fintechs?



Neither agree or disagree Agree

Source: 2019 Portugal Fintech survey to the top 30 Portuguese Fintechs

WHICH ARE THE GREATEST HARDSHIPS WHEN WORKING WITH INCUMBENTS?

IT System's compatibility & Integration

- Differences in business models & Investment
 - Regulatory uncertainty
 - Cybersecurity & Data issues 4%
 - Defining use-cases

Source: 2019 Portugal Fintech survey to the top 30 Portuguese Fintechs

INVESTMENT

Venture Capital activity has been increasing as Portugal becomes a reference in the Fintech scene. From January to March 2019, 21 operations were registered, which sum up an amount of € 85 M, according to the M&A monthly report of Transactional Track Record in March 2019, which represents a growth of 203% relative to the same period in 2018.

WHAT ARE THE GREATEST OBSTACLES WHEN **APPROACHING INVESTORS?**



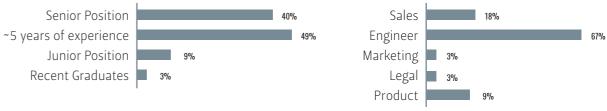
Source: 2019 Portugal Fintech survey to the top 30 Portuguese Fintechs

TALENT

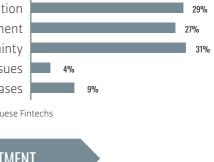
Technology and innovation would not have reached their current state if it wasn't for the deep talent pool. From founders to developers, talent is the oil that makes the machine run. From the sample, 60% of the companies are composed by teams of only Portuguese.

HOW MUCH DO YOU ESTIMATE THE INCREASE IN THE COST OF TALENT TO BE?



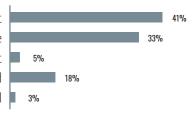


Source: 2019 Portugal Fintech survey to the top 30 Portuguese Fintechs



WHICH DO YOU SEE INVESTORS POINTING OUT AS **POSITIVE POINTS ABOUT PORTUGUESE FINTECHS?**

Talent Ability to execute Market Idea/Problem being solved Referral



Source: 2019 Portugal Fintech survey to the top 30 Portuguese Fintechs

Source: 2019 Portugal Fintech survey to the top 30 Portuguese Fintechs

THE FINTECH HOUSE



WHERE FINTECH LIVES IN PORTUGAL

Continuing the work to create the best conditions for the development of the Fintech ecosystem, Portugal Fintech is gathering the entire network in one single place. The Fintech House is the physical point of contact for an entire industry that does not stop evolving and that now has the capacity to grow even faster, through a closer relationship between all its parties. More than a place where startups can work or base their offices, this is the must-go place for Fintech in Portugal. A home to foster the proximity between, not only startups, but also the whole ecosystem, such as investors, partners, technical consultants, legal offices, incumbents or regulators. This is the place where innovation in technological and financial services happens and lives.

COLLABORATION IS KEY

The Fintech House is born from the collaboration between Portugal Fintech and Sitio, one of the main co-working operators in Portugal which counts with 10 locations around the country. It is the combination between the expertise of creating great places to work and the knowledge of a community enabler, which allows to create a space with everything startups need to develop their solutions.

As a collaboration itself, and understanding the major importance of synergies and joint ventures in the modern entrepreneurship world, the whole Fintech house's environment is optimized to promote engagement between members. The house is composed of:

- · An entire floor dedicated to networking, relaxing, meeting and events. This is where Founders meet for a coffee; where unexpected talks with innovations teams of incumbents come from; or where startups can encounter VC's in town:
- An auditorium to host the best events in the world of fintech, from innovation hackathons and tech talks to demo days and company offsites.
- The House hosts startups from completely different sizes, with a focus on having a diversity of projects going on. It also welcomes different players representing the ecosystem, being possible to find a bank, an insurance company, a tech and consulting team, a legal firm and an infrastructure & Cloud partner co-living at the space.



OUR GOAL IS TO HELP YOU THRIVE

- A Palace An entire building with 5 floors and 1500m2;
- In the Heart of the City Praca da Alegria 22, right next to Avenida da Liberdade;
- Where Fintech Lives 170 seats to startups, incumbents, investors and other parties;
- Auditorium 100 m2 to receive the top events of the industry;
- community.



AN ICONIC PLACE

The Fintech House is starting at an iconic place in the heart of Lisbon -Palácio das Varandas ("The Balcony Palace"). A five-floor building with the capacity to around 170 people, dedicated to companies in the areas of Fintech, Insurtech, RegTech and CyberSecurity.

Be part of Sitio – **Use any of the 10 locations**, from Lisbon to Porto; Network and learn – Attend the best events and be part of the Fintech

DRIVERS & TRENDS

accenture

By: Accenture

A sthe first fintech wave settles in our financial life a new wave starts to emerge promising to deliver more of everything, from disruption to opportunities. Some call it the rise of the robots. In Accenture we are positive that this new fintech wave will make possible to go beyond what todays humandriven processes can provide, at far greater speed, agility, accuracy and cost efficiency.

THE FIRST FINTECH WAVE CARVED THE ROAD TO CHANGE

Technology was once seen as an industry on its own, as global tech companies emerged and made their way into our daily lives ahead of the dotcom bubble in the year 2000. Since then, everything has changed. As years went by, every industry, sector, and company embraced technology in their own time, with most financial institutions trying to be competitive implementing sustainable innovation and avoiding early adoption. This once vertical and dominant industry was poised to great changes in the years to come.

It wasn't until 2015 that the term "fintech" started to be heard around the world and attracting significant investment from venture capitalists, with long conversations being held over the "competition vs. collaboration" dilemma. But as the ecosystem evolved, the environment went from a competitive one led by fear and dominance to a coexistence landscape marked by collaborative improvement (in the majority of markets). Managers, leaders and CEOs of major global banks and financial institutions started acknowledging the real value and benefits of the startup disruption. In that sense, financial institutions have been engaging in new synergetic strategies aiming to improve service and interaction with customers and clients, designing a new future leveraged on startups' technology, agility, and diversified talent. Startups, on the other hand, wanted the scale, visibility and reach that incumbents had to offer.

RECENT EVOLUTION AND TECHNOLOGICAL CHALLENGES OF THE NEXT WAVE

Along with the innovation that fintechs brought with them, and after a period of adaptation from the incumbent institutions to the fintech wave, these startups set the pace for change by raising a real challenge to banks' perspective of what lies in the center of their business: the customer. Banking strategy is now led by customer centricity backed up by innovation with its inherent digital transformation at heart. In interviews conducted with over 25 banking BPO service providers, 85% of banks were proclaimed to have ongoing digital transformation projects leading their priorities for FY18 and FY19 and additionally, over 60% of interviewed banks stated they expect to be digitally mature by 2020, a number that has risen from below 20% in 2018.

Fintech firms are much to blame for this new paradigm, considering their reputation on bridging the gap between what banks offer and what customers really want and need. Their focus on customer experience through fast, transparent, frictionless and personalized services helped push traditional financial institutions to switch their attention to the final customer, by setting omni-experience channels and the building of digital trust as two of their main priorities.

This new wave of innovation inevitably changed the Portuguese landscape, as banks have gone into building new digital experiences through apps and new offerings for their customers (with many incumbents leveraging on fintech startups through partnerships). Following the importance of financial institutions in our every-daylives, the sector is now expected to further evolve in its proximity to the customer, not so much on territorial presence, but on swift availability whenever it is necessary, building on a much-needed advisory role. As innovative technologies emerged over the last few years, so did new market dynamics, showing relevant evolutions on what is the financial institutions' perception over this plethora of available tech. As stated last year, these players were forced to look outwards beyond their

THE REGULATORY ADAPTATION TO THE PRESENT FUTURE

L ong gone are the questions of what would be pushing what forward: innovation or regulation. The rhythm in which technology (and consequential business opportunities) evolves has made it unsustainable for regulators to stay up to date on every development. But in due time, they come to help drive the competitiveness and change, ensuring it is sustained by a transparent and trustworthy environment. The constant technological evolution demands regulatory entities to be in a permanent effort to conciliate innovation and regulation, a noticeable effort across many countries including our own. The main Portuguese financial regulators work towards guaranteeing all regulatory requirements in areas such as cybersecurity, data protection and information aggregation. Additionally, it has recently created a direct contact channel for innovators to reach out and clear any existing doubts.

borders, given the fact that the sectorial limits have become blurred due to the wide reach enabled by today's innovative technologies. Such change lies on two principal structural vectors:

Financial products moving outside the financial industry, with more and more players across many other sectors trying to capitalize on their unique assets (specially e-commerce players such as Amazon or Shopify and Alibaba, which can leverage on huge customer bases to create lending systems based on trusted customer relationship and solid credit worthiness data), forcing banks to break sectorial barriers and constantly improve their value proposition and time-to-market;

2. New markets being created with new business opportunities, with banking services now being able to spread into once unbanked markets (unbanked people still exceed 60% in the Asian, African and Latin-American markets). In Europe, while we continue to see the General Data Protection Regulation (GDPR) providing protection to all citizens and their data, imposing boundaries to the use of data ownership, we have other regulations leaving space for further developments, such as the Payment Services Directive II (PSD2) promoting innovation and competition in payments, and the Open Banking initiative breaking down entry barriers and empowering the customer and its data.

Open Banking aims to move from traditional banking into an ecosystem of third-parties leveraged on application programming interfaces (API), an ecosystem that boosts interaction between banks, insurance companies, fintechs, aggregators, retailers and telecoms, all as one interacting with the customers and under governance provided by regulatory entities. This evolution allows for:

a) a focus shift to customer experience (with the customer in the center of it all);

b) a reinforcement of data as a valuable asset, upon acceptance of the customer of a trustworthy relationship with the data owner;

c) a confirmation of a collaboration environment replacing unilateral and individual thirst for profit;

d) an adoption of the new shared economy across the financial industry as has been happening in many other industries.

ARTIFICIAL INTELLIGENCE AT ART DRIVING THE NEW WAVE

oday, one broad spectrum technology stands out for its endless possibilities and potential: Artificial Intelligence (AI). The maturity of this technology has allowed for general human cognition to be transformed into software code, providing computers with the ability to successfully perform tasks that until now could only be performed by humans, as they can now interpret events, automate decisions, and take actions. With Al's potential for massive data analysis and learning capability to point out trends and behaviors, this can be seen as a disruptive innovation that it is undoubtably changing the way business is done, leading companies to refocus their talent in developing cognitive automated processes to deliver the needed agility, accuracy and cost effectiveness to be more competitive.

On one side, AI has the potential to provide cost savings of up to a \$1 trillion in the banking space until 2030, according to a report by Autonomous Research LLP. Such savings come from applying AI throughout the front, middle and back-office of financial institutions, with appliances going from security and administrative tasks, to compliance, authentication and underwriting.

And on the other side, new capabilities are enabling new opportunities and improving the way banks and insurance companies provide their services. Data, for instance (now considered by organizations to be the most valuable asset), when used with AI, allows to offer highly personalized products and services to the customers, minimize risks throughout the whole value chain, and follow price optimization strategies to better suit the clients' needs and increase operational efficiency.

In the face of this new reality and with the rising tendency to move into a sharing economy, Accenture is working towards a brighter future enhanced by a fully collaborative way of creating value. Accenture is actively working to build a fintech and insurtech ecosystem in Portugal by leading a joint collaboration between the most innovative startups and entrepreneurs and forward thinking banks and insurance companies in order to together create cutting–edge products and services. With strategic partners like Associação Portugal Fintech and Nova School of Business and Economics, we aim to share knowledge, experience and valuable tech to create an AI dedicated ecosystem right here in Portugal.

Portugal is more than ever well suited to be a key player in this new revolution and drive the future of AI in financial services, today.

PORTUGAL IS MORE THAN EVER WELL SUITED TO BE A KEY PLAYER IN THIS NEW REVOLUTION AND DRIVE THE FUTURE OF AI IN FINANCIAL SERVICES, TODAY. "

DRIVERS & TRENDS



By: IDC

E very year IDC Financial Insights presents the top 10 predictions for the financial services industries, the "IDC FutureScape: Worldwide Financial Services Predictions". Each prediction is shaped by a common set of key drivers that provides a planning tool for technology leaders and their line-of-business LOB counterparts to use in their IT strategic planning efforts.

This IDC FutureScape is a planning tool for technology leaders and their line-of-business LOB counterparts to use in their IT strategic planning efforts: it provides the strategic foresight needed to inform technology-based strategies by laying out our top 10 predictions; and each prediction supports a five-year planning process by identifying the timing on the x-axis, and the overall cost and complexity to address on the y-axis.

The predictions are based on a large number of sources, from end-user surveys, financial services organization surveys, vendors and fintechs interviews, and it is a culmination of the tenets of our research over the past few years.

The prediction process starts with key external drivers that are shaping the economy, regulations and other components of our society.

EXTERNAL DRIVERS

RISING CONSUMER EXPECTATIONS More convenience, customization, and control

> EMERGING AUTONOMY Learning to live with AI

THE RACE TO INNOVATE

Speed of change, delivery, and operations separates thrivers and survivors

PLATFORMS, PLATFORMS, PLATFORMS Industry competes for innovation at scale

> LEGACY INERTIA Retrofit the old into the DX world

> > SENSE, COMPUTE, ACTUATE Turning data into value

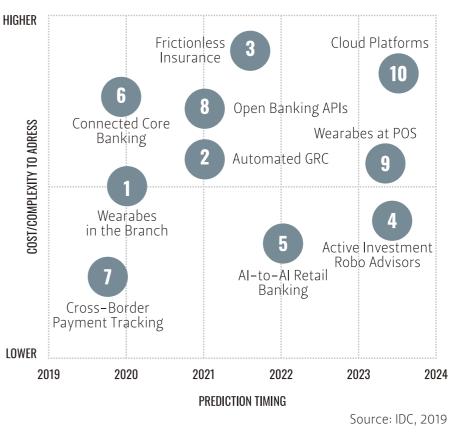
NEW NATURE OF RISK

Innovation to defend against bad actors and comply with increasing regulatory compliancez

The challenges of the industry today continue to be shaped by trying to match fintech innovations, meet customer expectations, and protect the brand while resources are scarce and regulatory burdens persist.

And the mission in financial services today is driven by the need to improve customer engagement in selling, delivering, and servicing financial products, payments, and services. Included in this mission is the need for some financial service firms to improve their "brand trust," providing their customers with a more transparent and secure environment. While some of this will be driven by internal strategy, much of it will be dictated through regulation and guidance. Driving all this is a concept called "connected banking," which is forcing the industry to disrupt its own business model by connecting to adjacent markets in order to expand the relationship with its customers and provide an experience that is being shaped by

Worldwide Financial Services Predictions, 2019-2024



industries outside of financial services.

Despite the significant changes already witnessed in the financial services industry over the past 10 years, the changes from 2019 to 2024 will be unprecedented. The impact of a scaled-up digital transformation (DX) economy on our industry will see more enhanced customer experiences, a proliferation of nextgeneration security solutions, the expansion of cognitive and artificial intelligence (AI) technologies, and the modernization of backoffice infrastructure using open application program interfaces (APIs) frameworks, all aimed to improve efficiency and overall profitability. As part of this digital economy, new rules for competitive success will be built, there will be new roles for IT leaders, and how financial institutions (FIs) interact and engage with fintech vendors will be presented with new requirements and challenges to the status quo.

2019 KEY PREDICTIONS FOR THE WORLDWIDE FINANCIAL SERVICES' MARKET

- the operating expenses associated with manual
- cases that combine blockchain and IoT to make

- **16** By 2020, 25% of all banks will have achieved
- $\overline{07}$ Cross-border payment tracking will be improved
- **08** By 2021, 75% of Global 200 banks will have
- 09 With the growth and acceptance of consumer
- 10 Looking for further efficiency gains and cost

ADVICE FOR TECHNOLOGY BUYERS

- customer and the employee. Wearables will be an excellent way to improve authentication in-person as well as remotely.
- Plan for and develop a comprehensive automated risk and compliance strategy to avoid siloed solutions that cannot leverage and learn from other systems.
- cases as true game changers in customer experience transformation in insurance as well as other financial service industries.
- most wealth managers will seek a hybrid approach allowing more robust and active roboadvisors for higher net worth customers.
- seamless customer experience. Risk-based transaction monitoring should guarantee high level of security with limited bottlenecks. Wearables are also a user-friendly and secure means of authentication.
- bank sides since each demand different skill sets and pose labor management challenges. This is particularly important for the largest institutions in developed economies.
- thanks to the improved SWIFT gpi quasi standard, but banks will need outside assistance on accommodating the changes to their payment hubs.
- APIs but also secures them without compromising the speed of execution. Issues around infrastructure uptime and availability will be important as the volume of API and data usage increases.
- in stores and bank branches and with adjusters. Security will need to be hardened, and customers and employees will need to understand the benefits for successful implementations.
- functionality, workloads, and complete solutions seamlessly from both internal and external platforms and is critical to building agility and flexibility.

Invest in digital and branch solutions aimed at improving the experience for both the

• Work with technology partners that can think of blockchain and IoT-enabled use

• While passive robo-advisors will rule the day for the majority of investors worldwide,

Adopt authentication methods that ensure high levels of security but still provide

· Ensure investment and alignment of IT resources serve both the legacy and connected

• Tracking payments in the same manner we track packages will become the norm,

• **Prepare for scale** by ensuring strong infrastructure capability that not only manages

• **IoT solutions** will find their way to the point-of-sale and authentication terminals

• Develop a Connected Banking Strategy that provides the ability to source

DRIVERS & TRENDS



By: Luís Roquete Geraldes João Lima da Silva Mariana Albuquerque Team Genesis @ MLGTS

 ${\bf T}$ he fintech industry continues to steadily grow while under a close watch from supervisors in the financial, banking and insurance sectors. The intersection between technological innovation and regulated activities continues to create significant challenges for disruptive companies, supervisors and incumbents alike.

Incumbents have been trying to strategically position themselves in the fintech sector, either by investing in new business segments or through integration or collaboration with emerging fintechs. Through the development of new platforms and business models, fintechs are trying to access financial markets but the high regulatory costs (capex intensive) and the slow pace of change of behavior in traditional financial services still make for an extremely challenging environment.

The regulatory advantage naturally lies with the incumbents. As "newcomers" or "disrupters", fintechs often start to operate as unregulated entities, developing their business model in stages that allow them to manage the cost of the regulatory burden and, in some cases, their activity dwells on grey areas that are only tangent to the regulated sector. They are able to leverage on this apparent regulatory freedom, which incumbents lack, to develop their activity favoring a "tiered" approach. Incumbents, on the other hand, have the regulatory approvals required to operate in the financial markets

therefore making the alignment of interests/incentives evident. Such explains the confluence between the two opposing sides, manifesting itself through investment, joint ventures or other means of collaboration. This is part of a wider global trend we are observing in Portugal as well, although Portuguese incumbents, when compared to other countries, seem more reluctant in making direct investments in fintechs.

Another recent trend shows international fintech scaleups increasingly setting up shop in Portugal and Europeanbased fintech scale-ups taking full advantage of the core founding principles of freedom to provide services and freedom of establishment (Revolut is the most recent example). After being granted the relevant licenses in a jurisdiction where the regulators are predictable and the legislative framework is clear and, inasmuch as possible, stable, fintechs operate in other EU countries through the freedom to provide services or branches by leveraging on passporting rules. From an operational perspective, this helps companies better manage regulatory risk since they are able to limit the bulk of regulatory oversight to one jurisdiction and focus on that country's specific industrysector compliance obligations. Companies are then able to better manage and monitor other country specific obligations that apply residually (e.g. rules regarding the prevention of anti-money laundering and terrorist financing).

Interestingly enough, even when Portugal is not the jurisdiction of choice to procure full licensing, international fintechs have increasingly shown interest in setting-up operational centers in Portugal. Our country has unique conditions which make it particularly interesting: high quality level human resources (including foreign language skills), still relatively low salaries and average cost of living, good weather and overall good quality of life.

CC OUR COUNTRY HAS UNIQUE CONDITIONS WHICH MAKE IT PARTICULARLY INTERESTING: HIGH QUALITY LEVEL HUMAN RESOURCES (INCLUDING FOREIGN LANGUAGE SKILLS), STILL RELATIVELY LOW SALARIES AND AVERAGE COST OF LIVING, GOOD WEATHER AND OVERALL GOOD QUALITY OF LIFE

P ortugal has recently seen some full licensing applications, particularly from crowdfunding platforms. With currently six platforms licensed and operating on a lending-based model (with one of six also undertaking equity crowdfunding), half of them obtained a license in 2018 while the remaining half were licensed up to July 2019. Regrettably, this is a sector where legal harmonization has not yet been reached at EU level, making it more difficult for national platforms to operate outside of Portugal and foreign platforms to be able to operate in Portugal.

Additionally, assuming Brexit will occur, it will have a significant impact in the sector affecting both incumbents and fintechs, especially if it is a "no-deal Brexit", with the ongoing re-domiciliation of companies into other EU countries, including Portugal, to continue to be able to target the EU market through passporting rules. As a result of fearing a "no-deal Brexit", many UK fintechs unicorns such as Revolut, TransferWise, Monese and Monzo have either applied or are considering applying for licenses in EU countries other than the UK, in order to secure the continuity of their businesses in Europe.

As previously mentioned, certain fintechs are only tangent to regulated activities and do not require licensing or authorisations to undertake their activity. This is particularly true for regtech companies. Feedzai and Loqr are two great examples of Portuguese regtech companies with increasing cross-border success and Fractal is a great example of a regtech's company operation out of Portugal. In this context, incumbents are able to outsource their demand for technological solutions to regtech companies that specialize, for example, in fraud prevention, anti-money laundering, prevention of terrorist financing, onboarding of new clients and cybersecurity through data science and AI, and without the high cost in R&D. Finally, it is also clear that European regulators emboldened the growth of the fintech industry. Supervisory and regulatory authorities for the banking, securities and insurance markets continue to promote innovation and embrace technological solutions to help consumers. In the EU the European Commission has developed an action plan for fintech and EBA, ESMA and EIOPA continue to closely monitor, produce reports and discussion papers concerning fintech which aims at leveling the field between European regulators and procure convergence in the approach and application of regulatory frameworks (which may also help to reduce certain regulatory arbitrage that may occur within EU countries). In Portugal, Banco de Portugal, CMVM and ASF have also devoted particular attention to companies working in fintech, acknowledging the specificities of this sector and the need for a more tailored approach, with Portugal FinLab being in the forefront of this regulatory initiative.

A REASONABLE CONCLUSION

A reasonable conclusion would be that, while still maturing, the European fintech landscape continues to afford a very favorable regulatory environment which should allow it to continue to grow and thrive. Fears of a "no-deal Brexit" will certainly continue to drive UK-based fintechs to continental European jurisdictions with Portugal becoming an ever more popular choice.

DRIVERS & TRENDS



By: Refinitiv

SMARTER HUMANS, SMARTER MACHINES: A SPECIAL ZOOM ON AI & ML IN THE FINANCIAL SECTOR

KFY INSIGHTS FROM THE 2019 AI & MI GLOBAL STUDY

The use of machine learning is becoming the new norm for the financial community as the sector builds smarter machines to drive competitive advantage. In fact, according to the latest Refinitiv AI & ML study, 90% of financial firms are using machine learning and all c-suit respondents affirm it is a core part of their business strategy, while in 2017 only 28% of financial-services' firms were deploying it.

THE DRIVERS OF THE ADOPTION

Tata is core to the way financial-service businesses operate. Any innovation that makes better use of data and enables data scientists to combine disparate sources of data in a meaningful fashion offers the potential to gain competitive advantage. We are observing key drivers such as the capacity to extract better quality information; increase productivity and speed in processes; reduce costs; and extract more value from data, which all contribute to the adoption of machine learning. The technology is experiencing an increase in the number of applications with more impactful results. While blockchain was a technology looking for an application, machine learning solutions are already in play in the market.

APPLICATIONS FOR MACHINE LEARNING ADOPTION DRIVERS Extract better quality information **Risk management** 60% Increase productivity and Performance analysis & reporting speed in process 48% Trading investment idea generation Reduce costs (alpha generation) Extract more value from data Automation

82%

74%

63%

THE OUTCOME: COMPETITIVE ADVANTAGE

e predict that AI/ML will be the single greatest enabler of competitive advector -services sector. In the last few years, there has been an explosion in the use of machine learning, led by applications for image processing, natural-language processing (NLP) and machine translation. Because these new capabilities are largely based on open-source libraries, and can be deployed relatively cheaply in the cloud, the barriers to entry have fallen dramatically. We expect a flurry of commercial and product innovation from organizations of all sizes. Financial institutions have gone beyond experimenting with and testing machine learning, deploying it in key areas such as financial risk management, pre-trade analytics and portfolio optimization.

It's not news that AI and machine learning are being tested and deployed in businesses of all types. But what is surprising is just how advanced the application of machine learning has become in the financial institutions that we interviewed. Our research shows that c-level business leaders are making significant investments plus have embraced these technologies as mainstream, using them not just to improve productivity, save money or cut costs, but also in key strategic areas including risk management and trading in order to differentiate themselves from competitors.

MAIN ML APPLICATION: RISK AVOIDANCE NOT AUTOMATION OR COST CUTTING

82% across all regions selected avoiding risk as their primary focus 100% of the North American participants selected risk avoidance first

CHALLENGES FACED

Unstructured data, as well as data from alternative sources, are increasingly important areas but need considerably more work before their insights are truly reliable. The adage 'garbage in, garbage out' has never been more pertinent. If data is the new oil, then much of it still needs a lot of refining and that's a heavy lift for the consumers of data.

The survey shows that the devil is in the data: data quality (meaning data of poor quality) is the biggest barrier to the adoption and deployment of machine learning.

As financial institutions are actively using machine learning as part of their core processes, they will have an increasing need for more data, and especially that which can be readily accessed and is curated, normalized and tagged in order to be able to run complex algorithms and process massive financial-datasets.

"The most complicated task is to get data which is relevant, reliable and from a secure data source, which therefore has some statistical value." said a participant.

The opportunity for financial institutions in machine learning is to tap into currently under-exploited sources of data and combine them with existing sources. Although machine-learning capabilities that enable these opportunities are developing rapidly, they are of no use if the data that feeds them is hard to find, poorly curated, dirty and inherently biased

TOP CHALLENGES WHEN WORKING WITH NEW DATA FOR MACHINE LEARNING

Accurate information about the coverage, history and population of the data

56%

48%

Identification of incomplete or corrupt records

Capacity to manage the size and/or frequency of the data

Cleaning and normalization of the data

KEY FINDINGS

MOVING FORWARD

Refinitiv.

It's no longer 'if' your organization should be utilizing artificial intelligence tools such as machine learning, it's 'to what degree' they should be applied. Companies that hesitate will ultimately find they are behind competitors and could have to scramble to maintain or acquire their edge.

FERRARIS DON'T RUN ON WATER OR CRUDE OIL.

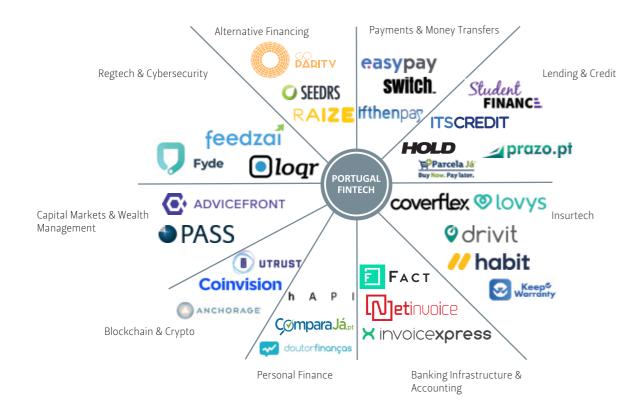
t is equally, if not more important, to ensure the data you are using is of the highest quality possible. For in the end, data is just the beginning. "We see a future of accelerating innovation fueled by wider availability of powerful cloud-based artificial intelligence and machine learning tools dramatically lowering entry barriers and thus changing the competitive dynamic across the industry. But no financial institution will be able to use the technology successfully unless the underlying data is machine ready. We're on a mission at Refinitiv to enable smarter humans and smarter machines. We started our journey in artificial intelligence and machine learning more than a decade ago to provide the technology, analytics and real-time, intelligent data for competitive advantage. This survey confirms the important role AI and ML play in the transformation of financial services and can aid your organization on its technology course. In the end, data is just the beginning." David Craig, Chief Executive Officer,



TOP 30 PORTUGUESE FINTECHS



TOP 30 PORTUGUESE FINTECHS



PAYMENTS & MONEY TRANSFERS

- 37 Switch Payments
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- 39 Easypay

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BLOCKCHAIN & CRYPTO

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PAYMENTS & MONEY TRANSFERS SWITCH





ANDRÉ TAVARES COO & CO-FOUNDER

PEDRO CAMPOS CTO & CO-FOUNDER

SWITCH IS OFFERING ITS SERVICES **TO PAYMENT SERVICE PROVIDERS** AND GOING TO THE OFFLINE MARKET.

6 ABOUT

Switch has created an abstraction layer on top of the existing payments infrastructure, so businesses can get access to the entire value chain through one simple API integration. The orchestration platform can add significant value to any payments operation by reducing technical investment and product deployment cycle, while aggregating transaction information from multiple sources into one consolidated data structure, that eases value added processes like Analytics, Dynamic Routing, Fraud Management, and Reconciliation.

CARGET CLIENTS

Anyone who processes payments online

WWW

www.switchpayments.com









RUCA SOUSA MARQUES CEO & CO-FOUNDER



PRESENCE Global





PAYMENTS & MONEY TRANSFERS

IFTHENPAY

6 ABOUT

payment.

Businesses

WWW

www.ifthenpay.com

© TARGET CLIENTS

ifthenpay

PAYMENTS & MONEY TRANSFERS EASYPAY







NUNO BREDA CO-FOUNDER

SEBASTIÃO LANCASTRE CEO & FOUNDER

IFTHENPAY HAS MOVED MORE THAN € 400 M IN 2018 AND HAS MORE THAN 14.000 SIGNED **CONTRACTS WITH COMPANIES.**

HEADQUARTERS IFTHENPAY processes payments in digital ways and move Aveiro money between entities; starting an own method of PRESENCE Europe STAGE 🗸 Series C FOUNDATION 2013

EASYPAY ACQUIRED A LICENSE TO OPERATE IN 2013, AND IN 2018 IT SURPASSED € 170 M IN PAYMENTS.

6 ABOUT

The idea came in 2000, and easypay was born in 2007 when the European Union created the regulations that allowed the existence of payment institutions. This was the year that the market revolutionized with the pioneering spirit of easypay, that started to provide online payments through Multibanco references and, in 2008, via Direct Debit. The company's DNA comes from its co-founder and CEO, Sebastião Lancastre, an engineer in information systems, that worked in Xerox Portugal and Unicre, a portuguese Credit and Financial Institution. "I was born in a plastic crib due to my family's connection to credit cards. I always heard about cards and now our mission is to walk towards the future, where money will be invisible" Sebastião Lancastre.

© TARGET CLIENTS

Anyone who processes payments online

WWW www.easypay.pt

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HEADQUARTERS





PRESENCE

Spain and other SEPA markets



Series A



REGTECH & CYBERSECURITY





REGTECH & CYBERSECURITY LOQR



NUNO SEBASTIÃO CEO & CO-FOUNDER



PEDRO BIZARRO CSO & CO-FOUNDER



PAULO MARQUES CTO & CO-FOUNDER



RICARDO COSTA CEO & FOUNDER

IN 2019, YTD, LOQR HAS ACHIEVED € 1 M ARR.

6 ABOUT

Feedzai is the market leader in fighting fraud with AI. It is coding the future of commerce with today's most advanced risk management platform powered by big data and machine learning. Founded and developed by data scientists and aerospace engineers, Feedzai has one mission: to make banking and commerce safe. The world's largest banks, processors, and retailers use Feedzai's fraud prevention and anti-money laundering products to minimize risk, while optimizing customer experience.

© **TARGET CLIENTS**

Banks, issuers, acquirers and merchants

WWW www.feedzai.com HEADQUARTERS

US

PRESENCE US, Portugal, UK, Hong Kong



FOUNDATION 2009

6 ABOUT

LOQR provides a 360° identity management platform with fast, easy and compliant customer onboarding including identity verification and digital contract signing features.

*©***TARGET CLIENTS** Banks and other Financial Services providers

WWW www.logr.io









PRESENCE

Portugal, Spain, UK, France, Norway and Hong Kong





REGTECH & CYBERSECURITY

FYDE



INSURTECH COVERFLEX



SINAN EREN CEO & CO-FOUNDER



JOSÉ LUÍS PEREIRA CTO & CO-FOUNDER



PABLO SOLE CHIEF SCIENTIST & CO-FOUNDER



LUÍSA LIMA VP OF ENGINEERING & CO-FOUNDER



NUNO PINTO CEO & CO-FOUNDER

6 ABOUT

Fyde helps companies with an increasingly distributed workforce mitigate breach risk by enabling secure access to critical enterprise resources for their employees, partners, contractors and outsourcers.

© **TARGET CLIENTS**

Companies that still rely on VPN to provide remote access to resources

www.fyde.com

HEADQUARTERS 🏠

Palo Alto

PRESENCE Portugal, UK and US

STAGE VV



6 ABOUT

Coverflex is insurances for B2B as a SaaS that creates monthly insurance subscription plans (bundled products) for SMBs and digital companies by providing a fully digital solution for acquiring as well as managing both policies and claims.

TARGET CLIENTS SMBs and digital companies

www.coverflex.com





JOSÉ AIROSA CTO & CO-FOUNDER



HEADQUARTERS

Portugal



PRESENCE Global



Pre-Seed



FOUNDATION 2019

INSURTECH DRIVIT

Ødrivit

INSURTECH HABIT ANALYTICS



GONÇALO FARINHA CO-FOUNDER



CARLOS ABREU CO-FOUNDER



SASHA DEWITT CO-FOUNDER

THE COMPANY HAS CLOSED TWO MULTINATIONAL CLIENTS.

6 ABOUT

Drivit is a driving analytics solution that can be easily integrated into any app to turn smartphones into high-quality telematics devices. Using its proprietary algorithms based on advanced digital signal processing and AI – to generate a rich and precise dataset of driving data – it enables its clients to promote safer and more sustainable driving behaviours and to address tough business challenges. Drivit is not only helping insurers to reward drivers for their driving safety and their positive behavioural changes but also providing mobility services that can truly help car owners save time and money.

© **TARGET CLIENTS**

Insurers, reinsurers, shared mobility companies, utilities and oil & gas companies

www.drivit.com

HEADQUARTERS A

PRESENCE Europe

Seed



RANKED AS TOP 10 INSURTECH FOR 2019 IN GLOBAL Insurtech competition. Launched Selfcare Platform for insurers to build, launch, and manage new products in just a few days.

6 ABOUT

Habit is a platform that allows insurance companies to offer new products and services on top of connected devices and gain access to real time consumer data. In turn, it builds behavioral profiles off of this real time data which helps insurers better understand their risk, improve pricing, and reduce claims.

TARGET CLIENTS Insurance Companies

www.habit.io





DOMINGOS BRUGES CO-FOUNDER



HEADOUARTERS

New York & Offices in Portugal



PRESENCE Europe and the US



Seed



INSURTECH LOVYS



INSURTECH KEEP WARRANTY



JOÃO CARDOSO CEO & CO-FOUNDER



ELISE MOUTARLIER COO & CO-FOUNDER



ROMANA IBRAHIM CEO & FOUNDER

LOVYS HAS RECENTLY CLOSED THE LARGEST SEED ROUND IN THE PROPERTY INSURANCE INDUSTRY IN FRANCE.

KEEP WARRANTY WAS SELECTED FOR THE ACCELERATION PROGRAMME STARTUPBOOTCAMP FINTECH & CYBERSECURITY '19.

6 ABOUT

Traditional insurance seems like a very boring and complex process to people. Lovys is reinventing insurance by making it 100% digital. It offers monthly subscriptions that are customizable and cancellable at any time. Customers can adjust their policies to get a plan that fit their needs perfectly. Lovys is creating an all-in-one insurance where people stop having four different contracts at different insurance companies to insure all their stuff! Smartphone and Housing are live and Car and Travel insurance will be launched by the end of the year.

© **TARGET CLIENTS**

Mostly young professionals on the B2C, and large banks and other contextual channels on the B2B2C side

www.lovys.fr

HEADQUARTERS Paris





Seed

FOUNDATION

2017

6 ABOUT

Keep Warranty is a B2B2C solution tackling the issue of lost warranties and purchase slips by storing them in one secure location and making them accessible at all times via the app. Soon it will offer customized niche insurances that tackle customer experiences in order to make people's lives simpler, helping insurance companies to directly contact their customers.

TARGET CLIENTS Insurance companies, banks and retailers

www.keep-warranty.com





MAHOMED IBRAHIM NON-EXEC. CHAIRMAN





PRESENCE Portugal & Netherlands



Pre-seed





CAPITAL MARKETS & WEALTH MANAGEMENT ADVICEFRONT



CAPITAL MARKETS & WEALTH MANAGEMENT PASS







ANDRÉ COSTA CTO & CO-FOUNDER



PAULO GOMES CEO & CO-FOUNDER

ADVICEFRONT IT SCALING THE TEAM, THE CUSTOMER BASE AND DELIVERING NEW TOOLS FOR FINANCIAL ADVICE FIRMS WHILE ENTERING NEW MARKETS.

6 ABOUT

Advicefront is an adviser tech platform. It's behindthe-scenes tech that takes care of the boring and timeconsuming tasks administrative financial planners hate, freeing them to help their clients achieve their financial goals. Advicefront's goal is to make high-quality financial advice accessible to everyone.

© **TARGET CLIENTS**

Financial Advisors, Wealth Managers and Private Banks

WWW www.advicefront.com HEADQUARTERS London

(O)PRESENCE Portugal and the UK





6 ABOUT

PASS is a fintech company dedicated to using Machine Learning and Deep Learning to turn complex big data sets (both traditional and alternative) into valuable and actionable insights to be used by clients on their Investment activities.

© TARGET CLIENTS

Asset Managers, Pension Funds, Banks, Family Offices, and Other Instittutional Investors

WWW www.passp.net





RICARDO PASSOS CTO & CO-FOUNDER



PRESENCE Europe and Asia



Series A



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PERSONAL FINANCE COMPARAJÁ.PT



PERSONAL FINANCE **DOUTOR FINANÇAS**





JOSÉ FIGUEIREDO CEO

JOÃO MORGADO CMO



LOURENÇO BRITO C00



RICARDO BAPTISTA CPO





RUI BAIRRADA CEO & PARTNER

JOÃO SALEIRO **CTO & PARTNER**

IN 2018, COMPARAJÁ.PT REACHED 2 **MILLION UNIQUE USERS.**

6 ABOUT

ComparaJá.pt is a free and independent online platform for comparison and analysis of banking products and telecommunications services that offers users the possibility to identify and acquire the solution best suited to their needs, with significant savings of time and money, quickly and simply.

In the free comparison tables of ComparaJá.pt, Portuguese families can simulate all offers of home loans, personal loans, credit cards and term deposits, as well as telecommunications services, existing in the market and subscribe, directly or with personalized support from the Support team to the best offer.

© **TARGET CLIENTS**

All Families

www.comparaja.pt







6 ABOUT

Our mission is to help families save money with their financial products. We negotiate with banks and finantial institutions Mortgage, Insurance and Consolidated Credit, helping costumers getting better deals. Thanks to our computer system, we are able to help more than 4.500 new costumers every month with a team of solely 60 consultants. Our portal provides thousands of helpful articles, simulators and information, with more than 4M visits/year (growing every month). We are a Portuguese company, born in 2014, completely boostrapped. At the current day we negotiate sucessfully almost 300M€ of credit every year.

© **TARGET CLIENTS** Consumer

www.doutorfinancas.pt

EACH MONTH, 4.500 NEW CUSTOMERS SIGN UP FOR DOUTOR FINANÇAS' SERVICE.





RUI COSTA COO & PARTNER











PERSONAL FINANCE

HAPI



DIOGO NESBITT CO-FOUNDER



А

Ρ

h

FREDERICO MANGAS CO-FOUNDER

ALTERNATIVE FINANCING GOPARITY



NUNO BRITO JORGE CEO & CO-FOUNDER LUÍS COUTO

THROUGH ITS PLATFORM, GO PARITY HAS ALLOWED PROJECTS TO RAISE € 1.6 M OF INVESTMENT FROM OVER 2.900 INVESTORS.

6 ABOUT

hAPI works in the B2B space and delivers aggregated information from different sources in a single point and format, whether it comes from banks, social security, treasury or any other.

© **TARGET CLIENTS**

Banks and Credit Institutions

www.hAPI.pt

HEADQUARTERS

Lisbon

PRESENCE (Portugal

STAGE

FOUNDATION 2018

🖯 ABOUT

GoParity is an online P2P impact investing platform that connects citizens to sustainable projects with as little as $20 \in$.

OTARGET CLIENTS

Organizations looking for funding for their sustainable projects and investors searching for return with impact

WWW

www.goparity.com









LUÍS COUTO CFO & CO-FOUNDER

PRITESH DINESCHANDRA CMO & PARTNER





PRESENCE Portugal





ALTERNATIVE FINANCING

RAIZE



ALTERNATIVE FINANCING SEEDRS



AFONSO EÇA CO-FOUNDER



ANTÓNIO MARQUES CO-FOUNDER



JOSÉ MARIA REGO CO-FOUNDER



CARLOS SILVA NON EXEC. DIRECTOR & CO-FOUNDER

RAIZE LAUNCHED AN IPO ON THE LISBON STOCK EXCHANGE IN JULY 2018.

SINCE IT WAS LAUNCHED, SEEDRS HAS ENABLED € 770 M OF INVESTMENT INTO A TOTAL OF 880 DEALS.

O ABOUT

Raize is an online marketplace for SME lending and retail deposits. Using the latest technological advances in the field of network platforms and information management, Raize has built a real alternative to the traditional financial system for companies and individuals.

© TARGET CLIENTS

SMEs, Retail and Institutional investors, and Banks

www.raize.pt

HEADQUARTERS

Lisbon

RESENCE Portugal

IPO

OUNDATION 1

🖯 ABOUT

Seedrs is an online platform for investing in the equity of startups and other growth companies. Simultaneously, it allows all types of investors to invest as little or as much as they like (from $\pounds/\pounds10$) in businesses they believe in and share in their success. And it allows ambitious businesses in all sectors to raise capital and build community through an efficient, online process.

Ø TARGET CLIENTS

Startups and investors

www.seedrs.com

SEEDRS



JEFF LYNN EXECUTIVE CHAIRMAN & CO-FOUNDER



London, Lisbon, Berlin and Amsterdam



PRESENCE

Berlin and Amsterdam



Series B



LENDING & CREDIT





LENDING & CREDIT ITSCREDIT



GUILHERME ALMEIDA CTO & CO-FOUNDER



ROBIN EBERS HEAD OF COMMUNICATIONS & CO-FOUNDER





JOÃO LIMA PINTO Ceo ANTÓNIO MONTEIRO HEAD OF PRE-SALES & DELIVERY

HOLD WAS LAUNCHED PUBLICLY IN SEPTEMBER 2019.

ITSCREDIT IS DISRUPTING SELF-SERVICE BANKING WITH ITS OMNICHANNEL DIGITAL PLATFORM THAT IS ENABLING ONLINE CREDIT APPLICATIONS TO TAKE PLACE IN LESS THAN 20 MINUTES.

6 ABOUT

HOLD enables their customers to easily and securely unlock the value of their crypto assets. Hold, deposit, withdraw and convert crypto and fiat currencies.

Borrow fiat using cryptocurrency as collateral or lend fiat and earn interest.

Spend fiat via a HOLD Visa debit card.



HEADQUARTERS 🏠

Oporto

PRESENCE

Portugal, Malta and UK

STAGE 📈

Pre-Seed / ICO

FOUNDATION 2018

6 ABOUT

ITSCREDIT is a software product company specialized in credit solutions and their implementation. With highly qualified team having over 15 years of experience in credit, we provide short implementation time and reduced timeto-market to deploy new credit products and integrate other solutions. Our Omnichannel Credit Platform empowers banks to attain full control over the credit applications process – from simulation to loan origination.

TARGET CLIENTS Banks and Financial Institutions

www.itscredit.com

ITSCREDIT



JORGE BRÁS HEAD OF PRODUCT



HEADQUARTERS Oporto



PRESENCE

Portugal, Canada, Angola, Mozambique and Kenya



Self-funded



2018

LENDING & CREDIT PARCELA JÁ



LENDING & CREDIT PRAZO.PT



MIGUEL QUINTAS CEO & CO-FOUNDER



PEDRO FERNANDES CEO & FOUNDER

PRAZO ALREADY AUTOMATES INVOICE INTAKE, TRANSFERS, PAYMENTS AND AMORTIZATIONS.

6 ABOUT

Parcela Já is a Fintech company focused on installment payments through credit cards, at no cost whatsoever for end customers. The developed software allows end customers to pay their purchased products or services over the store counter from 2 to 12 times with their credit card, without any interest or charges and without any bureaucracies or waiting time for credit approval. For the stores to be able to offer Parcela Já solution to their customers, they only have to have a Parcela Já POS terminal or the Parcela Já web application on their online shop (which is currently in development).

TARGET CLIENTS End consumers and any retailer

www.parcelaja.pt

HEADQUARTERS

Lisbon

PRESENCE O



FOUNDATION 2017

6 ABOUT

Prazo.pt enables and improves Companies adoption and Banks offering in Factoring. It does so, providing the technological platform, the back office resources and originating new businesses.

Ø TARGET CLIENTS

SMEs, as well as small and medium banks

www.prazo.pt











LENDING & CREDIT STUDENTFINANCE



BANKING INFRASTRUCTURE & ACCOUNTING **GOFACT**





MARTA PALMEIRO CEO



MIGUEL SANTO AMARO NON-EXECUTIVE DIRECTOR



SÉRGIO PEREIRA CTO



HUGO PINTO CEO & FOUNDER

MORE THAN 22.000 COMPANIES AND ENTREPRENEURS IN PORTUGAL USE FACT, OF WHICH 1.000 INTERACT WITH IT DAILY.

6 ABOUT

StudentFinance is a Fintech and Edtech company that aims to solve the skills gap, while transforming the trillion dollar education industry.

We assess the skills society needs and make the education affordable and accessible through Income Share Agreements.

Our predictive model creates an intelligence layer between talent, education programmes and employers to bring transparency and maximize employment outcomes.

The company is based in Madrid with operations in both Portugal and Spain.

OTARGET CLIENTS

Education Institutions, Employers, Students

WWW www.studentfinance.com HEADQUARTERS

(0) PRESENCE

Madrid

Portugal and Spain



FOUNDATION

2019

C TARGET CLIENTS SMEs

www.fact.pt

6 ABOUT

We proudly develop the invoicing and finance management

portal FACT.PT, aiming to provide new solutions that gives

to a manager fast and valuable insight about his business, by processing and aggregating all the information arround

sales, expenses, and bank accounts.

60











Series A





BANKING INFRASTRUCTURE & ACCOUNTING INVOICEXPRESS



BANKING INFRASTRUCTURE & ACCOUNTING NETINVOICE



RUI PEDRO ALVES CEO & FOUNDER

INVOICEXPRESS IS AT AROUND € 1 M ARR.





ANTÓNIO VARELA CHAIRMAN & FOUNDER JOÃO CASTRO PINHEIRO CEO

SME'S NEED LIQUIDITY AT HAND WITH SHORT NOTICE AND NETINVOICE HAS PROVEN ITS AGILITY IN PROVIDING IT. WE ARE NOW READY FOR SCALE-UP AND THE FUTURE SEEMS VERY BRIGHT.

6 ABOUT

InvoiceXpress believes that invoicing should be the easiest and simplest outcome of a business. It should happen effortlessly, while compliant with every new fiscal law. InvoiceXpress exists to simplify invoicing. It keeps everything in place, and even communicates directly to the Tax Authority. 3 steps are all it takes: 1) Create an account on Invoicexpress; 2) Fill in your invoice; 3) Send it to your client.

InvoiceXpress does the heavy lifting for you keeping you focused on your business. If you need to make your app talk to InvoiceXpress, there's a handy API you can use. Some say it's the easiest and quickest to integrate. But there's nothing like taking a look for yourself.

TARGET CLIENTS SMEs, mainly service companies

www.invoicexpress.com

HEADQUARTERS

Lisbon

PRESENCE

Angola, Belgium, Cape Verde, France, Malta, Mozambique, Spain, UK and the US



None



2010

6 ABOUT

Netinvoice is the first Invoice Trading platform idealized and developed in Portugal. Through its fully digital marketplace, SMEs can access liquidity by selling their Trade Receivables (invoices) to tackle Working Capital constraints and focus on their business. On the other end, Invoices are acquired by Buyers who find in Netinvoice a reliable alternative instrument for Portuguese SMEs' short-term direct exposure with controlled risk and attractive returns. All of this supported by a fast-paced and highly efficient proprietary platform developed by Netinvoice.

OTARGET CLIENTS

SMEs and Buyers (as per definition by the Bank of Portugal)

www.netinvoice.pt







MÁRIO AMARAL CTO JOÃO FEZAS VITAL Cro



HEADQUARTERS Lisbon



PRESENCE Europe





BLOCKCHAIN & CRYPTO

ANCHORAGE



BLOCKCHAIN & CRYPTO COINVISION



DIOGO MÓNICA PRESIDENT & CO-FOUNDER



NATHAN MCCAULEY CEO & CO-FOUNDER



MIGUEL LEITE CEO & FOUNDER

LAUNCHED OUT OF STEALTH IN JANUARY 2019, IN MAY IT ANNOUNCED END-TO-END INSURANCE COVERAGE, BROKERED BY AON AND IN JULY IT RAISED A \$40M SERIES B FUNDING ROUND, LED BY BLOCKCHAIN CAPITAL AND VISA.

COINVISION SURPASSED THE + 15,000 SUBSCRIBERS MILESTONE

6 ABOUT

Anchorage is the first crypto-native custodian designed to deliver the full services of a traditional custodian. It has brought the best of security engineering to crypto custody, for a solution that's not only safer, but also supports asset productivity.

© **TARGET CLIENTS**

Institutional funds & family offices that hold crypto assets

www.anchorage.com

HEADQUARTERS

San Francisco

PRESENCE California and South Dakota

> STAGE 🔨 Series B



6 ABOUT

Blockchain and cryptocurrency research platform. Helping more than 15,000 subscribers access independent and professional information about credible projects in the blockchain market.

C TARGET CLIENTS

Retail investors and B2B

WWW www.coinvision.co





Lisbon

HEADQUARTERS

PRESENCE

US, Europe, Australia, New Zeland and Asia Pacific markets

STAGE ∨

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6 ABOUT

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PAYMENTS & MONEY TRANSFERS

REVOLUT

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PAYMENTS & MONEY TRANSFERS EBURY



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VLAD YATSENKO CTO & CO-FOUNDER



RICARDO MACIEIRA COUNTRY MANAGER PORTUGAL



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EBURY IS A MEMBER OF TECH CITY UK'S FUTURE FIFTY 2017 AND THE DELOITTE UK TECHNOLOGY FAST 50 2017, WHICH RECOGNISES THE FASTEST GROWING UK BASED TECH COMPANIES.

6 ABOUT

Revolut was launched in July 2015 by former Credit Suisse and Deutsche Bank investment bankers, Nik Storonsky and Vlad Yatsenko, as a digital alternative to the big banks. While the fintech initially drew in customers by allowing them to spend and transfer money abroad with the interbank exchange rate, the company has since attracted over 7 million customers in Europe with its spending overviews, budgeting controls and cryptocurrency exchange. To date, Revolut has raised approximately \$340 million in funding, from notable venture capital firms including Index Ventures, Ribbit Capital, Balderton Capital and DST Global.

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Series C

FOUNDATION

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6 ABOUT

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2,600 years after the first coin was created, Lydia is paying homage with a carefully-crafted app for today's daily needs. With Lydia you can ask or transfer money to your friends, as well as pay with QR Code in store and adquire tickets for the best events in town! The french app with more than 2 million users is now working to launch some premium features in the portuguese market, which include a physical card without any fees worldwide.

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6 ABOUT

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2012

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Apiax builds the most powerful and flexible tools to master complex financial regulations digitally. It allows to transform complex regulations into digital regulatory rules and offers financial institutions the opportunity to deploy machine-readable regulations in their applications.

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6 ABOUT

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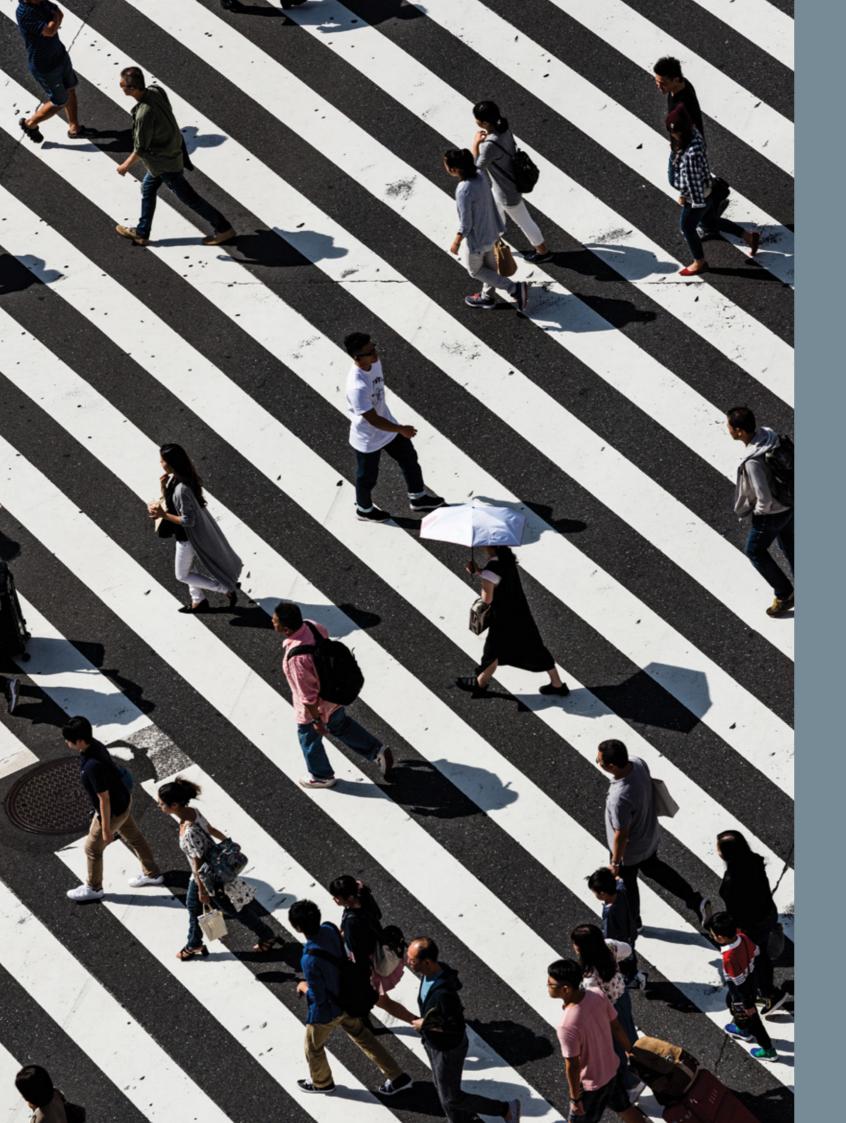
JOÃO TÁVORA PORTUGAL MANAGING DIRECTOR













KEY INSIGHTS



NIKOLAY **STORONSKY**

Founder & CEO of Revolut

After the surprising announcement that Revolut was going to expand its operations to Portugal, building a team of 400 people, Portugal Fintech went to talk with Nikolay, the CEO, and Ricardo, Portugal's Country Manager, in order to understand what was on the grounds of this decision and what we can expect from its promising future.

It is already news that Revolut chose to expand, with more than 400 hires to be allocated to the Revolut offices in Oporto. What weighed in that decision?

Portugal is quickly emerging as a key FinTech hub in Europe, and we're incredibly proud to be playing our part in that movement, as we look to create up to 400 new jobs. Last year, during my trip to WebSummit in Lisbon, it became very clear to me that the country was fully embracing the benefits that financial technology has to offer.

You have stressed before that Portugal is emerging as a key fintech hub in Europe – what would you say we are doing right?

THE PORTUGUESE ARE EARLY TECH ADOPTERS. "

The Portuguese are early tech adopters. People are keen to experience new products and services that may facilitate their

day-to-day life. Due to Portugal's amazing quality of life, great resources, good cost of living, it's normal that tech companies are putting the country in the forefront of their mind for anew investments. The presence of big tech events like Web Summit also, undoubtedly, help bring clarity on this journey. Portugal has been working really hard to showcase how its startup ecosystem is excelling and I think they are now profiting from it.

What is your vision for Revolut and on which stage of it are you?

We are building a truly global bank. Our vision is strongly based on one of our mission pillars: never settle. Revolut is a company that is constantly innovating, that will never stop looking for new features that are relevant for our customers and that will continue on trying to break the status quo. We celebrated four years this year with more than 7 million customers and we're expanding into new markets like USA and Singapore. We're still at an early point in our journey, but I'm



immensely proud of how much our teams have mastered to accomplish in such a short term. Our goal is always to put the customer at the center of everything we do, so we'll just keep working hard to reach the goals we set out at the beginning of our journey.

TROUR GOAL IS ALWAYS TO PUT THE CUSTOMER AT THE CENTER OF EVERYTHING WE DO (...)

How can this expansion help you achieve it?

If we want to be a truly global bank, we need to be where our customers are. Portugal is a very interesting market, across Europe we've been doing very well, but we need to establish our presence in other territories, like we did with Australia and like we plan to do in markets around the world. The office in Matosinhos will become our second biggest customer support center. The fact that we're investing in the country brings additional awareness and with that, hopefully, additional

customers that might only be hearing about us now. People need to know we exist. Once they know, they typically enjoy and use the product because it appeals to ever-demanding customers.

Revolut is known for developing really fast, partnering with other companies to speed the time to market. What is the "secret sauce" for such a speed in development?

There is no secret recipe for success besides having a team of talented and passionate employees, and a drive to succeed. Revolut's success is due to our dedicated team of experts from a number of interesting backgrounds that didn't feel that the industry had a solution for them. This goes out to the core of every developer, every financial expert, every compliance team member, to everybody. They know they are creating a product that truly impacts people's lives, and that's their fuel for keeping up and getting it done.

THERE IS NO SECRET RECIPE FOR " SUCCESS BESIDES HAVING A TEAM OF TALENTED AND PASSIONATE EMPLOYEES. AND A DRIVE TO SUCCEED. "

Can you reveal any new feature or service that is about to come?

We recently rolled out trading for our Premium and Standard customers, following the success of the trading launch in July for our Metal customers. We're providing even more people with access to the stock market to help make financial services more inclusive, innovative and affordable. We're continuing to build on the trading product, rolling out access to different markets and products in the near future. In addition, we'll be launching Revolut Youth, aimed at 7-18 year olds, teaching children financial literacy. Our long term plans are for the Revolut Youth app to meet the United Nations's development standards for financial literacy.



Country Manager of Revolut Portugal

What is Revolut's traction in Portugal and what are your plans to grow?

Portugal a tough market to break into?

REVOLUT IN " PORTUGAL IS A **GREAT CASE-STUDY.**

Revolut in Portugal is a great case study. We have more than 270 thousand users, and we have grown more than 150% in the first eight months of 2019. Portuguese consumers are very eager for our product. We're the 7th biggest market in Europe, in our Retail, and the 5th in Revolut for Business. Our focus is to continue bringing awareness around our services, to localize the product as best as we can, and to really help democratize access to financial services.

The Portuguese - interestingly, even the younger generations - have a tendency towards conservatism with regards to their finances. Was I don't see Portuguese as conservative as, sometimes, we think we are. The startup boom in Portugal has helped push our innovative side, Portuguese are very tech savvy, we love technology and innovative solutions that allow us to live our best lives. Revolut's success in the country is solid evidence that we're changing the paradigm. Portuguese are investing in the stock market with our trading feature, using crypto, making donations, creating vaults for their holidays. There's still a lot to be done, but we're on a good path.

What are the most requested features Portuguese the of consumers? Any particular behaviour or is it similar to the rest of Europe?

Our average user age is a bit higher

RICARDO MACIEIRA

than Europe (35 vs 33), but the overall tendencies are similar. People are using their Revolut accounts to spend and transfer money globally, without hidden fees, they are using their Metal cards with all it's advantages - like the cashback, which is one of the most liked features. In addition, they are investing in the stock market and setting money aside with our Vaults feature. Revolut is their ally for travelling, but it's becoming more and more a great tool to manage their finances.

Do you have any advice for Fintech startups who might want to break into Portugal as well?

I would just say you should learn about the market, take your chance, surround yourself with people with whom you can learn, explore and expand your professional network and never stop moving forward and evolving.



NATASHA MILLER

Chief Operating Officer, Financial Services and Digital Talent at Accenture Europe Africa & Latin America.

Natasha Miller is Chief Operating Officer of Accenture Financial Services Europe, Africa and Latin America. Having worked for over 20 years in the Financial Services industry, helping top tier organizations to prepare for the future, Natasha agreed to give us a strategic view on what is still to come of this innovation and technology wave.

As a strong supporter of the Fintech Innovation Lab in London, a city that is historically known for being in the forefront of financial services innovation, can you explain how Accenture is helping startups innovate and transform the industry?

This is an exciting question. We have now at least 10 years of experience in this sort of special ecosystem, and we have learned in that time, which has lead us to iterate our approach continuously. Everyone who has participated has a real jam of stories, but I think there are two things that are really differentiating.

Firstly, the difference of skills and experiences that we bring to the startup organization. We bring mentors, we bring concepts and ideas from our whole ecosystem, – which as you can imagine, being a global business, has enormous referenceability and access to the startup enterprises – the ability to gain so much from a very large and diverse ecosystem.

The second thing, which I believe is becoming even more powerful in the journey, relates to the fact that we have also gone on an active acquisition strategy in the last five years, where our acquisition experience has grown exponentially. We therefore have our own experience of integrating small organizations into a large ecosystem, and I think it has brought an even greater level of awareness, and we can therefore be quite provocative in the ideas and the thinking around a new startup: how can a new startup become successful when they are dealing with legacy business, and indeed make you think about some of the compliance and regulation aspects as well.

I think those are the two main flavours to me that have been massively game changing and bringing Accenture much closer to this frontier of Fintech and an ability to really assist new players in this new ecosystem.

London being one of Accenture's three strategic locations around the world for fintech acceleration programs, how do you believe it compares for example with New York or Hong Kong?

Well, it is probably the longest, most established in some respect. And being in london, it has the benefit of two or

three aspects that I think make it unique.

Aspect one is we have a government and political framework that is super supportive of innovation and collaboration, and therefore has incentives to businesses to land in London and become this 'new player'.

The second thing I think you have in London, which is almost superlative, is this access to the education and academy. That is really unique, because you don't see in such a small geography, in many parts of the world, this complement of education, academy and thought leadership working in such a synchronous way with technology and innovation.

Thirdly, which is something very powerful, is the investment interest. The fact that the VC players and the community who have equity or investment wallet are in London, creates a very powerful nexus for startups and for innovation and for that ecosystem to really be maturing and enabling organizations to survive and thrive. And I believe that is really important. If you look at the success rate of the organizations that have developed in London, I think you will find it has improved and developed over time, building on the insights, as well as the learnings.

Specially looking at the part you were saying about access to capital, we know that innovative fintech companies have been highly attractive to VC across all financial areas. At what stage do you believe we are at? Have we reached the top of the hype or are we just starting?

I have to believe we are just starting, right? And the reason is not because I want to underplay all the experience, learning and exponential growth, because that is phenomenal in itself, but when you look at the way in which the technology is really driving the speed of takeup, I think we are now on the next wave.

You can see this when looking at the development in Al technology, the development in Robotics technology, or the development in enabling infrastructure. All of a sudden, organizations which have got smart ideas can really leverage that advancement in the technology ecosystem. And I think you can also see it in the way that the ecosystem has matured. It used to be that it was dominated by large players with big technology background, and you look at them today and it is actually all about that agile nimble technology startups who are taking the technology to the next level of sophistication, enabling businesses to see new pockets of value and new pockets of opportunities to grow their enterprise and their value back to consumers.

I HAVE TO BELIEVE WE ARE JUST STARTING, RIGHT? **3**

Additionally, there is the development of the mobile device – can you imagine, ten years ago when people didn't have the same access to mobiles or computers, or all the technology? We are now at a point where there is more of an equalisation of access to the enabling devices and channels. That, in itself, is therefore almost enabling everybody to kind of move from the smart ideas of a whole new generation to an easier and more attractive ecosystem to do business with. The fact that today we can ping, we can use these new apps to actually communicate and build networks and social enterprise is part of the next wave, I think. Thus, I believe we are going into a new era where communication will actually enable the conversations that lead to innovation.

How do you see regulatory and compliance measures can boost or block all this innovation that we see going on? What do you expect them to come up with in the next five years?

I think this is the cornerstone topic for Financial Services. If you think about it, five years ago we saw Financial Services collapse and they told you that a good percentage, probably more than fifty percent of their strategic budget would be spent on compliance or regulation. I think that regulators have taken a different start to this new economy opportunity, and I've seen a real shift in the way that regulators are approaching working with tech startups. The UK regulator, as an example, has its own tech strength, its own community of innovation players and has really gone out of its way to extend its network to embrace people who can think smart about how to handle the regulation. You see this change in the way regulators started to realize that to be more effective in their role, they need to understand the challenges that the industry has in combining data, but they are super keen to make that process much more connected, much more thoughtful that instead of spending the time in collecting the data, they can actually have fun exploring the data and understanding what it means for businesses and for enterprises, then helping enterprises to unpick the roadblocks or to discover the areas where data or analysis is unearthing things that the industry needs to get its hands around. And I think

that's where, again, you asked me a question earlier about do we see we are at the next chapter, absolutely because when you have the confluence of regulators being a partner in the collaboration with the industry, that is a very different role from that "policing" stance that may have been more the behavior in the past.

Looking at today's successful Fintech companies, they are challenging incumbents with solutions, for example, built on AI and Blockchain. Do you think that these sometimes become marketing buzzwords, or do you actually see these technologies at the heart of innovation and creating value, attracting investments, and making an impact? And why specifically AI and Blockchain?

That's a big question, I'll try to break it down. I think when a topic most hits the headlines, there is always the risk that it appears a little bit news fad or marketing focus. But that is the communication wave, you have to get the idea out there to get the acceptability of the idea, and then people get behind it.

Now, with blockchain in specific, it is a topic that sounds so future-size that people weren't sure, but as we go on the journey, you are now starting to see organizations really embracing it.

When you look at what Accenture is doing globally with blockchain technology – this is serious enterprise where organizations can see the value of moving to a distributed ledger technology that, hopefully, will simplify and provide much more consistent recognition of transactions, recognition of ledger, recognition of dimensional value. I think it's like that for all these technologies, they have to have an incubation period where they are proven, and once they've gone out of the block then you start to see the industrialization maturing of the way those technologies will break into the market space.

I don't think, personally, that we've got much confidence in AI yet, I think it is talked about a lot and I do believe that people can see the value, but it needs to probably be crystallized for Financial Services into real use-cases where the industry will genuinely see collective value and get behind it, and when you get that kind of industry collective value, it is game changing. A good example is what we have seen in payments infrastructure, when finally we were able to use the Apps and comonizing structures the whole industry jumped onboard with more dynamic acceptable payments infrastructure. That's what we probably got to find for the Al opportunity.

Moving into the Portuguese ecosystem. Lisbon has been emerging to become also a tech hub of reference in Europe, it has been giving birth to unicorns, attracting investment through global tech conferences, we have been having abundant growing talent, Government support and so on. Do you see Lisbon competing with London, or is it also open for more of a collaboration with for example London as a global tech hub.

You know, I'm really open minded. I think any center can take a very strong position if they get the right ingredients, and the right sort of energy in those ingredients. What London has always had an advantage in is infrastructure, which means communications, sights and airports, and all of them being centered on the destination London. So actually, if as an entity Lisbon was to decide to put itself on the map, it would not just be about the ecosystem that supports investment in startups, it has to be that the whole enterprise is behind. Therefore these things, such as thinking about the communications, thinking about the efficiency of getting people from airports to those central hubs, those are all kind of important ingredients to create the collaboration.

There is so much around this to build this interest and you've got the Web Summit this year which is going to be a phenomenal moment, and I think you have also got really exciting moments in terms of Government sponsorship to make the attractiveness of Lisbon from tax and economic purposes really high. I also know

I THINK ANY CENTER CAN TAKE A VERY STRONG POSITION IF THEY GET THE RIGHT INGREDIENTS, AND THE RIGHT SORT OF ENERGY IN THOSE INGREDIENTS

you've made huge investments in the local universities and academies, and I think sponsoring these stem subjects, which we think of as the main drivers for some of the innovation going on the technology space, is all extremely powerful. You have got many advantages of climate, of culture, of all of those things which, again, people want to have fun as well while doing these kind of exciting projects, thus you have many attributes in Lisbon that could make you a real destination.

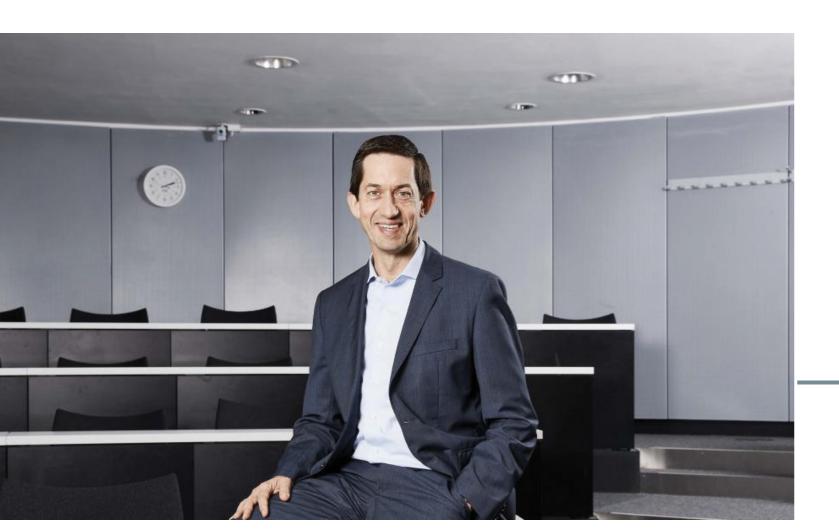
Nevertheless, at the same time I also have quite a strong view that we shouldn't be trying to make one center more preeminent above another, I think the power of this model is the ecosystem of Fintech-centered where we are all feeding of each other to bring collaboration and ideas and that's got to be the universal paradigm.

Now that there is definitely the potential for these synergies, for example Accenture has now built an Fintech ecosystem in Lisbon, how do you see the Financial Services industry benefiting from it, or would there be anything else to foster these relationships?

I think one observation would be that you mustn't think about just an industry segment because what we've discovered is that you get such an interesting dynamic when you think about other industries in the ecosystem. So, for example, for Financial Services looking at retail, looking at the Amazon model or the Google model for their enterprise, really makes a fairly big difference in terms of the way that you think. The second thing that I would highlight is the way in which we are working, so this agility, this co-creation model is fostering environments where people can come together and work in a different way is super important, and I think the more that we can distribute that way, giving people the flexibility and the chance to participate, is again of utmost importance. If it's just the people who work in their offices, you get a distortion I fear.

These are the two things I believe will make a massive difference in the open mindness of the industry, and being open minded on the intergenerational opportunity that this brings. Again, we are becoming much more advanced in terms of take up of the digital agenda, the use of devices, the ability to think smart and really be much more creative in terms of the way that some of the ideas will be executed, whether that be to consumers and people in the marketplace, or even to employees which are also a massively important community that the Fintech industry has the opportunity to influence. Everybody has a working life, but the way we can make that working life even more effective, even more participative, even more collaborative is a major topic in itself. That is another thing that I see coming through in this mixed wave of the Fintech era, it's not just about the end consumers, it's about employees as well. As working professionals, we need to think smart about how people live and work.

AS WORKING PROFESSIONALS, WE NEED TO THINK SMART ABOUT HOW PEOPLE LIVE AND WORK.



FRANCISCO **VELOSO**

Dean at Imperial College Business School

Professor Francisco Veloso is currently the Dean at Imperial College Business School. He is also the former Dean at Católica-Lisbon SBE, and an adjunct Full Professor at Carnegie Mellon University. Francisco agreed to talk with us on "innovation" and its impact on the industry.

As an introduction and because you have such an interesting path, we'd like to focus on your life as a professor and as an innovation expert.

've always been interested in innovation and L entrepreneurship. That interest developed during my undergrad in engineering physics, and eventually became the topic in which I did my PhD. That has also been the area that I've always been working in throughout my academic career, most of it at Carnegie Mellon University in the US. Eventually I came back to Portugal, subsequently became Dean at Católica-Lisbon and, while playing that role, precisely because of my interest, I decided to develop a lot

the entrepreneurship efforts at the school.

Then came the opportunity of becoming the Dean at the Imperial College, which is a very Tech-driven business school. This is particularly relevant for our finance department, which is a top department in the world, with very strong component related to fintech in its multiple dimensions. From crowdfunding, to algorithmic trading, ethics in automated decision making in finance, cryptocoins, or climate finance, we are investing in the future of finance, and doing so through a very important connection to the fintech environment in London and elsewhere.

As an expert in innovation, what guidance can you provide to the sector on the way it is evolving and impact in finance in specific? Where do you see these innovations coming from and how do you see organizations working with it?

I think that there are two sources of innovation and both are absolutely critical.

First, it's important to realize that the financial services' world is really being transformed because of fintech. The depth and the extent of the transformation is extremely significant, and you can pick whatever indicators you want around that. For example, if one uses financial indicators, it's quite significant that Lloyds Bank is investing £3 billion in its digital transformation. And this transformation is important for established organizations, as it is for new entrepreneurial firms. Therefore, I really

think that existing financial services firms have to make a fundamental commitment to pretty much change everything, processes, toolkit, culture, to really embrace digital. It is a very important driver of transformation.

FINANCIAL SERVICES' WORLD IS **REALLY BEING TRANSFORMED BECAUSE OF FINTECH. I MEAN.** THE DEPTH AND THE EXTENT OF THE TRANSFORMATION IS **CRAZY IN MANY WAYS.** For example, JP Morgan hired as a Chief Scientist Officer, not somebody with a very strong background in finance, but actually the former head of the robotics at Carnegie Mellon University, the Portuguese Professor Manuela Veloso. The reason behind it is that they wanted to create a research organization capable of leveling with places such as Microsoft Research or Google Research, to help drive the future their products and services – historically, financial services have never thought of themselves as being at the cutting edge of research and technology. They are now realizing how significant this change needs to be. The second one is the entrepreneurial route. Precisely because this is a brand-new world, a lot of the innovations are coming from new entrepreneurial firms. Take cryptocurrencies or digital currencies, which are transforming financial services - the Bitcoins and the Etheriums of the world and the startups that support them have captured a lot of attention. These are a set of transformations opening up all sorts of possibilities for firms, be them new or established.

And we are seeing firms entering all areas of the supply change with different approaches and different business models to try to go forward. You have players that are already quite visible, like the Revoluts of the world. But you have firms like a startup called Loot, in the UK, that basically provided basic account services to people entering the financial market for the first time. In two years they captured 200.000 clients. While they have since gone into administration, it's amazing that startups coming up out of nowhere can get several hundred of thousand of clients in a domain that is supposed to be the bread and butter of the established banks.

Being considered by many as a techhub, do you see Portugal having an advantage in terms of positioning, as what regards to fintech?

I think that the advantage that we can think about

Portugal is not specifically in regard to fintech. It has to do with the fact that it is a very cost-efficient country to do business and it's a very nice place to live, and it has very good "raw talent". On top of that, it is now much more visible internationally that there is a growing vibrant entrepreneurial community in Portugal.

Take a company like Feedzai, which is the most visible Portuguese fintech firm. They are very successful, global and fast growing, an amazing company that was created out of Portugal. The fact that a company such as Feedzai can be created in Portugal is relevant because it shows precisely the depth and the extent of the on-going disruption of financial services, as it demonstrates that a fintech firm can originate and develop out of Portugal.

I think the general conditions that I talk about, the vibrancy on the entrepreneurial community and these early success stories like Feedzai can be super powerful for another budding startup to go out there and position its product, and get traction and development in the global market. The early success of fintechs like Freedzai are going to help reinforce the notion that very successful innovation at an international level can come out of Portuguese institutes.

If you had something to teach to the Portuguese ecosystem, what would be?

On the Portuguese market they need to be able to corner whatever specificity local opportunity exists, because it is important to get traction from your local market and use it as a successful demo case when one goes abroad. Yet, because the Portuguese market is tiny, entrepreneurs really need to think globally, very, very quickly.

So, for example, going back to the example of Feedzai, they had an early testing with SIBS, which didn't last very long, but immediately provided a base-case for them to go out and sell to other international clients. In fact, many Portuguese successful startups, and this is not

IT HAS TO DO WITH THE FACT THAT IT IS A VERY COST-
EFFICIENT COUNTRY TO DO BUSINESS AND IT'S A VERY NICE
PLACE TO LIVE (...)77

just in fintech but also more broadly, see that one of the differences when they start to talk with people in more sophisticated markets is how fast decisions get made – the decision can be negative, but can also be positive. So, it is quite important that entrepreneurs spend the required time engaging and connecting with new markets quickly and decisively.

That does not mean necessarily moving the base of the company outside of Portugal, because I really think the cost effectiveness of doing things in Portugal is very powerful. Having been in London for the last two years I can tell you that the cost of doing business in here compared to Portugal is crazy different. Overall, it's not about moving outside, but connecting to other realities and making sure you spend the time, the effort, and the drive to really take advantage of the opportunities that exists to anchor your firm in a different development trajectory.

As a dean, what do you feel makes formal education such an important step for entrepreneurs and innovations alike?

If you're going to be a very successful entrepreneur, very quickly you will need to understand finance, strategy, business models, etc, all knowledge that you can acquire in formal education. Of course this is not something that is going to tell you what your idea should be and what your entrepreneurial solutions should be. But a place like a university, where such education is acquired, can also be an environment where you can develop and test your ideas, and connect to other like-minded people, that can work with you in your entrepreneurial journey. More progressive schools and universities, like Imperial or Católica create precisely that type of environment, which can be very powerful to drive forward a very successful entrepreneurial firm.

On the other hand, there is also some element of myth. People have this idea that entrepreneurs are people with the 20 something college drop out because we have seen the history of Facebook and Google. Yet, what more indepth studies show is that your average entrepreneur is mid-forties, with already previous experiences, including some formal training, either on the tech or on the managerial side or both.

How do you feel education is fueling innovation nowadays and especially which skills are more important to be developed in today's students?

I think it's a combination of creativity, teamwork, empathy, your ability to develop yourself, to learn and to continue to be on a learning journey during your career. Moreover, the current leader is one that has to be able to orchestrate, in the sense that you have to be able to work with others in a way that is more about mobilization rather than command and control, as it has been in the past. All these skills are really, really important in a variety of ways, complementary to the more traditional technical skills that people are used to develop. This is certainly something that good universities are paying a lot of attention to.

For example, at Imperial we really worked hard to redevelop the leadership journey that we offer to our students, to make sure that they are well prepared to be leaders in today's tech-driven environment. To be successful in today's age, students have to work hard to make sure they are developing this set of softer skills.



FILIPA **FRANCO**

Head of Listing at Euronext Lisbon

WHY YOUR AMBITION SHOULD BE IPO-DRIVEN

For a long time, stock exchanges have been looked upon as the ultimate goal and mark of achievement for successful entrepreneurs and business cases. But while representing an important milestone in a company's lifecycle, a listing actually marks the beginning of a brand new period, much like a graduation, after which a whole new set of opportunities unfolds. Joining the capital markets will allow your company to benefit from improved access to capital, an increased global profile and a greater access to liquidity.

One can easily recall big names from established family-businesses (L'Oréal, Corticeira Amorim, Jerónimo Martins, Michelin, Peugeot) to first generation successful endeavors (Bill Gates / Microsoft; Jeff Bezos / Amazon, Pieter van der Does / Adyen) that have chosen capital markets as their route towards growth and independence.

If going public represents a solid goal for many entrepreneurs, why then are so many companies still opting for an IPO later down the road? One possible explanation is the easy access to private capital, which following the natural course of the process, delays the decision to go public to a moment when capital needs can no longer be met by private investors, and/or when an exit strategy is sought by investors who need to get a return on their investment.

Turning to private equity can certainly prove to be the right alternative for a company, particularly at an early stage, and in the short and medium terms as an IPO will require a longer preparation. But like all possible financing roads, it comes with its own set of challenges. One of the most obvious is linked to control and decision making. Quite frequently, founders find that when bringing private investors in they will share decision power and often concede on their vision, and to an extent,

IS THIS YOUR AMBITION?

GOING PUBLIC – A QUESTION OF MINDSET?

- can even be pushed aside from the company's main strategic decisions. Another sensitive point has to do with compensation, as often these deals make it harder to find a balance between remuneration and exit strategies for founders and early-stage investors. These are but two examples that reinforce why a company can and should seriously and strategically contemplate resorting to capital markets – whether complementary to the venture capital / private equity, as a natural successor, or the main source of financing, from the get-go.
- In fact, and almost as an offset, keeping control is one of the strongest positive externalities that capital markets offer public companies. For companies with a good equity story, strong business model and powerful leadership, going public should be engrained in its mindset from day one as it allows for the fulfillment of their founders' vision, while defending the company's brand and culture to the core.

GOING PUBLIC – A MATTER OF TRUST?

Earlier I mentioned challenges associated to all financing routes. So without beating around the bushes, it is fair to say capital markets' seemingly thorny path is its investors. Capital markets investors are the most demanding and challenging ones. Investors who will grant you a onetime chance to convince them to invest in your company. Investors that, if not pleased with your openness and clarity, regarding business and performance - positive, or otherwise, - will not hesitate to sell-down their shares. Yet more importantly, when that trust is honored, capital markets' investors will fully support your capital needs and growth ambitions, offering you the means to materialize your vision and growth opportunities in a very short time frame. Because they will trust your ability to identify and grab market opportunities, set up the best business model, develop the highest value product and put together a strong, experienced and independent management team.

Trust is the cornerstone of capital markets. Because unlike private investors, capital markets' investors are not taking a role on the company's management and decisions. Instead, they trust management will successfully run the company, make it grow and value their investments. This trust must be conquered and kept by a clear and effective communication strategy, by being honest and reasonable about the company's ambitions and goals, and of course, by delivering upon expectations, and if not, clearly accounting for what went wrong.

GOING PUBLIC – A MATTER OF BEST FIT?

Capital markets are flexible, both regarding the way the listing is conducted, and where it is executed.

Indeed, there are several ways to come to market, ranging from a direct listing, without capital raising, to an 'Initial Public Offering' (IPO), or conducting a private placement on a few institutional investors. Likewise, there are different markets, with varying sets of rules and obligations, adjusted to your type of business, its profile and capital requirements and your ambitions.

In Euronext, these markets will range from regulated markets, more demanding in terms of requirements, to Euronext Growth for top performer SMEs and Euronext Access, the perfect entry level market for early-stage companies.

GOING PUBLIC – WHY EURONEXT?

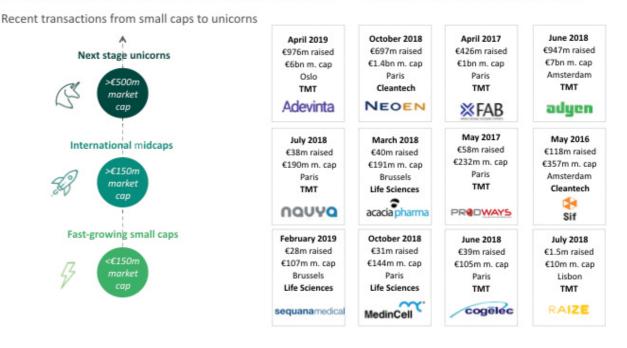
With over 1,450 listed companies and an aggregated market cap of €4.8 trillion, Euronext is the leading pan-European stock exchange, with local presence in 6 European historic exchanges to date (Amsterdam, Brussels, Dublin, Lisbon, Oslo and Paris), while acting as single player, i.e., positioning itself as a global exchange that offers a single order book, trading platform, liquidity pool and harmonized framework to European issuers and the financial community.

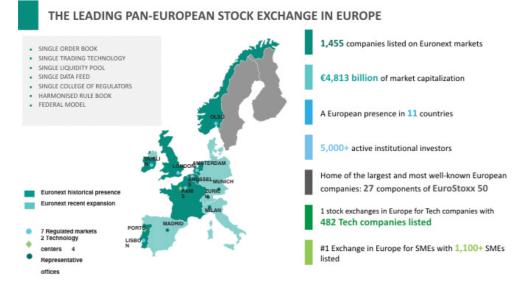


Not surprisingly, Euronext reflects the dynamics and specificities of Europe's economy, with a community of listed companies that cover both traditional industries but also - and particularly, more recently - innovative, tech-based companies. In fact, European tech companies are increasingly choosing Euronext as their growth route. Over 480 tech companies with a global market cap of more than €530 billion, benefit from Europe's deepest pool of liquidity and wide (+1,400) and international (47% are US-based) tech-focused institutional investor community that support their stocks' trading and finance their growth ambitions.

A particular beauty of tech businesses is their willingness to go public, both at a later or earlier stage of their life cycle. Out of the 160 listings at Euronext since 2013, you may find plenty of recent examples of this flexibility, from Raize's €1.5 million offer, to Adyen's €1 billion.







This unique offer is particularly relevant for smaller economies, enabling companies that more depend on international capital to grow, to tap into the leading pool of liquidity in Europe.

In fact, it is interesting to note that successful stories in capital markets are far from exclusive to large caps. On the one hand, nearly 75% of the companies listed at Euronext have a market cap below €150 million; on the other, large caps and unicorns are also able to complete € 1 billion IPOs, harnessing financing from investors from across the world.

A CLOSER LOOK INTO FINTECHS' RECENT IPO'S OFFERS US AN INTERESTING INSIGHT: ADYEN

A CLOSER LOOK INTO FINTECHS' RECENT IPO'S OFFERS US AN INTERESTING INSIGHT: RAIZE

In 2018 Raize, the first Portuguese crowdlending platform, became also the first worldwide player to go public. Raize successfully placed on Euronext Access a 100% secondary, retail investors offer of \leq 1.5 million that enlarged the company's shareholder base to over 1,500 investors, after a 4x over-subscribed, 3-weeks public offer. The company's primary goal – to leverage on an Euronext listing credibility, to boost their reputation and reap benefits from that impact on business – has been successfully accomplished, with revenues growing by 75% in 2018.

GOING PUBLIC – A MATTER OF BEING READY!

Capital markets offer companies and their founders an unrivalled set of advantages that no other financing and strategic route alternatives can offer: access to capital to promote companies' growth, diversification of the investor base to allow the company to remain independent, liquidity for their investors, and increased credibility and reputation to support their business expansion.

Because start-ups play a key role in the economy, fostering economic growth and job creation, Euronext has put together a comprehensive set of initiatives to support tech companies on their capital markets route. For nonlisted companies, Euronext launched TechShare a pre-IPO 8-months programme that helps entrepreneurs to familiarize themselves with capital markets. On its 5th edition, TechShare has already provided training to over 280 companies with the support of over 80 partners that offer valuable and expert advisory on a pro-bono basis. Once listed, tech companies can benefit from initiatives that aim at boosting their visibility towards investors, such as Tech 40 Label, recognizing innovative European SMEs and putting them on the spotlight, Morningstar analysis, boosting tech SME's visibility on capital markets or the Trade & Leverage programme dedicated to support foreign tech companies' liquidity.

Getting IPO ready takes time and perseverance. If becoming public is part of your ambition, you should bear in mind what it takes and how you should prepare for it since day one. Once you go for it you need to prepare, gather a strong team and set up an effective investor relations strategy and communication. Euronext is ready to empower you and help you navigate this process – side by side, every step of the way.



WILLIAM MCQUILLAN

Partner at Frontline Ventures

From what we know, you've had an entrepreneurial vein from the moment you left college and joined Ondra Partners as one of the founding employees. We'd love to know more about your path going through college.

"I would say, as a starting point, that both my parents owned their own companies, and since I was a kid, I grew up with both my parents working like 6 to 7 days a week, but both loved it. Therefore, the idea of "having a job" was, for me, having my own company and not having to report to someone else.

When I got into college I started thinking of ideas, but I didn't have any specifics. Additionally, the feedback at the time was that you needed both money and experience to start a company. Things have changed a lot since then, however, at the time I simply thought of which job would help me understand how to start a company. Investment banking was exploding, offering amazing jobs and lots of money and basically, I applied to a bunch of different Investment Banks. I got job offer from Lehman Brothers, which I accepted and my logic at Investment Banking was good, because it would effectively make me earn some money and I could save to start a company, I would learn a lot and I would meet a lot of interesting contacts. I joined

in the summer of '08 and it went bankrupt in September, thus I was forced to rethink my strategy. I was lucky that my boss started Ondra Partners, calling me to work alongside him the week after Lehman went bankrupt. To me it was so exciting, as I'd still learn what investment banking meant and could also be part of a 'startup'. I was there for two years until I realized that what I loved

was taking this idea of doing something differently, pitching it to our clients, our investors, our future employees, opening up offices, thinking about branding, building a company culture. What I didn't particularly like was investment banking, which is why I quit and got involved in the startup world."

Did your experience in banking translate into an interest in fintech startups?

"I would say, it didn't translate into a special interest in Fintech startups, it did give me a better baseline knowledge

about how financial services work. I had to understand regulatory standards and financial plans. However, for me the interest in what I do is very heavily around the people I am investing in. Investing in early-stage is about people. If they happen to be in the fintech industry, even better, because it represents an ever-growing market opportunity."

IF THEY HAPPEN TO BE IN THE FINTECH INDUSTRY, EVEN BETTER, **BECAUSE IT REPRESENTS AN EVER-GROWING MARKET OPPORTUNITY.**

What excites you the most about investing in early-stage ventures?

"One of the best things about being a venture capitalist is that you meet people who are, necessarily, a little bit crazy. The odds are stacked against you and what I mean by crazy is that you have to truly be passionate about what you are doing.

Every single day, I meet people who have taken an



enormous financial and social risk by starting a company. They are pitching to me and I am mostly absorbing knowledge from these incredibly passionate people - it is amazing. What I love is reducing the friction from what their trying to achieve." After, we find Will naming himself as a person who executes, rather than an idealist, allowing us to understand the shift from entrepreneur to venture capitalist.

"Not everyone at Frontline thinks the same way and that's what I like about our partnership. Some of the partners are market-focused, some are product-focused, and that brings better discussions to our Investment Committees."

In a nutshell, what is your investment thesis?

"The reason why we focus, as a fund, on B2B is that when you look at the startup data, 40% more exit and IPO value is being created from B2B companies, versus B2C. There are 70% more B2B companies getting to an exit than B2C companies, having 40% more value created. From a data perspective B2C is a lot riskier." Will responds, rationally, providing us with accurate data and, afterwards, with his experience.

"Additionally, while investing in early-stage companies, if

you have a B2C company, you could spend a month calling a thousand consumers and it still would a tiny bit portion of the customers needed to understand if a product has a chance at success; whereas you could pitch a B2B company, I could call 8 heads of department in any technical industry and, straight away, you meet potentially large clients that can make you profitable. So, we look at B2B as a great investment area, which is both substantially safer than B2C whilst being more profitable."

And what excites you the most about investing in specifically in seed-stage?

"The beginning of a company is always the most challenging moment. It's something that has so much potential, and that can be directed into so many different directions. James, the Portuguese company we invested in, is a great example. They started out doing something different, and then that was just a great team that had built some really interesting technology, and they actually were able to find a very different application for that technology than what they originally thought. I love the early days, when you are still trying to figure out exactly where the potential lies and, as an investor, helping the challenges that arise during this time." He pauses and, clearly, has a strong point to address, continuing with "I don't want to and won't be an investor that gives some money and says 'call me when you exit or when you fail'. I enjoy saying 'here are your challenges, how can we *help?*' and that is what makes my job fun.

At Frontline we don't reject people for being too early. When I was an entrepreneur, it was frustrating being told "no" because I was

too early. So, we have a rule that we don't reject people because they are too early and, if you put that in perspective, 50% of our investments are pre-product; 75% are pre-revenue; and pretty much most of those are in the 'idea stage'. To exemplify, I have been given two term sheets that literally said that we can't actually invest until it is a registered company and has openned a bank account. Literally ideas on pieces of paper."

AT FRONTLINE WE DON'T REJECT PEOPLE

That's amazing on your part, because everyone has someone who has been through the process of being rejected a bit too early.

"And a lot of the times, saying someone they are too early is basically saying 'Hi, I am not going to give you any feedback', when what they should be saying is 'Look, you guys are first time entrepreneurs, and you've never worked in Fintech before so we don't believe that you can build this, we want to see you actually build this product before' or 'You have no technical development talent on your team yet, we don't even know if you can build the product' so either don't believe in the team or don't believe the product is differentiative enough, either way they should give that feedback. In Frontline, because we have the rule that we don't say someone is too early, it forces us to actually give them feedback, whether or not we are right, at least it gives them a data point to base how they evolve."

Do you have any vision for the growth and development of the European Fintech sector in the B2B space? If you feel it's interesting, do you compare it to the B2C space? Additionally, are there any challenges that you are trying to tackle when providing them with expertise?

"I will break that apart.

Firstly, I am incredibly bullish on Fintech in Europe, and the reason why is because actually when we started Frontline we started thinking what sectors could Europe produce better companies in than the US. There are regulations, as the PSD2, coming out across the EU which have lowered the barriers enormously FOR BEING TOO EARLY. in the US, you must get regulated in every single state, which makes it incredibly complicated to expand. So, in general, I am very bullish on European Fintech.

> Secondly, in the B2B space for the same reasons. Fintech is the sexy partner because banking and financial services are such a core part of someone's life that they get a lot of attention. Moreover, I think banks have done very little innovation for many years and now you are seeing a very big wave of it being enabled. But, in the B2B space what people also don't think of or hear about as much because it is probably a little less sexy, is that all companies need all of those things too, and even further and in an even more differentiated way and all of those are being disrupted and altered and changed thanks to the technology wave we are seeing as well. So to me, as bullish as I am on the Fintech space, I am even more bullish on the B2B Fintech space because there are just so many opportunities there to build companies.

And regarding the second part of the question, if there are any challenges

I try to tackle when providing them with expertise, I wouldn't say there are more challenges than other companies. So, a lot of the times with Fintech, there are regulatory approvals needed, but actually for B2B Fintech it is often less regulatory approval needed than B2C so, I think it is just about assembling the right team and the right investor base."

And how do you see the relationship with incumbents evolving within this ecosystem that is growing?

"I would say that most, not all, but most of the large incumbents are now at the point where they realize that they are being, or that their customers are being taken away from them, and I think that banks initially didn't realize it because it was death by a thousand cuts. No startup was saying 'I am going to replace HSBC or Santander' because nobody could do that, but what was happening was every different business line was being affected, so I think that it took them a bit longer to realize this. You now have examples like Barclays, which is a big sponsor of Tech Stars that is very much looking for fintech innovation. Also, one of our investors is Allied Irish Bank, one of the largest banks in Ireland. Banks are specifically looking for one of the new potential Fintech areas that could either disrupt them or be added to them to provide better services and products to their customers."

THE CHALLENGE WITH ANY LARGE INCUMBENT IS ALWAYS THAT ALL OF THESE BANKS ARE SO LARGE, THAT YOU REALLY NEED TO KNOW WHO ARE THE **RIGHT DECISION MAKERS. 37**

"The challenge with any large incumbent is always that all of these banks are so large, that you really need to know who are the right decision makers, and who is going to champion you internally but once you start to be able to do that it can open up a lot of doors and we definitely are of the view that it's often better to work with these big large players. Banks are so much infrastructure-built that I don't think they're going anywhere, and I think that actually figuring out ways to work with them to build better products on both sides is the better route for Fintech, definitely in B2B."

You've referred your investment in the Portuguese Fintech James. Have you found any specific characteristic

of Portuguese entrepreneurs that differ from others, and is there any advice that you could give them when approaching international investors, as yourself? "I don't think that there's anything specifically to Portuguese founders. We've invested in one company, so I don't want to over-generalize, but we believe we can build big companies from anywhere.

T WE BELIEVE WE CAN BUILD BIG COMPANIES FROM ANYWHERE. 37

As an advice, I would say in general most European founders undersell themselves. Particularly because a lot of what we do is help our companies expand into the US and you need to be able to sell the company and pitch it in a more polished way, and I think a lot of the times the founders are too humble because culturally in Europe overly-selling is not appreciated. I would say many European companies don't pitch hard enough.

My advice to entrepreneurs many times is 'you need to take it up the level, don't pitch just what you know you can accomplish, pitch what's possible'."

When advising startups, is expanding to Portugal a recommendation that you give, and if not why so? Additionally, I am going to ask you about Brexit.

"Let me first answer the question without talking about Brexit.

Realistically, we don't advise our companies specifically to move to Portugal and that is because we feel that, as B2B focused, they can target their clients from the geographies they are based in. In the same way that if we had a Portuguese company, I wouldn't advise them to open up an office in Spain and Germany and the Netherlands, from a sales perspective, that's not an advice we give. However, opening up in Lisbon, Oporto, or other Hubs can be a good opportunity to lower the developer cost base. In that sense, we don't actively advise 'You have to move to Portugal, it is the only place to go to' but I think it is on the list of probably five to six places where we recommend our portfolio to open up secondary operations in Europe due to the potential of lower cost base without risking talent.

Moving to the second part to your question, I think the effects of Brexit are very negative for our portfolio companies, and we have been observing three trends: (i) a lot of our bigger UK companies are now finding it much harder to hire European talent, and it will be difficult until we figure out what Brexit really, even if in a post-Brexit the talent pool flow will go back to where it was, in

London it has reduced a lot; (ii) we are seeing this kind of a bifurcation of investors in Europe between those who focus in Europe and maybe not UK now, and those who are UK-focused and that's a pity, I mean, having more pan-European investors will build bigger companies; and (iii) we are seeing more entrepreneurs choosing other Hubs as the place to start their company, such as Copenhagen, Lisbon, Paris, Berlin, instead of London, to the UK's loss.

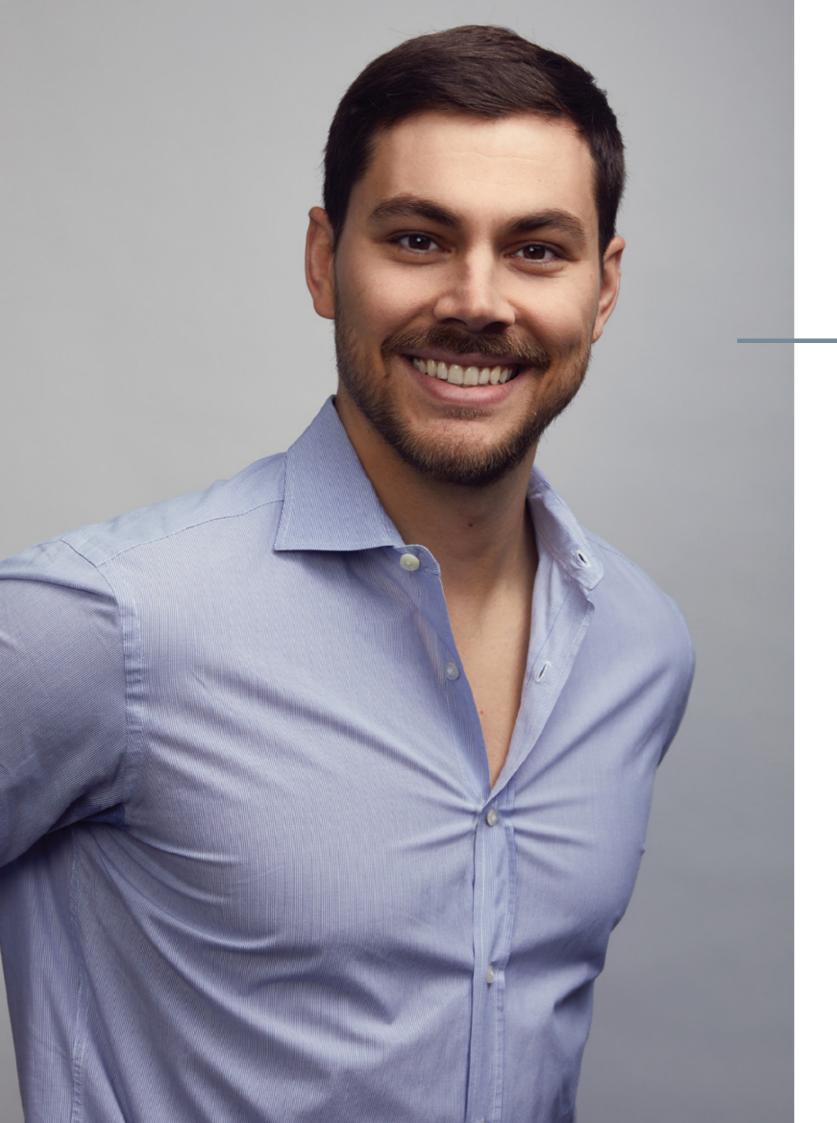
Nevertheless, it honestly doesn't make me recommend Portugal more or less."

Lastly, if you were asked to give a general piece of advice to entrepreneurs out there in a single sentence, what would it be?

"This is an absolutely ridiculous question, because there are so many many things you can say. So, I think maybe what I'll say is also what I don't hear many people talking about, because there are lots of generic ones like 'be ambitious'. In a single sentence: I don't think founders should forget about developing themselves and their team in the early days. That's the sentence, and the context on that is that it is so easy to forget about developing yourself as a person and as a worker in the company and what you often see is that founders were doing everything in the early on, so that when they passport into Series A or Series B they haven't grown with the company."

REAL IN THINK FOUNDERS SHOULD FORGET ABOUT DEVELOPING THEMSELVES AND THEIR TEAM IN THE EARLY DAYS.

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DIOGO MONICA

Co-founder and President of Anchorage

An interview with Diogo Mónica, Co-Founder and President of Anchorage, an innovative cryptocurrency custody service startup. Diogo agreed to share with us a little bit of his background, as well as his insights into the crypto world; how to navigate the rapid seas of security fintechs; and the future of money.

We know that you started in fintech at Square. Could you tell us a bit more about your path?

I've been working in security one way or another for the past twenty years.

My dad was in the field and he taught me how to program at twelve. I had an interest from very early on in understanding security, which led me to focus on network security specifically.

Then I went to get an engineering degree in Técnico. I did my bachelor's, then my master's and ended up doing a Ph.D. in computer science in the distributed systems space.

It was during my Ph.D. that I decided to join Square, about ten years ago. I had been in the process of interviewing at Google and Facebook, and I realized that I wanted to work at a smaller company – Square was still under 30 people at the time. One of the reasons why I joined Square instead of joining one of those big companies was because Square only had one other person on the security team at that point, so I would be working on everything security related, at a payments company – and there's nothing that requires more security than money.

I also really liked the combination between hardware and software security, because it was such a wide scopespanning everything from securing the manufacturing supply chain for the card reader device, to securing our cloud architecture. Obviously, another big reason was the opportunity to work with Jack Dorsey. He had just

- founded his company, and I knew I wanted to create my own thing later in life, so I definitely saw an opportunity to learn from the best.
- I joined Square in early 2011 and led the platform security team. I worked there from the early stage series A and watched the company grow to 1.300 people.
- When I left, it was essentially a publicly traded company and is now worth \$30 billion. My code at Square, and all the security infrastructure that I built, now moves over \$100 billion per year.
- I met my co-founder Nathan McCauley at Square we joined the same week. After a few years of collaborating at Square, we began considering whether we should leave to create our own company. We decided we wanted to maximize impact and learning in a new industry, so we joined forces and decided to sell ourselves as a unit to Docker. Docker was completely exploding in terms of impact – over half of the servers on the cloud run on the Docker platform, and my code was used for all the security aspects of it. So, from an engineer's perspective, having an impact in hundreds of millions, if not billions of servers was a no-brainer next step.

Did you always know you would circle back to fintech?

The reason why Anchorage comes about is because, while I was at Docker, the prices of crypto assets started exploding. In 2017, a lot of ICOs were raising funds and a lot of projects were coming to the space, so a lot of the crypto funds that wanted to invest in the protocols started reaching out to me personally to consult for them. They were asking, '*Hey Diogo*, *you've been in key management for ten years, can you help us with the security of these bitcoin keys?*'

The first client that came to me had lost the passphrase to a \$1.5 million bitfund wallet and they were offering 20% if I could break into it. So, that was my introduction to the business. I started consulting for the funds until I realized that I didn't have enough hours in my day – I had a full-time job at Docker.

That's when Nathan and I decided that building a platform was the right decision. The conversation went something like: "Hey, this is the perfect Venn diagram of our skillset, right? I have a PhD in computer science and distributed systems, we have fintech experience building payments infrastructure for billions of dollars, and doing security at scale." If you do the Venn diagram of all these skillsets, Anchorage is at the intersection: a custodian for private keys that are worth hundreds of millions of dollars.

So, we decided to create this together. We saw that there was a massive opportunity and that's when we decided to raise our series A, \$17 million from Andreessen Horowitz and a bunch of other folks. More recently, we raised \$40 million of venture capital from Blockchain Capital and Visa; we became a Founding Member of the Libra Association; we have some of the largest cryptocurrency funds as clients; and the company is over 40 people now. It's been a fun

TO DID I KNOW I WAS GOING TO COME BACK TO FINTECH? I THINK THE ANSWER IS INVARIABLY YES, ONE WAY OR ANOTHER.

progression.

Did I know I was going to come back to fintech? I think the answer is invariably yes, one way or another. Again, my career goal has always been completely laser focused on security and there has never been anything else that has been more important than protecting money.

It's definitely a great story to tell. Can you go a little into Anchorage, what it is and how it works? How would you describe the way Anchorage crypto custody works in comparison to, say, having all assets stored in a vault under a Swiss mountain?

Anchorage is, in its essence, an institutional custodian for crypto assets. What that means is that we allow institutions to invest in this space and we hold the assets for them, much like a normal custodian in traditional finance would, someone like BNY Mellon or State Street.

In the traditional world, a custodian is a record and a database, or else is responsible for the safekeeping of gold in a vault, or the safekeeping of a treasury certificate. Anchorage was created because digital assets are fundamentally different. You need a different DNA to protect digital assets that are completely irrecoverable if stolen: an actual tech company that has the information security DNA to build this, versus a traditional player coming into this space.

When I was consulting for these funds, I realized that the status quo for this new category of "digital asset custody" was something called cold storage. I like to call cold storage "pirate custody," because the technology is no more advanced than what pirates did to store gold coins in the 1700s. Pirates would take their gold coins, put them in a treasure chest, bury these treasure chests somewhere in an island, and then they created treasure maps so they'd be able to find the treasure later.

When we created Anchorage, the status quo was effectively the same, but instead of gold coins, people were storing wallets with bitcoin private keys; instead of treasure chests they used safety deposit boxes or vaults; instead of islands it was mountains in Switzerland; and instead of a treasure map, you have a checklist that people are following to collect the keys and access their resources.

This is absolute nonsense. There is no way that we've created the most sophisticated digital assets ever, since humankind has existed on this earth, and what we're doing with them is using the same technology that pirates used for gold.

So, we created Anchorage to do better, by taking the best of what we knew how to build from our experiences at Square and Docker, and applying modern security engineering to this new crypto custody use case. We can have better security than burying these assets in mountains, and we can also make them more accessible. Which means that you can use these keys if you want access to your bitcoin today. It shouldn't take 48 hours or be limited by how fast a human can run to a safety deposit box. We need a system that is digital, that has better safety properties, and that supports the level of participation that blockchain networks increasingly require.

So, in the process of having this vision to put in place, how did you go about making it real? What did you think was important at that stage?

The best way I can describe my fundraising experience with Anchorage is that there was and is an absolutely perfect founder-market fit. There are very few people that had academic experience, that had years of scale at a fast growing start up protecting money and then experience with security at scale, that had worked with hardware security models, worked with the regulators, built a lot of the building blocks needed for Anchorage.

This founder-market fit really is unique and I do think that the best companies come from some kind of serendipity of the universe putting the right people at the right places at the right time.

THIS FOUNDER-MARKET FIT REALLY IS UNIQUE AND I DO THINK THAT THE BEST COMPANIES COME FROM SOME KIND OF SERENDIPITY OF THE UNIVERSE PUTTING THE RIGHT PEOPLE AT THE RIGHT PLACES AT THE RIGHT TIME. **99**

We're now seeing some big players entering this market as well. How do you see their role and especially their positioning in a field that, not that long ago, didn't have the same level of credibility it does now?

First and foremost, they legitimize the space – it's actually good for the space that we have banks like Fidelity, and

institutions like ICE, that are helping institutional investors participate in crypto.

It has become an alternative asset, as any of the other thousands of alternative assets. Crypto is becoming a commodity in which there's futures, there's the ability of having liquidity, you have access to market participants, insurance and good grants behind it. So, if anything, it's incredibly good for the space that big players are joining more and more.

And what does this mean for Anchorage?

Regarding Anchorage, we're a digital asset custodian; Anchorage supports all assets.

In fact, what Anchorage believes is that your custodian shouldn't dictate your investment strategy. We have exactly zero clients that only have one cryptocurrency and what clients want is a service that supports all their needs.

In that perspective, Anchorage provides something that is not even in the same category as these players that are coming to the market.

What do you think we'll see develop in the future, beyond these current crypto assets?

Today's global financial system is incredibly complex: what we call "money" includes precious metals like gold, 180 different fiat currencies, stocks, bonds, credit, contracts, derivatives, and many other kinds of financial instruments.

Over the last ten years we've seen several proven use cases emerge so far: the first is using assets like Bitcoin, Zcash, and Monero as stores of value – as a kind of digital gold. The next is stable assets like Dai and Libra, which are meant to function more like the dollar or the euro. And lastly, we've seen decentralized computing platforms like Ethereum and Tezos develop their own tokens, which are used as currency within the platform.

I believe that's just the beginning, and that like the traditional financial system, the crypto financial system will be made up of many different currencies, many different stores of value, and many more complex financial instruments as well-and that new wave of growth will only accelerate as more institutional investors enter the space.

With Anchorage being a Founding Member of the Libra Association, how do you see your role in it and what do you believe the future of Libra will be?

Anchorage has been part of Libra since the beginning. We were one of the first ones to engage with Facebook and to participate, back when it didn't even have a name and it was only two people. Anchorage has deep domain expertise in information security and distributed systems and blockchain and cryptography, so, as Libra developed, we really have been able to advise them on the path forward.

We're very convinced that Libra will launch. The technology has been evolving very well, regulatory pieces are currently being debated, and a lot of the people that we have on board are very big companies. There's another Portuguese company involved, Farfetch, so there are at least two Portuguese related companies in there. I'm very optimistic that Libra has all of the pieces in place to be the largest digital asset that we've had.

So, we have Libra and Telegram coming in; we've seen the Chinese announcing some initiatives; then we heard established players, like JP Morgan, saying they'll launch their own coin. Do you see a currency war brewing here?

I think there will be many cryptocurrencies in existence. I don't think there is a winner take all scenario. In fact, what I think we're going to see is cryptocurrencies that have regions. Potentially, you can see a Chinese cryptocurrency; Libra being adopted in different pockets of the world; some cryptocurrencies are having a lot of success in Europe; and others with a lot of success in Africa...

In a way, I see all these crypto assets sort of like

programming languages. Technically all programming languages do the same thing (all of them are turing complete), yet you have dozens of programming languages that have different frameworks and different specialties.

You'll have cryptocurrencies that store value; others that will be world computer tokens; cryptocurrencies that will be a mechanism for maintaining intangible tokens; or ones that will be stable assets.

In terms of the future of money, there's no question in my mind that there will be digital asset proliferation in the future, and that blockchain systems will allow you to transfer value. If you look at the status quo, it makes no sense that it takes me five days to transfer from the United States, which is a first world country, to my mother in Portugal, which is another first world country, plus that it takes a percentage of the value in fees on top of it. I can send a selfie to my mother right now, but I can't send

money – both these things are digital representations of value that can be encoded in bits exactly like each other – there is no difference between them on a technical perspective, yet one has more regulatory pressure.

I have no doubt in my mind that there will be digital currencies that will be cross border and worldwide in the near future.

Looking back, what was or what has been the hardest part of the journey and, what excites you more about the future?

I think the hardest part of the journey has been focus. There are so many interesting things happening. You can move 100 million dollars across borders with 12 words memorized in your head. We've never had this kind of asset or this kind of facility. If you think about all the applications of blockchain as well as all of the applications of crypto assets, they're just mind boggling in terms of potential applications. So there's a million ways that Anchorage can go, and use cases to which we can apply our technology. At the end of the day, we protect private keys. Yes, right now they're digital assets that might be commodities; in the future they might be securities, it could be anything. It could be the representation of a domain name, it could be the representation of a deed, it could be the representation of a car, a house, whatever it is...

The thing I'm really most excited about is this concept that Anchorage has the potential of being the bank of the internet. As more value accrues to private keys we have the potential of being the new foundational infrastructure that can move value around in a safe manner and store all these different types of value.

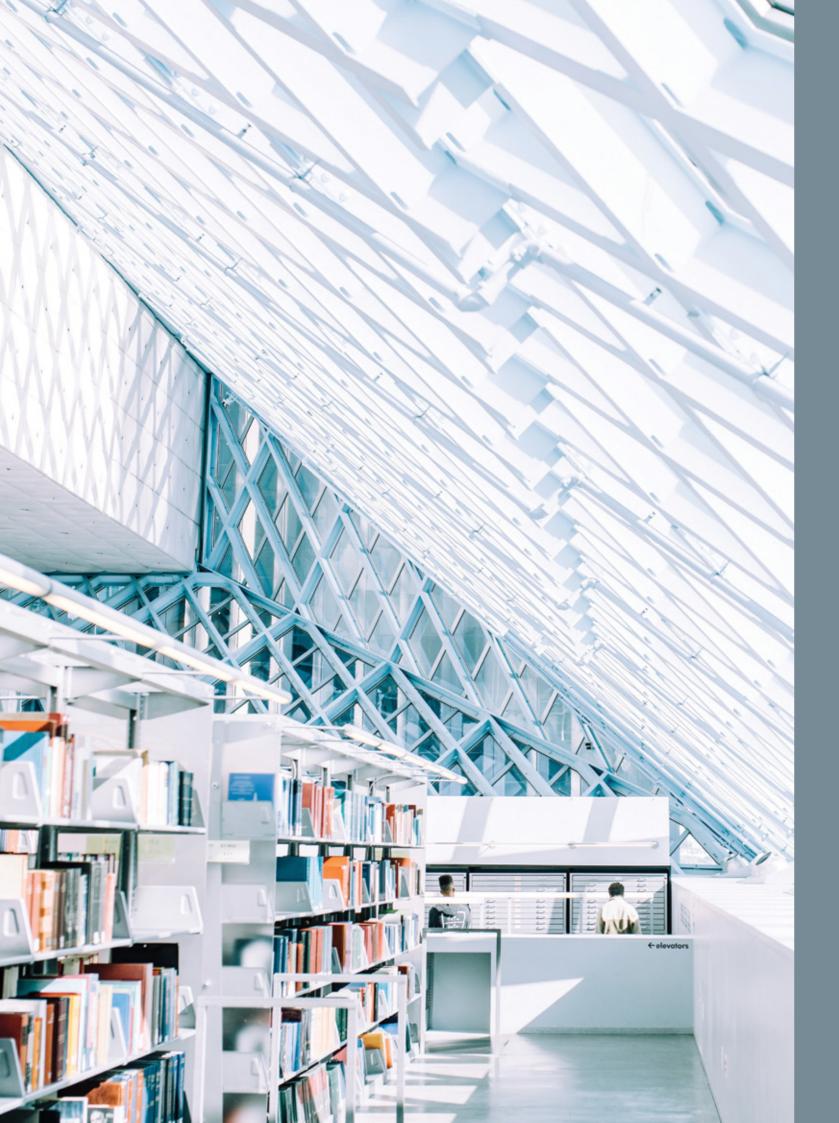
On a different note, did you ever consider starting Anchorage's business in Europe through Portugal? Was it ever a possibility for you given the current ecosystem here?

I've been thinking about engineering offices in Portugal, that's a model that has been working well and one we've seen a lot in companies that are coming to the States. There's a lot of talent, there's deep tech, a really good culture, and incredible life quality. I lived there for the majority of my life, but I do think that you couldn't have started this company in Portugal. The reasons are very simple: there's still no critical mass of talent that has the experience with infrastructures to move a hundred million dollars a year nor as much critical mass for venture capital for firms. Through my tenure at Docker and Square, combined with a lot of the angel investments and co-investments I've made, I've developed a very local network. So, this critical mass of engineering, and critical mass of money, as well as the risk-taking attitude is important.

Those are the three main components to success in a fastgrowing company like this and this didn't exist in Portugal ten years ago. This reality has changed dramatically but you want to be on a stage that's a world stage and I do think there's a lot of headwinds against a company starting a fintech business in Portugal to this day. So, the candid answer is that Portugal is making really great progress on all three of deciding factors but we're not there yet.

Perhaps an option would be to have that first critical moment in the US or somewhere where you have access to those key points you mentioned but if you're considering expanding to Europe, maybe start through Portugal. Would that already be an option you would consider if you had enough support?

If I were starting my next company, I do think that it would be a lot more likely that I would consider Portugal as a place to start. I do think there's starting to be a critical mass from an engineering perspective, but I would still be coming to the US to fundraise and it would be a bicoastal thing from day one. It's a lot easier to sell if you are headquartered in Silicon Valley and San Francisco. There's a lot of venture firms that still don't want to invest outside of the United States, some of them won't even invest outside of Silicon Valley in companies like in Chicago, which is a big city in the United States, but they are still "no, it's not my focus, I don't want to invest there".



FINTECHS ENABLING INCUMBENTS: REAL CASE-STUDIES



HABIT ANALYTICS & ALLIANZ FRANCE

NURTURING A NEW DATA MASTER

// habit Allianz 🕕

ounded in 2018, Habit Analytics is one of the top insurtech startups to watch. This year, the Portuguese Insurtech, which has headquarters in New York, was among the eight best insurtech startups worldwide, recognized at the Zurich Innovation World Championship 2019.

Habit Analytics offers innovative solutions to traditional insurance companies by aggregating and analysing data from IoT devices, smartphones and contextual data sources in order to extract valuable consumer insights. The collected data gives insights about the state of the alarms and understands presence inside the home. This enables insurers to make inferences about the behaviour of its customers and know how to respond.

"HABIT HELPS THE WORLD'S LARGEST INSURERS UNDERSTAND THEIR CUSTOMER"

BUT HOW DID A ONE YEAR OLD STARTUP ACHIEVE SUCH A PRESTIGIOUS RANKING?

Domingos Bruges, Co-Founder and CEO of Habit Analytics, already had hands on experience in this field since he founded an IoT startup called Muzzley, in 2013. After spending years building a powerful platform, he found it a challenge to monetize the product by selling to consumers. During his experience with Muzzley he realized that the secret to success was to restructure Muzzley's business model, considered to be a "B2C" model (Business to Consumer) into a "B2B" model (Business to Business) because that would better serve the demands of the market.

While participating in the Techstars IoT accelerator in New York, Domingos met Sasha DeWitt, current Co-Founder and COO, and together they founded Habit Analytics. Nowadays, they divide their time between Lisbon (where the development teams works) and New York (headquarters). The startup has grown to 17 employees and has raised \$2 million of total funding. They use the Muzzley IoT platform alongside new data profiling models, and given the new B2B approach the startup now targets big corporate clients. In fact, Habit soon realized that the best sector to invest time in is the Insurance one.



I EVERAGING THE POWER OF DATA FOR INSURERS

The Habit Analytics team believes in the power of data and they know that insurance companies are not taking advantage of the opportunities arising from real time data analysis, and that is a problem. Instead, these companies rely too much on historical data from their consumers and consequently do not have real time perceptions of their behaviours and needs. The truth is that insurance companies don't have the internal resources and capabilities to develop very sophisticated technologies based on real time data and IoT. On the other hand, insurtech startups are clearly forcing the redesign of the insurance industry landscape by applying technology innovation to processes along the entire value chain. Therefore, the solution to develop such new technologies is to partner up with these new players and outsource their services. These partnerships are definitely a trend. In 2018, the capital invested in insurtech startups reached \$3.18 billion worldwide almost double the \$1.65 billion invested in 2017, according to data from the FinTech Global database. In fact, there are major global insurance companies scouting for insurtechs that can help them to access new market opportunities by personalizing experiences and providing entry to niches.

OVERALL, THE INSURANCE SECTOR IS STILL VERY EARLY IN THE DIGITAL TRANSFORMATION CYCLE AND EXPECTATIONS ARE THAT INVESTMENTS INTO INSURTECH WILL CONTINUE TO GROW AT A DRAMATIC PACE. THIS MEANS THERE IS A HUGE OPPORTUNITY FOR STARTUPS LIKE HABIT.

THE BEGINNING OF A PARTNERSHIP WITH ALLIAN7

Allianz France knew that for underwriting risks, it was no longer sufficient to look at historical data. Therefore, the big traditional insurer wanted to find a new solution for home security that could enable them to offer new services as well as customize their pricing based on predictive risk models. With this in mind, Allianz started to evaluate several insurtech startups and Habit came up as the most interesting one, with the best technology and pricing. Habit's first pitch to Allianz was in mid 2016 (while still under Muzzley) and the contract was signed in

The white label app was the perfect solution for Allianz because they were able to rapidly deploy a solution without the need of creating a new app from scratch. Moreover, Habit offers a solution that is device agnostic allowing Allianz's customers to choose from a list of compatible devices and control them via the Allianz Safe Home app.

December 2016. The scope of the project included a home safety solution focused on leak and fire detection using IoT devices, smartphones and contextual data sources to extract consumer insights, which would enable new services and data-driven decision making. For this effect, Habit now offers Allianz access to a data analytics platform that provides them customer insights based on profiling on top of the collected data and a white label app that is being used by Allianz customers to control their smarthomes.

" CONNECTIVITY IS BECOMING INCREASINGLY IMPORTANT IN THE HOME, ALLOWING US TO BE ALERTED QUICKLY IN THE EVENT OF A PROBLEM. ALLIANZ SAFE HOME ALLOWS TO MANAGE SERENELY AND EFFECTIVELY ALERTS. BY INTEGRATING ALL THE CONNECTED OBJECTS ON THE SAME APPLICATION AND LINKING THEM TO AN AUTOMATED ASSISTANCE SERVICE, ALLIANZ FRANCE IS TAKING A KEY STEP IN THE SERVICE PROVIDED TO ITS CUSTOMERS IN THE PERSONALIZED PREVENTION OF DOMESTIC RISKS."

- ALINA BURTIN, MARKETS DIRECTOR OF ALLIANZ FRANCE

egarding the pricing, Habit charges a licensing cost to use the technology and R a monthly fee based on the app's active users. During the implementation period, Habit plugged in their solution into Allianz's core infrastructure. Considering that we are talking about a home security service, there was no space for downtime or errors. Therefore, one of the biggest challenges was to manage the performance of the solution since it could not break down because that could jeopardize the safety of customers. For that, Habit implemented a strict SLA and has diligent processes in place for daily testing of devices and pushing new features into production.

Additionally, another project challenge was to manage the multiple stakeholders involved. Beyond the relationship with Allianz, Habit also had to work with one of the Big Four services firms to coordinate the integration with Allianz's systems. For instance, they provided technical support in terms of managing the exposed APIs. Furthermore, since Habit was dealing with sensitive customer data, a huge requirement was to be diligent and follow every legal requirement, such as the GDPR.

ROADMAP FOR THE FUTURE

At last, the solution launched in France in mid 2017, so the project took about 6 months to implement, which put the project 18 months ahead of the initial plan. Nowadays, Habit is providing them constant insights about their customers' behaviours inside their home, which will help Allianz enhance its underwriting model and optimize pricing decisions. However, Habit's team does not plan to stop here. They are already working on new verticals that include the expansion of their use cases related to home security and the development of new solutions such as elderly care and car insurance. Furthermore, they are eager to reach new markets. So why not use the well established relationship with the Allianz group as a vehicle to expand to new geographies?

LOQR AND **BANCO MONTEPIO**

TOPPING UP CUSTOMERS EXPECTATIONS



F ounded in 2015, LOQR is one of the top Fintech / Regtech startups to watch. During 2019, this multi-awarded startup. continued to growth its customer base in Particular data and the startup is a start of the s startup, continued to growth its customer base in Portugal and cross borders. Currently, they have 35 collaborators delivering their platform in 4 countries across 2 continents. LOQR provides a 360° Identity Management Platform, including Fast, Easy and Compliant Customer Onboarding with Identity Verification and Digital Contract Signing features.

CUSTOMER ONBOARDING, FASTER, EASIER, COMPLIANT, 77

BUT WHAT IS LOOR? WHAT IS THE IDEA BEHIND IT? WHAT PROBLEM IN THE BANKING INDUSTRY IS LOOR SOLVING?

Ricardo Costa, Founder and CEO of LOQR, refers that LOQR is mostly known to be a Customer Onboarding Management Platform created to manage the complete process of the customer onboarding workflow for banks, financial services and any other highly regulated verticals. "By using LOQR's platform our clients can build their own customer-centric and compliant onboarding process". Customer Onboarding, Consumer Credit, Credit Card Issuing, among others, LOQR provides all the needed tech tools to support the different phases of each specific workflow, according to each specific product and regulation.



This includes data acquisition, customer due-diligence (including KYC and AML), legal documentation with digital contract signing, core services integration and post onboarding relationship management. "The idea behind LOQR is to build a platform where non-IT companies can design digital processes, new or by migrating existing paper-based ones, without worrying about technology." Ultimately any process that needs customer intervention, should be able to be easily designed and make available through our platform, and the platform will be responsible for filling the technological gaps.

HOW CAN BANKS IMPROVE THEIR CUSTOMER JOURNEYS?

By building business partnerships. To deal with today's customer expectations, banks must deliver the same user experience customers of all ages are used to see and feel in the other day-to-day services they use. Customers are expecting something as simple as opening a new social media account, subscribing a new streaming service or rent an electric scooter. They are able to accept, and they are even expecting, some small additional security related complexity associated with the verification of their physical identity. What they are not expecting, at all, is the need to spend additional time with papers or physical presence. To achieve this expectations there is a need to use the same technologies, methodologies and evolve at a similar pace. LOQR, as an IT product company, focuses precisely on that, allowing banks and other regulated service providers to focus on their core services which, normally, are not around developing technology. And that is why we look at banks, not so much as clients, but as business partners where we also share risks, because like any other successful business partnership it must be a mutually benefiting one.

COMPLYING WITH PSD2, GDPR, AML, AND OTHER SPECIFIC REGULATIONS, SPECIALLY IN THE DIGITAL WORLD, REQUIRES ADDITIONAL AND RELIABLE IDENTITY VERIFICATION (IDV) INVESTMENT AND IMPROVED STRATEGIES. THIS HAS BEEN AND WILL CONTINUE TO BE A GROWING MARKET WITH MUCH TO DO FOR YEARS TO COME.

THE PARTNERSHIP WITH BANCO MONTEPIO

It all started a year ago. At a time when the love-hate relationship between Fintech and traditional banking was being discussed, Banco Montepio, called a young startup to bring innovation, technology, and put traditional banking at their customers' fingers. It was the beginning of a relationship that led Banco Montepio to take another step in its digital transformation process.

With the integration of LOQR's platform, which enables the customer's virtual presence in full compliance with KYC guidelines and contract signing, Banco Montepio was able to launch, in just 12 months, 3 new services: 100% digital remote account opening for individuals, 100% digital online consumer credit and 100% digital online account opening for SME's.

And what do they have in common: the customer experience is always simple, fast, secure and the use of the account or credit money is immediate as they wish. Banco Montepio was particularly apprised with the 100% digital online account opening for SMEs, since they are the next focus of their technological innovation at Banco Montepio.

To finish, we can only say there is much more to come.

12 MONTHS, 3 NEW SERVICES

"With this business partnership, and by adopting a technology base that will accompany it in the future, Banco Montepio has been able to strengthen its path towards a more digital banking service and is able to offer its customers the user experience they are used to on a daily basis even with other state of the art digital service, always according to the Bank high security and compliance standards." – Luís Melo, IT Director at Banco Montepio.

hAPI & BIG

BIG TOTAL BANKING

h A P I

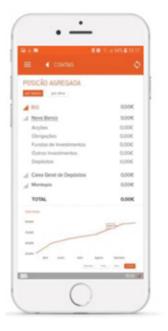
hAPI, founded in 2018 by Diogo Nesbitt and Frederico Mangas, is an enabler of the fintech ecosystem. The team counted with the expertise from previous ventures, such as the "B2B" fintech startup Magnifinance, and from years of consulting for some of the biggest players from the Portuguese industry. It was the combination of this knowledge and skills that led the founders to work together on the creation of solutions for the banking sector, in a time in which financial institutions grow their awareness for the importance of providing new applications on top of their clients' data. Being the market demand ever–growing, this is probably one of the best times to empower applications, instead of creating them on your own – in other words, to work as an enabler in a "B2B" model. The Founders focused their product on the delivery of any kind of financial information, of any kind of financial institution, in a single point and format. At first, you could think that it is another PSD2–fueled startup, but as you will see, it serves institutions in ways that exceed the norm.

TR HAPI IS THE ENABLER, THE USE-CASE IS YOURS **99**

AN OPORTUNITY TO INNOVATE

B anco de Investimento Global - "BiG" - is an innovative bank since its inception. In 2018, the bank focused on investments and savings, addressed the arrival of PSD2, always looking at it as an opportunity, and not as a threat. It was this outside look, combined with an inwards analysis and a close contact to its clients, that allowed BiG to take advantage of the open banking philosophy. It knew that its customers seldom keep their assets in a single institution; that they were managing their portfolio based on the institution and not as a whole; and therefore, not taking all the potential they could be getting, plus being too much exposed to certain products or asset classes. BiG was keen on providing a solution for this problem and it did mark the start of an innovative project and a partnership with hAPI.





IN SEARCH FOR A SOLUTION

B iG goes therefore to the market in search for a solution that can empower its use case – the display of the entire net worth of a client in one single place, whenever he wants, wherever he wants, totally cost free, and with all the convenience and security. hAPI is then the best choice to attack this opportunity. It has the experience in the Portuguese market; the highest number of connections with banks and other sources (including even elements from the tax authority or social security with applications on several areas as consumer credit); the integration of several asset classes, going beyond payment accounts; and it went through the Portugal FinLab with all the Portuguese regulators, reinforcing all measures on how to be fully compliant and up to date at a regulatory level. Payment aggregators are now common, however, investment account aggregators — think, for instance, of having a full view of your stocks, bonds, funds, ETFs, and more — are seldom seen. The scope of the project included the development of an account aggregation solution that, not only showed a full picture of a client's portfolio detained in another bank account, but also provided an analysis of the growth of their respective portfolios by bank and by asset.

"THIS IS A TOOL THAT WILL BE ACTIVELY PRESENT IN THE DAILY LIFE OF OUR CLIENTS. THEREFORE, WE FOCUSED ON DEVELOPING A SERVICE THAT IS SECURE, INNOVATIVE AND FREE."

- PAULO FIGUEIREDO, MEMBER OF THE BOARD OF DIRECTORS OF BIG

COOPERATION IS THE ANSWER: AN INVESTMENT BANKING USE-CASE

T his is only one of the many use cases hAPI can power and one that the company was always keen to support. It is itself an innovative solution – going beyond the known "PFM" (Personal Finance Managers) to create an "IFM" (Investment Finance Manager) – and help manage the entire net worth of BiG's clients. Cooperation was without any doubt what allowed to develop such a proposition, with the desired capacities and conforming with the highest standards and regulatory measures. hAPI worked with BiG to create a solution with the speed and specific knowledge of a startup, along with the legal requirements and necessities of a bank as BiG and its clients. Throughout it, there was the involvement of the technical teams of hAPI as well as of the business and technology teams of BiG.

Regarding the design of the project, there were two major challenges associated to BiG Total Banking: data protection and security; and the collection of information. One of the major challenges of the project, as with any that includes data management in the EU, was to comply with GDPR requisites. BiG demanded the implementation of a diligent solution and one of the great benefits of hAPI concerning data protection - as viewed by BiG, an institution that deals with sensitive personal data daily - is that it does not touch client data. Instead, as mentioned previously, they provide a fully independent software that works solely through the bank and then stores all the information on the core system, being all the information secured with the highest standards. This means, remarkably, that client information is secure, never being handled outside the respective bank's servers and being thoroughly inaccessible to any other parties or even to hAPI. Additionally, another project challenge was the use of data collection technologies, along with the enforcement of PSD2. The client is the main focus when providing these services and, therefore, hAPI and BiG's partnership was born and developed with it in mind. Both always believed, from the first moment, that the user owns its data and must be able to use it whenever and however he wants. Therefore, the technology allows the way around that protectionist attitude, allowing the client the freedom to choose whether they want a full view of their portfolio or not. On the other hand, the infrastructure ensures the easy elimination of all the data in the moment the client demands it.

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 BIG TOTAL BANKING.

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ONLY THE FUTURE WILL TELL

The roadmap for the future includes, certainly, a continuous partnership, both in the maintenance of BiG Total Banking and the development of new verticals to expand to. BiG is looking to expand to new geographies and providing unique services to different target clients, so only the future will tell which solutions will grow out of this partnership, however, they are bound to be as creative as they will be innovative.

Until the moment, BiG Total Banking counts with thousands of aggregated accounts and, with the option to do it, more than 60% of the clients choose to share their data with BiG to have a better service and look for a closer contact with the bank to better manage their portfolio and maximize their results. Besides, the tool launched in November 2018, almost one year before the enforcement of the PSD2 regulatory standards, was distinguished as the Financial Innovation of the year by Euronext Lisbon Awards

ADVICEFRONT & BEST

FOSTERING EFFICIENCY ACROSS THE SECTOR





Advicefront is a technology company founded in 2015 that is building a digital financial advice platform for financial advisors (FAs) and their clients, aiming to reinvent the way FAs help clients grow their money and achieve financial security. The first product that the company launched is **Onboard** – which aims to remove the friction from the beginning of the advice journey for FAs and clients, particularly when it comes to collecting information about risk tolerance, fact-finding, payments and digital client agreements. The company has a second product in beta testing called **Plan**, which is being developed with a community of advisors to help FAs build interactive financial plans and dynamically generate suitability reports to clients, making sure the advice given follows the highest regulatory standards.

"HUMAN-LED FINANCIAL ADVICE SHOULD BE ENHANCED. NOT REPLACED. WE BUILT ADVICEFRONT TO MAKE FINANCIAL ADVISERS BRILLIANT AT WHAT THEY DO - THEY'RE THE HEROES OF OUR STORY."

- ADVICEFRONT'S WEBSITE

HOW DID THE IDEA COME ABOUT?

Jose Supico, CEO and co-founder of Advicefront, was working in the Wealth Management industry and realized that the world of FA was lagging behind in terms of technology and that many clients didn't have access to high-quality financial advice mainly because of the cost involved in delivering it in a timely manner. The original idea was to create a robo-advisor tool, but he soon realized a more human-centric approach was critical during the advice process. After consulting with several investors, the CEO, his co-founder (André Costa, CTO) and Adrian Durham (FNZ CEO and a board member of Advicefront) decided to focus on building a totally new B2B platform for FAs in the UK.

As a London-based company, one of the biggest challenges to Advicefront was to break into the UK market. However,

they defined it as one of the most important strategic goals. For instance, from a long-term perspective, as the UK market is heavily regulated that is a big advantage. In particular, the strict regulations in the UK market makes it easier to expand operations and enter other markets which are still lagging in terms of regulation, such as the US. On the other hand, the company has decided to keep its Product team in Portugal, as maintaining contacts in both markets improves its ability to source talent and keep a more global perspective going forward.

HOW DID THE PARTNERSHIP WITH **BEST MATERIALIZE?**

As specialists in the Banking, Asset Management and Trading areas, BEST is a Portugal-based bank that is known by its technological business products, using a platform to manage its clients' everyday finance, investments and trading. However, a problem that is commonly faced by companies of this type is the time-consuming process for FAs to build an investment position, which could take 6 to 8 hours. Until Best started to work with Advicefront, this was no exception.

dvicefront's value proposition was to reduce the amount of time A required to build a position to about 15 minutes (depending on the level of configuration) whilst safeguarding the ability to personalize every proposition to the specific client and use-case. Moreover, getting efficiency up means reducing costs for customers and partners - and maybe for their clients as well.

BEST, as one of the leading digital banks in Portugal, understands the need to keep innovating and improving processes so it was a no-brainer on the day Advicefront presented BEST's bespoke investment proposition built in just 15 min, after one of the consultants had spent approximately 6 hours to build the exact same proposition.

WHAT HAS BEEN THE OUTCOME OF THIS PARTNERSHIP?

• BEST's Financial Advisors no longer have to struggle for hours with Word documents to build a proposition, everything happens automatically within the Advicefront/BEST platform.

and Advisory team at BEST.

• BEST has managed to cut down the time it takes to deliver an investment proposition to a client from 6 hours on average to just 15 minutes.

• This solution was tailor-made for BEST using the Advicefront engine and core platform so that BEST is able to both benefit from the ongoing updates and feature releases but also to provide a fully customized experience to their clients, who never have to leave the BEST website.

• Advicefront has improved the product on an ongoing basis with feedback from real clients and the day-to-day operations of the Investment

VISA AND FINTECHS

ONE OF THE ORIGINAL FINTECHS



ack in 1958, Dee Hock, Visa Inc. Founder and Chairman, created a company based on the disruptive idea of electronic B money: "What if money became fully electronic? It would become nothing but electrons and photons that move around this world at the speed of light that any individual could use at any time, wherever they happened to be, seven days a week, 24 hours a day".

From this idea and focusing on being the best way to pay and to be paid for everyone and everywhere, Visa has been the leading global payment technology company for the last 60 years.



ENABLING EVERYWHERE

ENABLING EVERYONE



As the world moves from analogue to digital, Visa is applying brand, products, people, network and scale to reshape the future of commerce and bridge businesses and customers:

1. Giving consumers secure, seamless and convenient ways to pay. 2. Supporting issuers by continuing to provide innovative and secure solutions

for their clients.

ssuer

3. Providing acquirers with a low cost and low risk acceptance tools. 4. Providing merchants with assured payments and larger customer reach.

Account Holders

Individuals and

transactions

and services

conduct

businesses that

to pay for goods

41

Issuers

· Financial institutions or companies that issue Visa products to account holders

 Assume account holders' credit risk

· Set and collect fees and interest charges from account holders

Provide customer

holders

service for account

· Offer rewards programs

Develops new market opportunities (acceptance)

systems

FINTECHS: THE PARTNERS ON THE DIGITAL ERA

Fintechs are stirring the financial sector across the world and, through several approaches, Visa has been supporting these companies to thrive, keeping the focus on the potential value brought to the ecosystem. Visa is devoted to be the most responsive and supportive network for emerging and disruptive payment players, where "Visa has a commitment with European fintechs that materialize in an improvement of our internal processes, as well as an investment program that supports the European Fintech development." (Charlotte Hogg, Visa Europe CEO). For example, the following three case studies showcase Visa's role on the fintech world.

As of March 31, 2019 7 As of June 30, 2019 ided to Visa by acquiring financial institutions and other third partic

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BEYOND REGULAR CURRENCY



Spanish start-up founded in 2016 with the aim of developing the "financial platform" of the future" that would bridge the gap between crypto users and the mainstream market to simplify customers' financial decisions and give them full control of their financial services.

In 2019, 2gether enabled its prepaid Visa card to be used in 19 Eurozone countries and allowed clients to immediately convert cryptocurrency to euros and to spend it wherever Visa cards are accepted, free of charges.

This solution allows the consumer to pay in euros or instantly converted crypto currency, to manage both euro and crypto balances, and to buy and sell crypto on the 2gether platform, without putting the consumer through the common hassle of conversion and use of several different applications for one final purpose.

2gether's prepaid Visa card became a reality across Europe through the partnership with Pecunia Cards E.D.E. (Pecunpay), as their regulated Electronic Money

Institution, and with support of Visa for solution deployment and performance monitoring.

To assist fintechs in this space, Visa developed a framework to approve card programmes that enable consumers to convert cryptocurrency to fiat currency, which can then be used to make purchases using Visa debit or prepaid cards.

2gether and Visa collaborated on a pre-paid card programme, undergoing the following phases: Visa BIN request, BIN implementation and certification, card design and chip configuration definition. With this process successfully concluded, Visa is continuously supporting 2gether with further developments, making sure existing and new programmes deliver to the market needs.

SUSTAINABLE BANK ACCOUNT



ToMoRRoW

SUSTAINABLE BANKING ToMorrow

Born in Hamburg, Germany, neobank Tomorrow combines the concepts of "mobile banking" and "sustainable finance", offering a mobile current account and various opportunities to use finance for positively impact the world in both social and environmental aspects (e.g.: microcredits, organic farming and renewable energies).

The first

2gether 🛞

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collaborative

financial platform

0

More recently, through a Visa partnership with solarisBank (banking-as-a-service provider that offers both the technology and the banking license), Tomorrow is able to offer Visa cards to their 12,000 and growing customers, where for every new cardholder, during a period of time Visa will fund 100 new trees in Brazil. Visa and Tomorrow are also exploring opportunities to create environment friendly cards.

Tomorrow's issuing became a reality through Visa's Fintech Fast Track Programme, which provides start-ups a clear path towards the market entering supported by Visa's:

1. Rapid onboarding – designed to meet companies' specific needs, cutting down the process up to four weeks.

2. Industry expertise - connection to Visa's network of certified partners that provide services across the payments spectrum (e.g. solarisBank).

3. Growth drivers – commercial incentives to help companies get started, and marketing and consulting support their scale-up.

INTELLIGENT URBAN MOBILITY



Born from the idea of sustainable cities and smarter mobility, German MOTIONTAG helps mobility providers to aggregate their masses of users into useful information so they can offer seamless, intermodal experiences.

In 2018, MONTIONTAG participated in Visa Everywhere Initiative (VEI) for Germanspeaking markets. Conceived to promote payment innovation, VEI challenges start-ups to answer the future payment market needs, improve their own value propositions and develop innovative services and products considering Visa's value chain and network.

For the German-speaking markets edition, Visa dared start-ups to forecast the "Future Ecosystem for Payments" and provide ideas to enable technology-driven future use-cases powered by digital payments which will shortly become relevant in the market.

Focusing on the German ticketing hassle for public transportation, MOTIONTAG won the challenge with a use-case where passengers would receive a valid ticket with just one click and pay (with Visa card on file solution) just for the specific journey they were travelling, highlighting the need to provide solutions that encompass mobility market heterogeneity and give consumers a seamless experience. After this successful edition, Michael Hoffmann (Head of Visa Innovation Centre Berlin) gratefully applauded the winners stating "We look forward to working with these exciting start-ups to help to develop their ideas with our payment expertise and take them to the next level", leaving the door open for further collaboration.

VISA: SUPPORTING FINTFCHS

To power fintechs and accommodate their diversity, Visa's Fintech Strategy includes a wide range of approaches built upon three pillars:

Venture and investment - financial participation in companies that add value to Visa ecosystem or support new use cases for Visa solutions, promoting the differentiation and improving or accelerating the development of solutions and services.

Fintech partner marketplace – partnership with fintechs, that add value to the payments ecosystem, for Visa's Fintech partners network integration, widening companies' exposure to potential clients and partners.

Commercial incentives - financial incentives adjusted to fintechs cash flows and treasury needs on their initial years in the market.

≡ Sta	atistics			
DAY	WEEK		MONTH	
Nov	Dec Jan	Feb	Mar Ap	
★ Summa	ry			
79	540	19:27	28	
Total amou	nt of tracks			
28.4	Darx	Rabing Rapid transf Subway Car Transay	600	
* Vehicle	Records			
	175	1000	1000	



WHERE REGULATION MEETS INNOVATION



PORTUGAL ΓΙΝΙΛΒ WHERE REGULATION MEETS INNOVATION

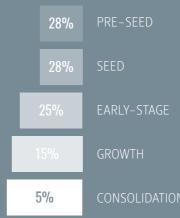
The Portugal FinLab is a communication channel between innovators - new players in the market or incumbent institutions – and the Portuguese regulatory authorities. Through it, regulators provide guidelines to the participants on how to navigate and operate in the regulatory system. The purpose of the Portugal FinLab is to support the development of innovative solutions in Fintech and related areas through cooperation and mutual understanding.

It is the outcome of a partnership between Banco de Portugal, Comissão do Mercado de Valores Mobiliários (CMVM), Autoridade de Supervisão de Seguros e Fundos de Pensões (ASF) and Portugal Fintech. By joining all of the Portuguese financial authorities, we are able to create a better environment for the development of fintech businesses and/or projects, in order to follow the global growth trend of this sector.

RELEVANT **STATISTICS**







SEGMENTS IN WHICH THEY OPERATE





🕂 UK - 7,5%





🔨 US – 2,5%

GERMANY - 1,5%

✓ OTHERS – 10%

12.5% 20% 22.5% ALTERNATIVE FINANCING

IN CONVERSATION WITH THE ORGANIZERS



HÉLDER ROSALINO DIRECTOR OF THE BOARD OF DIRECTORS AT BANCO DE PORTUGAL



FILOMENA OLIVEIRA VICE-PRESIDENT OF THE BOARD OF DIRECTORS OF COMISSÃO DO MERCADO DE VALORES MOBILIÁRIOS

The first edition of the Portugal FinLab has reached its end. In hindsight, how has the experience changed your former perspective on financial innovation?

Hélder Rosalino – Innovation is something that, by its very nature, cannot be regulated in advance, without the risk of incurring in a crystallization of inefficient procedures and practices, only because the law so determines. The truth is that innovation poses huge challenges for regulators.

This first edition of Portugal FinLab has the merit of providing regulators with specific knowledge on new technologies being used in financial services, new services being launched to serve customers' needs, new business models for an existing service, etc. Moreover, Portugal FinLab has brought regulators and innovators closer, which is crucial when you think that the main challenge for regulators is to not jeopardise innovation while safeguarding security and minimizing risks.

Filomena Oliveira – Following the financial crisis, the perception of innovation as one of the major contributors



MANUEL CALDEIRA CABRAL MEMBER OF THE BOARD OF DIRECTORS OF AUTORIDADE DE SUPERVISÃO DE SEGUROS E FUNDOS DE PENSÕES

> to finance development and welfare growth has been challenged and its risks and benefits to society questioned. Created through the coordination of the three financial Portuguese competent authorities, which also teamed up with Portugal Fintech, Portugal FinLab is a highly dynamic platform, proving that it is possible to enhance engagement and to preserve the benefits of financial innovation, while mitigating potential severe risks.

JOÃO FREIRE DE ANDRADE

PRESIDENT OF PORTUGAL

FINTECH

On a personal perspective, I would say that the first edition of the Portuguese Innovation Hub has strengthened my former holistic view on the huge potential of innovation to deepen economic inclusion, sustainable growth and social welfare.

João Freire de Andrade – It is public knowledge that Fintech can originate from banks, insurers, telco's, the so-called "big techs" or startups. The Portugal FinLab showed that the latter are the most active group, which confirmed my former perspective on financial innovation: that these smaller companies are creating a solid solution for addressing some of the biggest challenges of the financial sector. It's also very interesting to see a massive interest from startups in being "Regulated by Design". The previous experience of the startup founders in the ecosystem is huge and, combined with the cutting-edge technology they are developing, creates all the conditions to have innovation driven by technology in the financial sector.

Considering all the different participants and the innovations, what has surprised you the most?

Hélder Rosalino – The main surprises were, on the one hand, the high number of candidates, also coming from different jurisdictions, and, on the other hand, the diversity of innovative projects submitted.

Portugal FinLab demonstrated that FinTechs are eager to share their ideas and projects with regulators so that our feedback helps them to comply with the applicable legal framework.

I AM LEFT WITH THE IMPRESSION THAT THE INNOVATION PROCESS IS STILL LARGELY UNSTRUCTURED AND THE CURRENT STATE OF GLOBAL KNOWLEDGE OF ITS GOVERNANCE IS VERY LIMITED.

Filomena Oliveira – I would say that speed, diversity with innovation, spanning a myriad of activities and intersectional synergies were aspects that, while not being a complete surprise, impressed me the most.

Financial innovation has existed since the civilization of man. However, its pace and popularization quickened in an unexpected way, encouraging new changes. These changes are occurring since the inception of new tools and models, to implementation and commercialization. From the regulators' point of view, this ever-moving scenario is confirming the need of a comprehensive understanding of innovative products, mechanisms and, most importantly, governance models. Only by holding this deep knowledge, regulators will be able to act effectively, predicting and managing the wider impacts of innovation, preferably before they occur, and promote nascent technologies that can play a key role in delivering innovative products and services by enhancing the quality, reducing costs or by increasing access for consumers and investors.

Manuel Caldeira Cabral - I would say I was surprised by many things, for example, the variety of thematic areas presented. Effectively, the covered areas were very diverse, such as RegTech, Lending & Credit, Banking Infrastructure, Payments & Money Transfers, Blockchain & Crypto, Insurtech, among others. Additionally, I would like to emphasize the level of participation of foreign companies, as it reflects a strong signal of how our country is currently seen outside, surging as an important incubator of technological projects which are innovative and attractive. In that sense, this project reveals an important signal of openness from the regulators to innovation, which contributes to reinforce the position of Portugal in attracting foreign investment for the sector. Another stimulating aspect was the fact that the project saw technologic innovators from different dimensions, some were initiating activity while others already had a global presence.

Lastly, a reference with respect to the characteristics of each project, more exactly in terms of their impact, it was interesting to observe the existence of projects with an enlarged impact and others with a more restricted scope, although not less interesting.

João Freire de Andrade – What surprised me the most was the diversity of technology and business models these companies are bringing to the market: blockchain applied to equity fundraising; e-commerce payments; aggregation technology; Open Banking API's; instant credit on the shop; and, even, student financing processes.

Were you able to detect the formation of trends in the sector through the various participants and applications?

Hélder Rosalino – The fact that many applicants presented ideas/projects in the payments domain confirms that the revised Payment Services Directive will have a relevant impact in promoting innovation and competition.

Filomena Oliveira – I am left with the impression that the innovation process is still largely unstructured and the current state of global knowledge of its governance is very limited. Identifying and systematizing the core trends in the sector and their implications for the financial system can be ambiguous.

In Portugal FinLab, we notice that Distributed Ledger Technology and Artificial Intelligence were the most

popular technologies employed in the projects across the two batches, which accompanies the main international trends, namely, security token offerings, robo-advisors and RegTech solutions.

These technologies provoke a major change in the financial system but whatever the final disruptive effects, the financial markets must be characterized by reliability, transparency, efficiency, integrity. In a single but powerful word: trust.

Manuel Caldeira Cabral – When we look at the applications, I believe one can draw a trend. First and foremost, note that in the new business models there is a blurring of the boundaries which segment the financial markets. About 40% of the projects involved more than one supervisor, which places interesting challenges to supervision and reinforces the interest and singularity of this project that gathered the three financial supervisors. Another aspect which also emerges from new businesses is the effort of making easier and cheaper what currently is difficult and expensive, thus benefiting the consumer. It can also be seen that technological innovators are working increasingly with data, that is, the use of big data has had an accelerated development in the last few years. A lot of this development is supported in Artificial Intelligence, running on top of Machine Learning techniques that are feeded by enormous amounts of data of innumerous formats. Let me also emphasize particularly Insurtech. For the purpose of the Portugal FinLab, two projects of this thematic were presented, one related with multirisk insurance in housing and another about motor insurance. I believe it is evident that technological innovation's influence in the insurance sector is strong and shows a tendency to grow even further. Its link with digital technology is imperative since the consumer seeks, by default, a product which is easy to acquire, to use and equally as transparent as possible. The digital technology that is currently being used in the sector, at the level of AI, Machine Learning, Big Data, IoT, Robotic, etc, allows levels of development and efficacy which, either from a technical point of view (actuarial) or from an administrative one (eg. Claims management), or even

from the commercial one (eg. Analysis of consumption habbits), are much higher than the ones achieved so far. The digital and technological development has dragged a strong process of change in the way we live, thus I dare to say that this new technological approach influences most of the sectors in society and, obviously, the insurance and pension funds' sector is equally hit by these winds of change.

João Freire de Andrade – B2B is a massive trend between the participants. The majority of participants created technologies, products and/or services to help other businesses be more efficient.

This is an important characteristic of the Portuguese Fintech landscape and stresses the importance of the Portugal FinLab as, typically, the target of fintech and insurtech companies are banks and insurers, both heavily regulated entities with immense compliance requisites. The FinLab enables the participants to fine tune their offering to these entities.

With regards to the international scope of the innovation hub, was Portugal FinLab a goood vehicle to bring foreign companies and talent to Portugal? What other tools does our country have that may provide us with a competitive advantage?

Hélder Rosalino – Portugal FinLab may be seen as a good vehicle to bring (and retain) companies and talent to (in) Portugal.

The significant number of international participants in the Portugal FinLab made that clear. The main drivers are: fluency in English, technical skills, regulators' proximity, synergies with FinTechs already established, amongst others.

Filomena Oliveira – Most definitely. Probably taking advantage of Brexit impetus, and side by side with

other national initiatives, Portugal FinLab contributed by opening a window, fostering the visibility and the credibility of Portuguese innovation and innovators. The number of foreign applicants to this first edition speaks by itself.

For the first time this century, in 2018 the UK was the top foreign investor in Portugal. A rather unusual number of European countries publicly declare their intention to scope the Portuguese financial ecosystem. Nevertheless, there's still much to do to reach the maturity level the country still needs to be in the forefront of the innovation field.

Going to the second part of your question, the advantages of our country are almost undisputable. I believe that Portugal is now perceived as a start-up nation and a hard-tech location. The economy has witnessed a paradigm shift over the past decades. Rather than exporting goods and tourism, the country has positioned itself as a financial services exporter.

Social and political stability, time zone, weather, culture, cost of living, language skills and a growing pool of highly qualified human resources with an international mindset are strong drivers to convert Portugal in a privileged destination of foreign investment and an hub for financial innovation.

National cohesion and political commitment will be crucial. Despite the big advances of the past decade, Portugal's tech scene is still very incipient. The dispute for high tech talent is worldwide so we need to retain skilled local talent and keep attracting foreign expertise.

Manuel Caldeira Cabral – As said previously, the significant percentage of foreign projects presented reveals that Portugal has known how to keep track with this wave of innovation that is spreading, fast, throughout the world. In the past years, Portugal has asserted itself as an attractive country for startups and for the development of competence centers from large technological multinationals. This has been achieved by public policies which contributed to the growth of Portuguese startups and to the attraction of foreign

investors and entrepreneurs. It seems clear to me that the Portuguese market, as a whole, has become most desirable for the development of solutions which are technologically innovative and which, in some cases, lead to substantial changes of behavior and positioning of the players in the market. The creation of an Innovation Hub is another excellent example of the commitment, in this case by the financial regulators, on the development of this ecosystem, with a strong potential to promote Portugal as a target for foreign investment.

João Freire de Andrade – I agree. That 30% of the applications came from international companies is the best indicator of the scope of this innovation hub. Portugal is seeing an exponential growth of its startup scene, not only from local entrepreneurs, but also international entrepreneurs which are relocating here.

This isn't solely due to the charms of our country – the natural beauty, good food and nice people – but for the key elements of tech talent; an increase in the number of companies reaching unicorn valuation; the existence of specialized investors; and a growing interest from international investors looking for quality with reasonable prices.

Additionally, the openness of the Portuguese regulators – that chose to listen to the market and co-organize a 'one-stop-shop' program to help these entrepreneurs – is a crucial ingredient to this amazingly positive combination.

IT SEEMS CLEAR TO ME THAT THE PORTUGUESE MARKET, AS A WHOLE, HAS BECOME MOST DESIRABLE FOR THE DEVELOPMENT OF SOLUTIONS WHICH ARE TECHNOLOGICALLY INNOVATIVE (...)
• MANUEL CALDEIRA CABRAL

PORTUGAL FINTECH REPORT 2019

de Portugal, Filomena Oliveira from Comissão do Mercado