## FINTECH TAIKS Issue 03 January 2022 Semi-annual publication

Italian Insurtech Summit 2021

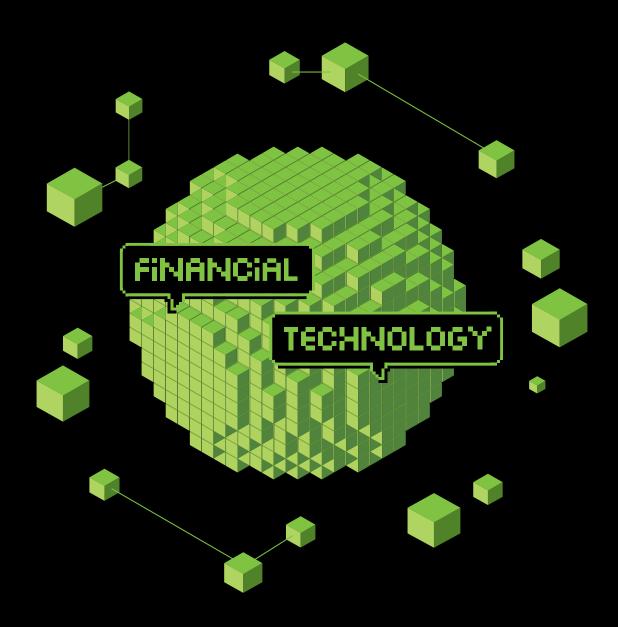
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PROMOTING INTEGRAL HUMAN **DEVELOPMENT AND PEACE** 

by various speakers

# FinTech Talks Mag: together towards tomorrow

A quick introduction in this next chapter of the FinTech Talks Magazine

#### PAOLO GIANTURCO

BUSINESS OPERATIONS & FINTECH LEADER
AT DELOITTE CONSULTING ITALY







Financial services are a business built on trust.

The combination of accelerating innovation and increasing collaboration is the fundamental equation for success in the financial market. In this context, FinTech can act as a catalyst, bringing together different players fostering inclusion, collaboration and idea sharing.

That's why the Sixth Edition of FinTech Talks focused on three disruptive technologies that are changing the way Financial Services players collaborate to build new solutions and products.

The first one is embedded finance, a new paradigm that allows financial and non-financial organizations to share products, ideas and capabilities having as a goal to ease the customer journey and better respond to their needs.

The second one is Cloud, which is shifting day to day from an IT-only solution, to a driver of overall business growth. This happens since Cloud increases the level of efficiency in organizations, it is a

catalyst that can accelerate technological innovation, it allows new ideas and products to be implemented quickly, and finally, it enables collaboration internally and with the broader FSI ecosystem.

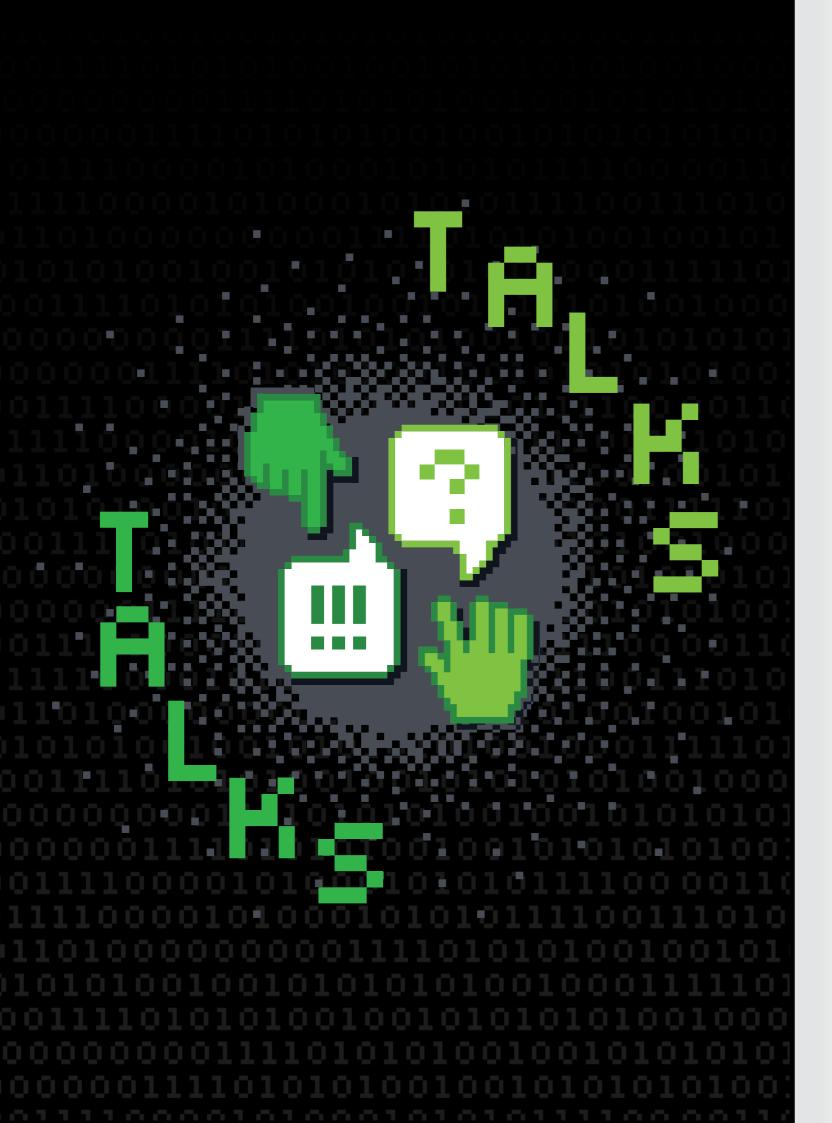
Collaboration and sharing are also at the core of the third trend we identified, Decentralized Finance or De-Fi. We explored De-Fi as an extension of embedded finance, where the collaboration is embedded in a Decentralized App, leading to a real democratization of financial services.

FinTech Talks Magazine is your guide into the new world of collaboration FinTech is building today. And that's a huge step ahead: years ago, we started with tension between incumbents, Fintechs and other players, then we experienced collaboration between these players, and now we witness collaboration embedded in De-Fi.

What will be the next evolution?

I wish you a pleasant reading!

Paolo Gianturco



## Deloitte FinTech Talks 2021

#### Agenda

The new frontier(s) of FinTech evolution
Outside the box: the Booking.com experience
Outside the box: the rise of embedded finance
Better, Faster, Stronger: how cloud sparks innovation in FSI
Closing Remarks: Cloud, Embedded Finance and the new frontier of De-Fi



## The new frontier(s) of FinTech evolution

SPEAKER
CHRISTIAN SARAFIDIS
GLOBAL RESPONSIBLE FOR FINANCIAL SERVICES
INDUSTRY SOLUTIONS — MICROSOFT

"There is clearly a call for collaboration amongst all the players in the market. With this "composable approach" you can really build a digital bank born in the Cloud."

In this session it's like sharing my perspective on innovation, that I have a passion for, the cloud and in general how to create business value using technology.

We live in an era where machines are everywhere and are getting more and more intelligent. An example is what we see with the explosion of mixed devices where there is a combination of reality and virtual reality, and this adds to the set of data that we see more and more in the application in the sector.

The digital transformation strategy works as an accelerator to all these, and we see innovation coming from the front to the back office, using all the new technologies that we are talking about.

But if we think about what we see in terms of innovation in the banking sector, we see large traditional banks actually having an incremental strategy to innovate. So for example, starting from the customer experience, they review the omnichannel strategy to integrate new digital channels and they move to payments or even core banking systems.

What we also see is that there are some hybrid models where traditional banks are even creating next to them a challenger bank and combining this into a line restructuring so to address the millennials and build a customer experience that could attract them.

So what is important to see, on how technology is being used, is the cultural aspect. Innovation means also adopting the technology, is re-skilling people and also being inclusive and having the right mindset to collaborate with others and define the right partnerships.

Many banks have been working on their own marketplace to change their customer experience at a faster pace because if they

had to do it without innovating it would take a lot longer, so agility and time to market are certainly key. This is why we have seen many many banks collaborating with third parties and with Fintech in particular.

The business decision-makers have also thought about ways to create profitability. Profitability can come from reducing costs but also from improving and driving growth by adopting new technologies. However, the fact that a lot of technology has been adopted has had consequences in risk management in the area of compliance and certainly of cyber security.

As my boss Satya Nadella says, every company needs to adopt a sort of "Tech Intensity". What is that? Is the combination of tech adoption and tech capabilities. The first one is the collaboration that allows enterprises to partner in order to use solutions already developed and not reinventing the wheel every time. The second one is the company's own capability to scale and skilling as well. Adoption and capabilities are super-important, but the fundamental part is trust: trust in the business model, so not to partner with an organization that will become your competitor tomorrow.

For this reason, Cloud is now expanding its influence over decision makers. It used to be only the IT decision-makers to be super passionate about Cloud, but now it became mainstream. Not only because of its technological value but because it brings value to each line of business. For example by developing super-apps not only to integrate financial services but potentially shopping services loyalty programs.

Banks are looking to have a completely frictionless experience when they onboard their customers. They want to get rid of card-based processes and leverage data, such as offering a personalized self-driving finance offering wallet or payment facilities that also offer a sustainability feature to attract millions of people.

For example, Flowe invented a whole new banking experience to attract millennials and build experience around sustainability, private health, and this was based on building the banking platform in colaboration with partners, making it agile to develop new capabilities over time. We discussed the innovation that is happening at the customer experience level, so the first area of

innovation. Personetics is a good example that does exactly that: helping banks leveraging their own data and offering self-driving funds leveraging data and Al.

My personal takeaway regarding digital innovation in financial services is that organizations should build their own Digital Feedback Loop with your customer engagement, employee operations and software, that is actually capturing all of this data, building products, gaining back feedback from clients and employees and pushing them back into the system. That's how innovation can resonate between an organization. One of the main points here is to build relationship in order to deliver business value for your customer.

Every organization should think about an ecosystem orchestration

to build all the capabilities of a financial services institution. What are the right partnerships based on technology and trust to deliver value to the clients (whether they are consumer, the SMEs space or the corporate space)?

With this "composable approach" you can really build a digital bank born in the Cloud leveraging for example Cloud-based B2C identity management, passworldess authentication or API-based card management and issue. In one word, combining their own capabilities with fintech and third parties in order to deliver value to customers.

There is clearly a call for collaboration amongst all the players in the market. So let's all come together, let's partner and let's start to innovate at pace and scale.



## Outside the box: the Booking.com experience

SPEAKER

DANIEL MAROVITZ

SENIOR VICE PRESIDENT OF FINTECH - BOOKING.COM

Daniel, you are a sort of pioneer of embedded finance since when people didn't even know what the word meant. You started as the youngest Board Member of Deutsche Bank, then you became a formal banker, then an entrepreneur. Now you are SVP of FinTech at Booking.com. So, why don't we start with how everything started at Booking.com and how you got where you are now?

I think that Booking.com is an interesting use case for a couple of reasons. Booking.com is the largest part of an holding and it's unusual both in the group and in the world. It's in the top-ten of e-commerce players worldwide and the number one in travel. However, until a couple of years ago, it was an e-commerce player that wasn't doing e-commerce at all.

What do I mean with that? Well, it was sort of a giant e-commerce platform – you can think of it as an exchange of hotels (and a number of other things, but let's focus on hotel to keep it easy) – to place inventory on the marketplace and offer pretty effective tools to help travelers search and book accommodation everywhere: from their laptop, from their phone, a couple of clicks is all that it

What Booking wasn't doing was to take the payment. It was out of the payment flow completely and that had some consequences: some of them were positive for a period of time, because payments can be complicated due to regulation, taxation and lots of diversity and engineering requirements. Not having to manage payments

was a way to reduce friction between operations and the business model. The negative part, though, was that the powerful role the intermediary does is to make transaction easy and travelers are a very unusual category, you know, because a travelling e-commerce doesn't work in a local or regional market as a vendor of physical goods like Amazon or Nike do. Travel implies crossing borders, crossing currencies, languages, cultures and also switching to different payment methods. And the culture of payments is very specific to each place: in the Netherlands, for example, everyone uses something called iDEAL to buy things online. Even if you are from a neighboring country like France, Germany or the UK, you may never have heard of it. In Netherlands every online payment is on iDEAL, but if you take a twenty-minute drive across the border to Belgium, that's not the case. So what Booking had to do to really facilitate the marketplace was to be able to offer lots of alternative payment methods to make it easy, comfortable and safe for bookers and do the same for partners, giving them flexibility on how and when they get paid across the globe.

What you start to realize is that the Booking marketplace is about travel, of course, but it's also a two-sided marketplace with suppliers on one end and buyers on the other. And Booking should offer value to both of them to prove its worth. The further you start digging in the place where Booking could build additional value, reducing frictions, risks and complexities, you realize that the thing that Booking hasn't still realize after 25 years of activities are actually financial. Foreign exchange, cross-borders fees, Buy-Now-Pay-Later, installment structures for partners, access to early payments and so on. If we get now to the topic of embedded finance, we realized that in order for Booking to do its job – solve travelers' problems – we give them the inventory they need, the dates they need and we give them the right products at the right budget and at the right quality. We help them to feel comfortable

and safe when they go through a payment process and then we offer a wrapper of customer service around it.

It's largely the same thing on the suppliers' side, what we refer to as partners: companies like hotels, rental car companies, airlines etc. We want to make sure that there's no hotel anywhere in the world that decides that Booking is not the right place to sell their inventory. We always want them to feel that Booking is the right place, so we connect them to buyers. We give them the tooling, the invoices, the control they need. And that's exactly a story of embedded finance.

We embed financial capabilities into our core platform – some of them generated by Booking itself, many of them generated by the financial ecosystem, from banks to FinTech companies and everyone in the middle.

From what you just described, it sounds like Booking is what InnoCentive from Procter & Gamble is for innovation. You guys literally explored uncharted territories: when you took the job you were a one-man team starting from a blank sheet of paper and you grew to a 400 people team in almost 4 years. How much of it was Booking's journey and how much of it came from collaboration with other techs or startups?

When I came in, Booking had elements similar to Google: in fact, Booking and Google grew synergistically together for some decades. It makes sense then that some product development and engineering approaches are similar and, therefore, most of the tools that Booking uses were built in-house. One of the things that I tried to make really clear is that the only business, the only industry in the world that describes itself in quadrillions – thousands of billions or millions of millions – of turnover is payments. The global GDP passes through the payment systems.

As big as Booking is, it was very very tiny compared to the scale of all payments that flows through, and not just traditional ones but also digital payments worldwide. I wanted to make clear that we should not only be good at building but also be good at integrating. We had to be comfortable with the fact that our role from a product and engineering perspective wasn't going to be – in most cases – to build but to effectively integrate, to build great interface, to build great user experience at both sides of the marketplace. But it should have been done from a variety of Lego bricks across the financial world, not necessarily bricks that we designed.

What I want to do is take all these components and put them together in a way that is comfortable and seamless and stable and

"I think that Embedded Finance has to be the natural evolution from banking to FinTech and from FinTech to decoupled embedded financial structures, where people are able to assemble services from a variety of little Lego bricks and make them part of their own ecosystem." documented and controllable. It's a different kind of mindset. I spent nearly 11 years at Deutsche Bank and banks have historically struggled with this, because of a really secure and commanding approach: collaboration and "coompetition" – a sort of competitive cooperation, if you will – is difficult, and resulted in banking making a lot of decision that were expansive but not really good for user experience. On the contrary, Booking is all about experience, and that's why we focused on collaboration since day one.

Do you think that embedded finance is an opportunity for financial institutions and for incumbents to get closer to the point of building solutions together? Or is it the opposite: banks can be cut off by non-financial players entering financial services?

It is a fundamental question. I think it has do to with how traditional financial institutions consider themselves. Historically, banks have always been a walled garden. You come into the bank and you get into a secluded place where you can do things inside. It might sound like a funny example but, what happens in authentication with Apple, Google and Facebook? You can use your Facebook credentials to login to millions of places around the web, because Facebook has taken their security infrastructure and has extended it outside of the Facebook garden. Apple and Google do the same. You can argue that AWS does the same: it was a series of internal tools that Amazon created to run their business in the Cloud, and then they realize "Hey, we run a bigger Cloud than anyone: why don't we extend out and sell it as a service?"

Banks need to take a decision whether this is what they want to do. Today banks have scale, which is thousands of times bigger than many fintechs out there. The question is: do you force your customer to enter the walled garden of the bank or you decouple these services? Volume is volume and I want to make money anywhere I can. I want to take the capabilities I have, decouple the fifty-car train that is a global bank, putting a piece where it can live on its own so it can be used by players outside of our complete ecosystem, whether that's payments or Electronic Bill Payment & Presentment, whether that's foreign exchange services or credit.

The Buy-Now-Pay-Later industry, you can argue, it's something that banks just gave up. It could have been them. They have a lot of sources of signals that the Buy-Now-Pay-Later players had, but they didn't want to decouple the credit decisioning away from their core proposition. It had to be connected to a card and then to an account and so on. I think that Embedded Finance has to be the natural evolution from banking to FinTech and from FinTech to decoupled embedded financial structures, where people are able to assemble services from a variety of little Lego bricks and make them part of their own ecosystem regardless the sub-industry they are in because, you know, there's a FinTech or a Financial Industry angle in every industry or art. There're ways to increase loyalty, decrease friction, increase average selling price, improve conversions through some sort of selling funnel: any industry has some sort of Financial Services aspect that can be improved on.

Embedded finance is a way for merchants to know their customers better, to know their financial journey disconnected from even a fintech and certainly from a traditional bank.



## Outside the box: the rise of embedded finance

**SPEAKERS** 

IRINA CHUCHKINA
GLOBAL CHIEF MARKETING OFFICER - THUNES

MATTEO CONCAS

GLOBAL HEAD OF DIGITAL BANKING SOLUTIONS - ENEL X

"There is this rapid experimentation that leads to democratization of financial services or new business generation. The most exciting part is observing this new start-ups or new ideas or models; sometimes you hear things you have never really think about."

Matteo Rizzi: Irina, can you please tell us what you have done before Grab? And what you are doing now after Grab?

Irina Chuchkina: I'm Irina, I'm based in Singapore and before Grab I've spent around 7 years in Visa and few more years in retail banking. When I was working for the Visa Innovation center, that was a very important milestone for me because I realized that I wanted to try new things and I wanted to join a startup. This was a big ambition associated with payments (I was very familiar with) and that was when I joined Grab.

I joined in the early days of the development of the vision so I was contributing to many of those discussions, interactions and explorations. After spending 2 years and half in Grab, running partnership, marketing and launching GrabRewards as well as contributing to GrabPay, I transitioned on B2B side of payments which was in my capacity as marketing person to lead Asia Pacific operations for Rapyd, another platform. In that days Rapyd was a relatively small company, throughout the next 3 o 4 years Rapyd grows, now its evaluation is around 5-10 billion dollars. After Rapyd I moved into another company called Thunes, so I am now currently the Global CMO of Thunes, which is another payment platform, an ambitious one.

Matteo Rizzi: Hi Matteo, please introduce yourself.

Matteo Concas: I work in Enel, Enel is the largest utility company in the world, based in Italy. I work in the fintech arm of it, Enel X

that is a big organization in which we invest in electrification of financial services and where I'm the Global Head of Digital Banking Solutions. We are 130 people and definitely, Embedded Finance is something we are working on. Enel has 300 million clients in Italy and payments are part of the services we offer.

Before Enel X I worked in an investment banking in M&A in London after that I moved to Berlin where I stayed for almost 5 years in N26 where I was the General Manager Italy than I became Head of growth global.

When I was there, the idea to be an enterpraneur started growing inside me so I launched the Penta digital banking for businesses.

Matteo Rizzi: Fintech is not an industry anymore but it became the Space, a "meta industry" where everyone is evolving and building services on top. How did we ended it up in this situation? What brought us here in the past years?

Irina Chuchkina: I think the bigger events that happened were the creation of the Internet and the next moving everything into the Cloud. We started having technology that was not just working for one company but across the industry and it was creating access to start-up, entrepreneurs, to all people that did not want to invest millions of dollars in FinTech solutions. They could consume or use as a service. I think this was probably the first breakthrough that continues to change the face of the whole Internet economy and that is on the technological advancement prospective.

The second thing that happened was probably a behavioral change and I like it a lot as well. Just few years ago, there was a tension between innovators and companies. There was this competition, a battle between startup and companies, it was either/or, a sort of binary approach. It is not not binary anymore.

What we are seeing is that everyone is collaborating with each other. Many financial institutions are building those API platforms that are becoming a lot more accessible and FinTechs are very happy to work with the large players and consume or offer their services. I think these are the 2 big pieces that really changed everything we are seeing these days.

Matteo Concas: I could not agree with Irina more and I want just to add one more thing about regulation. Regulatory openness helped a lot and we are seeing more open innovations also in the mindset and in behavior. Maybe we have some countries a little more advanced than other but we are having a technological advancement all over and the regulators enabled us to lunch more innovation (es. the video identification, the photo identification etc).

## Matteo Rizzi: Payment is the more natural embedded service that not financial players are typically willing to incorporate, what are the other opportunities?

Matteo Concas: We are working on Credit, not only for payment but also for our other services (as mobility). We have heavily discussed about this opportunity within the organization. Another possibility is the insurance; actually, our target clients are family, house owner etc so we are discovering this are. Finally we have linked payments with debit card or account, since the beginning of our activity.

We are also trying to create the ecosystem to use the apps as digital channel to sell more services to our captive clients. In Latin America, especially in Colombia where the unbanked is still common we linked the pre-payment of the credit card directly to the energy bill so the credit is mixed in a joint venture with a local bank

#### Matteo Rizzi: I would love to understand a little bit more, what does Thunes do?

Irina Chuchkina: Thunes means money in French slang. Thunes is a really unique company. It is not a collecting company but it is a pay - out. Few months ago, Thunes acquired a company called Limonetik, it's a French company and now it does both collect and disbursement. If you think philosophically what you can do with money, you can do 4 things:

- Storing
- Collecting
- Disbursement
- Borrowing

Thunes is able to support 3 of this things (storing, collecting, disbursing). It is a B2B API platform, it has not a B2C brand. It offers a cloud client solution and covers the vast majority of global markets. One of the number, I was really impressed by, was that it managed the 99% of transactions in real time.

This is about the company. Related to the other opportunity in the sector, what I really enjoy seeing in Thunes is some of the new business models that are emerging from this platform solution. There is this rapid experimentation that leads to democratization of financial services or new business generation. The most exciting part is observing this new start-ups or new ideas or models; sometimes you hear things you have never really think about. One of the things that payments now are starting to enable is the social media content or creator economy. People from YouTube or TikTok, when they create content they get paid from the platform, they gain the money immediately, instantaneously and they don't have to wait the typical time a traditional banking needs.

How do we also enable e-commerce via social media channels? When you watch a review of a beauty products, there will be a solution that would help you to click the button and tokenize transactions. Your details are immediately stored. How amazing, that interaction becomes so fast, seamless, invisible and effortless.

On the other side, I am very excited about B2B solutions, between banking, large corporates and retail customers. To me that is an opportunity to see innovation that is thriving and ripe.

#### Matteo Rizzi: What about the role of banks? Is this an opportunity or a threat?

**Matteo Concas:** For Enel embedded finance means partnership and technology and APIs enable that. We are working all around the world with different banks for all the services we offer (ex. Credit services or wealth management). Partnership is the key word for us.

Irina Chuchkina: I see the role and the value of banks as infrastructure providers. The tech companies embed banks product or services, we can't live without banks. Many regulators still don't allow for new systems or new players into the space however if you're a smart bank, they are starting to create their API library to make their services available to disruptors, start ups, innovators, entrerpreneurs. We are seeing lots of example all over the world, banks just need to be smart enough to seize the opportunity.



#### **SPEAKERS**

**ALBERTO DALMASSO** (picture on the left)
CEO & FOUNDER — SATISPAY

FRANCESCO RINAUDO (picture on the right)
HEAD OF PROFESSIONAL SERVICES — GOOGLE

**FILIPE TEIXEIRA** (picture in the middle) CIO — ILLIMITY

LUCA GIURATRABOCCHETTA
CLOUD FOR FSI LEADER - DELOITTE CONSULTING

"Cloud can be considered as a "catalyst" for innovation also in the fintech sector, where every company is competing to bring innovation to the financial users, where every company is committed in bringing innovation to end users in the best way possible."

### Luca Giuratrabocchetta: How important is the Cloud technology and in particular in the development of the Finech sector?

**Alberto Dalmasso:** The acceleration of Fintech sector around the world exploded thanks to regulatory and technological innovation. From a technological perspective the groundbreaking innovation, in my opinion, are basically 2:

- The spread of Mobile, that changed the way we surf the web, and we access services;
- The Cloud technology.

In my opinion the Cloud has a Central Role. In the financial services industry the cloud has not always enjoyed a good reputation for security concerns. Considering technical knowledge is clear that cloud is not risky, and offers you efficiency, and the access to the higher standards in the market. Is it impossible to think that any company could create the same level of efficiency without the use of an open cloud technology. From my experience in Satispay I could easily say that we couldn't have reached our goals without

## Better, Faster, Stronger: how Cloud sparks innovation in FSI

the Cloud Technology, from an implementation and way of working perspective. I think that Fintech will happen faster thanks to cloud and I think that only Cloud based companies can have a key role in the financial sector in the next 5 years.

Luca Giuratrabocchetta: Francesco, you work in a company that is innovative in the DNA, what is your point of view on what is happening in the Cloud Market, and what on the Fintech Side?

Francesco Rinaudo: Cloud can be considered as a "catalyst" for innovation also in the fintech sector, where every company is competing to bring innovation to the financial users, where every company is committed in bringing innovation to end users in the best way possible. To understand the actual Google offerings we have to do a step back on what happened before. Since its birth, the mission of Google was to organize the world information, collecting and organizing data, giving them a meaning and bringing them back to the user.

Retracing the same path, Google understood that to scale up they need to innovate their services, to create new instruments and to re-think their culture of innovation.

Luca Giuratrabocchetta: How did the Cloud affect the organization of Illimity in its early stages? What benefits have made the choice of the Cloud successful over a traditional infrastructure?

Filipe Texeira: Illimity in only 6 months from his birth passed from an idea stage to be live in production with a digital retail banking system PSD2 compliant. In Fintech environment, time to market it's critical in term of business and logistics and with a traditional approach we would have had much longer timelines. With a cloud infrastructure you can access immediately to the best of breed in term of technology (e.g. you can have the best technology in term of cybersecurity or API ecosystem), the organization of ideas is less difficult, and you can easily align your IT strategy with the business strategy of the bank.

#### Luca Giuratrabocchetta: How do you manage the "war for talent" in the cloud sector?

Felipe Teixeira: For example, as a bank we are required to have cybersecurity teams, also for regulatory reasons. We also need our team to be open minded, and ready to grasp both cloud opportunities and constraints. Since within the Italian market is extremely difficult to find cloud engineers with experience in banking industry, we cope with this challenge by bringing together those who possessed cybersecurity skills and those who have

cloud engineering skills, and making them collaborate to create new and innovative solutions.

This is a huge risk, because you have both to manage mixed experiences and to be able to find people with the right attitude to learn new things. In order to succeed, it is also very important to find the right partners and leverage on their experience.

Luca Giuratrabocchetta: Based on your experience, can you give us an example of a Satispay project that would not have seen the light if it was not for the cloud?

**Alberto Dalmasso:** It was definitely the "Cashback". Nowadays, in our platform there are thousands of merchants who can offer cashback promotions to our users. Additionally, merchants can customize promotions and target specific users based on their characteristics, based on whether they have already spent money in their stores, where they come from, etc...

This is a "heavy" service to be implemented: money is sent back in real time to customer accounts. To make this possible, we really had to push the limits to take advantage of everything the cloud was giving us. The "wow" effect on our customers meant that there were many attempts by our competitors to reach the same level of engagement and customization we created.

Without cloud technology, it would not have been possible to react as fast as we did to the "State cashback", a Government initiative launched back in December 2020. We were part of the initiative from the beginning and everyone could get a payback by using Satispay. Since we already gained experience on cashback systems, we have mixed our skills with cloud technology to turn this initiative into a great success.

Unlike other providers, who requested onboarding via digital identity or via the national "lo" app, on Satispay it was possible to access the state program by directly onboarding on the platform. Supported by cloud technology, we have managed to increase engagement enormously and be the only ones to provide a service without system delays or crashes.

Luca Giuratrabocchetta: Based on your experience on the market, what are the key success factors for fintech that could be supported or accelerated by cloud?

**Francesco Rinaudo:** There are mainly three factors that you can always find if you look at Fintech; for each of them, cloud could actually help to democratize and accelerate innovation.

- Customer experience: it is very common that users ask for multi-language, 24/7 and multi-channel support. Through cloud engineering, you can offer an improved service by leveraging, for example, on Al or by building your own machine learning model, without starting from scratch
- Operational speed and excellence: as for customer experience, users expect to have the service up and running 24/7. Nowadays, if a message system is down for few hours, all the media is gonna talk about that, as happened recently. Cloud allows to have tools to monitor, track and automate some operations in order to reduce inefficiencies. Moreover, cloud technology is associated with SRE (Site Reliability Engineer) practice, born when, starting from 2003, Google faced the challenge of keep up with the speed of growing by maintaining at the same time the levels expected by users
- Security and compliance: customer data must be kept safe, while bearing in mind that your business will most likely have to scale globally in the future. While scaling, it is necessary to maintain a high level of safety and security for the end user. It is also necessary to be in line with the existing regulation, which has many complexities. The cloud again can help to get some important certifications (such as the GDPR in Europe) without having to revolutionize your systems from scratch.



## Cloud, Embedded Finance and the new frontier of De-Fi

#### PAOLO GIANTURCO

CORE BUSINESS OPERATIONS & FINTECH LEADER, DELOITTE CONSULTING

MANUEL PINCETTI (picture on the right)
HEAD OF STRATEGIC TRANSFORMATION & GROWTH
PRACTICE - MONITOR DELOITTE

MATTEO RIZZI (picture on the left)
CO-FOUNDER - FTS GROUP

"We started with tension between incumbents, Fintechs and other players, then we saw and we are experiencing a lot of collaboration between these players, and now we have collaboration embedded in DeFi, for that reason we have to study and understand what will be the next disruptive change in the future."

**Paolo Gianturco:** I think that we started with a large vision from Daniel about innovation, and what are the main factors accelerating innovation. I like also the point about Quantum Computing, I can't imagine what will happen when Quantum Computing will be used in the Cloud.

We started with this large vision, and then we had very interesting and pragmatic examples of embedded finance. I think that we all agree that now it's easy to talk about embedded finance but 5 years ago it was impossible to connect Banks with Fintech or other Companies/Businesses, to include payments or other financial instruments (e.g. insurance instruments).

Now, for us, it's normal to talk about embedded finance because of the collaboration, of the new way to agree about commissions, technical and operational combinations. Remember, that there is also a sort of reputation that all these parties have to manage.

Q: What is your opinion Matteo about this easy way to talk about embedded finance, if we think about 4/5 years ago was not so easy to collaborate?

Matteo Rizzi: I'm in line with you, 3 to 5 years ago is halfway this first decade of Fintech. Everyone started to understand that even not being a regulated financial institution you could start providing a certain level of credit, data enrichment and even payments. And back then, if we remember before embedded finance, Revolut and N26 were just about to start. What happened is that there was an acceleration of these non-financial services players entering in the game. I don't know if we have already realized how is significant that company like Booking.com and Enel, have a Fintech guy with hundreds of people working with them.

We are talking about large corporations dealing with financial services and I do believe this is just the beginning.

Q: If you were a Bank today seeing all these large corporations entering financial services with their own teams, what would be your strategy, what do you think a Bank need to do today looking at the embedded finance?

Paolo Gianturco: I remember very well your question to Irina Chuchkina and Matteo Concas, and both gave us a good insight. Matteo talked about partnership, Risk and Regulation Management and infrastructure, while Irina again talked about Risk Management, Regulation and competencies on this area.

I agree with this vision, I think that Banks still have good relationship with local clients. Even if Banks have been in some troubles in the past years, they have good competencies in Regulation, Risk Management and how to manage Credit and especially Credit to Risk.

Maybe they have to follow or to invest more in the Retail area and in the Wealth Management area because I think that the Corporate, Small Corporate could be more managed locally but a lot of individuals and Retail customers, they can change rapidly from one solution to another if they don't find the best one.

For me Banks should focus mainly on local clients, try not to lose these clients using digital services, focus on core competencies like Risk Management and Regulation, also a lot of other operational and technical competencies.

Also being aware about rapid change in individuals and Retail customers due to digital services.

**Manuel Pincetti:** as you know, I work with Banks every day and I try to support CXO in making future decisions and setting strategy. Some experiences in the last few years, showed me that digital transformation, also boosted by Covid-19, is now pushing larger Banks to rethink how they can serve all the panel of self-direct clients. The amount of self-direct clients, we have in Italy, is exploded in the last 2-3 years, now is at least 40% and in some cases is more than 70%.

It is really a bulk of clients on which if you want to extract value

you need to rethink how to serve those, and the only way you can have the pace and speed to change the way you serve them is collaborating with someone that is able to do that at scale. On the other side, even smaller Banks - the territorial ones realized that every decision in the past to be in full outsourcing for managing the entire technology and operation is today a choice that they need to consider, understanding how to open up their core banking systems, platform and channel management systems Also, in partnership with all the IT outsourcers and providers. Because also the territorial Banks that usually compete locally, nowadays can compete locally just for small bulk of their clients, so territory is moving to digital and if you want to compete in digital you need to play with digital rules and not physical ones. This change for Banks is a great opportunity for Fintech to collaborate with them through cloud, boosting a better finance in my opinion.

Matteo Rizzi: Finally, I want to share some thoughts of why we wanted to talk about DeFi. Beginning of 2020, DeFi was a 2 billion dollar market worldwide, the number I have of the last quarter was 80 billion dollar and it is a market that is of course mainly in holding accounts but the same exponential growth was registered in decentralized credit.

In Asia right now, there a people that are borrowing from stable coins to buy their cars, so the moment where Manuel, Paolo and myself can seamlessly invest in a start up in Nigeria as well as I invest in the starting phase of a company in Italy, this is where the famous democratization of financial services will happen for real. I know that Paolo started his Blockchain journey in Deloitte and he's very passionate about DeFi as well.

#### Q: so Paolo, why do you think was so important talking about DeFi today?

**Paolo Gianturco:** I completely agree with you. You know that in the crypto asset and Blockchain world, we have, just to simplify, two big visions:

1) One is Bitcoin that is the half of the value of this market, we are talking about of more than 2000 billion of dollars, half of these 2000 billion are because of Bitcoin, the other half is because of a puzzle of token, decentralized applications that we can call DeFi and NFT. I think that is strategic for Banks, Fintechs, incumbents and investors to understand what will happen in the future. It is strategic because it's not easy to understand, it's complex, also for me it's difficult to focus on the several Blockchain offered (e.g. Stellar, Algorand, Uniswap). We have a lot of new Blockchain that is very difficult to follow, but we have to follow, and we have to understand them. And just one example, maybe someone can know about Uniswap, that is decentralized application to exchange financial products, just crypto at the moment, and now is value is more than 9 billion dollars just the value in the DApp. I asked my team to check what is the code in this DApp, and I can't believe that we have a DApp with just 600 lines code that worth 9 billion of dollars. On the other side, we know that in Fintech and Banks we have several lines of code, million, just to say that we have to study what is happening in Ethereum 2.0 and the change from Proof of Work (POW) to Proof of Stake (POS).

2) The last point is related to collaboration in embedded finance, we have talked about it, if you think that DeFi is an extension of embedded finance, where the collaboration is embedded in the DApp. So, we started with tension between incumbents, Fintechs and other players, then we saw and we are experiencing a lot of collaboration between these players, and now we have collaboration embedded in DeFi, for that reason we have to study and understand what will be the next disruptive change in the future

**Matteo Rizzi:** I personally lost the big train of crypto, but what I do believe in is the power of DeFi to become truly borderless in term of investments, credit and payments.

You know I'm particularly focused on emerging market, especially in African continent, and this space is a space that would greatly benefit from a truly borderless set of financial services.



# Innovation as efficiency in "value exchange" processes

Perspectives on Insurtech Innovation from Italian Insurtech Summit 2021

#### ROMANO SACCHI

INSURANCE CORE BUSINESS OPERATIONS LEADING PARTNER
DELOITTE CONSULTING

In a period of great change imposed by the pandemic as the one we are experiencing, I am sure that Insurtech can become an element with which insurance companies can transform their internal organization and impact the market in a very effective way.

In this context, innovation in Insurtech must focus on issues of absolute concreteness to switch from an experimental phase to an industrial phase. For this reason, value exchange processes must be part of the transformation processes that companies want to implement, accompanied by an innovation mindset. The latter must help and guide companies to aggregate multidisciplinary teams with different talents and cultures, in order to effectively lead the transition towards Insurtech.

Transforming one's mindset means engaging different disciplines, cultures and talents, as I mentioned earlier, to drive transformation in all areas of the company work and thinking: the way one interacts with the customer, the way one works, the ultimate transformation of processes to digital, and the pervasive use of data to enrich the company. All based on a resilient but also flexible IT architecture. And it is precisely in this flexibility that, I am convinced, Insurtech can provide decisive support to insurance companies.

It is important to make a shift in mentality in all the three areas of the Insurance value chain to give a further boost to Insurtech. That is, to move from a testing phase on a series of specific initiatives - almost as if technology was driving the transformation - to an end-to-end vision on processes, where technology is an element of support to the operational and industrial transformation process.

So, let's identify some areas that can be managed through this approach to transformation for each of the three areas of the value chain.

In terms of Products, Underwriting & Sales, for example,
Deloitte and Google Cloud have developed a set of AI that helps
underwriters to better assess the risk to be insured, through data
standardization and enrichment, triage of the property to be
insured and self-learning capabilities. Such tools, as mentioned,
must be part of a process of cultural transformation in the way
operating processes are managed. This is where the concept of
the Agile Product Factory comes into play, the opportunity for
companies to adopt organizational models to create "adaptable
organizations" rather than the "stable organization" to which we are
more accustomed today.

It is in the organization of companies and processes that the greatest benefits from Insurtech can be obtained. In this regard, I want to present an example related to the world of Subscritpion & Usage-Based Insurance products. Here Insurtech is able to significantly increase technical accuracy and customer adoption. In terms of organizational models, "adaptable organizations" field digital workplace and future of work tools that invest extensively in working methods by leveraging technological tools for analysis and process transformation such as, for example, Deloitte Process Bionics.

In the Claims Management area, Insurtech will be able to extend



"Transforming one's mindset means engaging different disciplines, cultures and talents [...] to drive transformation in all areas of the company work and thinking."

the scope of claims management processes, introducing the theme of prevention upstream and the management of the digital payment process downstream. In this sense, Insurtech already has solutions available: as far as prevention is concerned, through telematics tools, which allow scoring the driver's driving behavior and help him, through notifications sent in push mode, to adopt a safer driving behavior; as far as the process of claim reporting and management is concerned. There are tools that support the entire process also through tools for automatic reading of documents, and tools for automatic damage assessment, through image recognition tools. There are Al tools to increase the perimeter of prompt motor settlement and, finally, digital payment tools.

Deloitte has developed specific solutions for each of these areas, some of which I described earlier. There is, for example, OnSite Al. There are tools and Apps to support telematics such as Drive-GO. A platform for Instant and Peer to Peer based on a blockchain, that we will address in more detail below. Some of them are proprietary assets of Deloitte, others derive from partnerships with different players in the Insurtech world. Among the proprietary solutions, the theme of "adaptable organization" is the main one: our solutions help mapping the informal networks with which a company works to go beyond known processes and typical process operations, thus identifying what are the decision-making or working points of contact between service lines in different structures or between offices within the same functions. There are

also approaches and blueprint designs for the digital workplace and Process Bionics that, through capture, blueprint, execution and process sustainability, enable a new way of optimizing processes.

Finally, the world of Claims, which today is closer to the idea of a digital systems based on partnerships with FinTech providers. Deloitte has identified several of them - amongst all the solutions seen above - to design the so-called End-to-End Journey for each type of claim and type of client, with a technological basis that enables new ways of managing claims.

Solutions and assets find their enablers in technology. These are well-known solutions and, in our view, they need to be viewed as an organic environment. That's why Deloitte talks about hyperautomation: only considering these technologies in a contextual, integrated and organized way it is possible to make progresses in terms of automation, value exchange and optimization on insurance processes.

Blockchain technology is the foundation of some of these solutions such as telematics, usage-based and for Instant and Peer to Peer platforms. However, it is also the foundation on which the crypto world works and Deloitte is convinced that the cryptocurrency will be the next frontier of development in Insurtech.

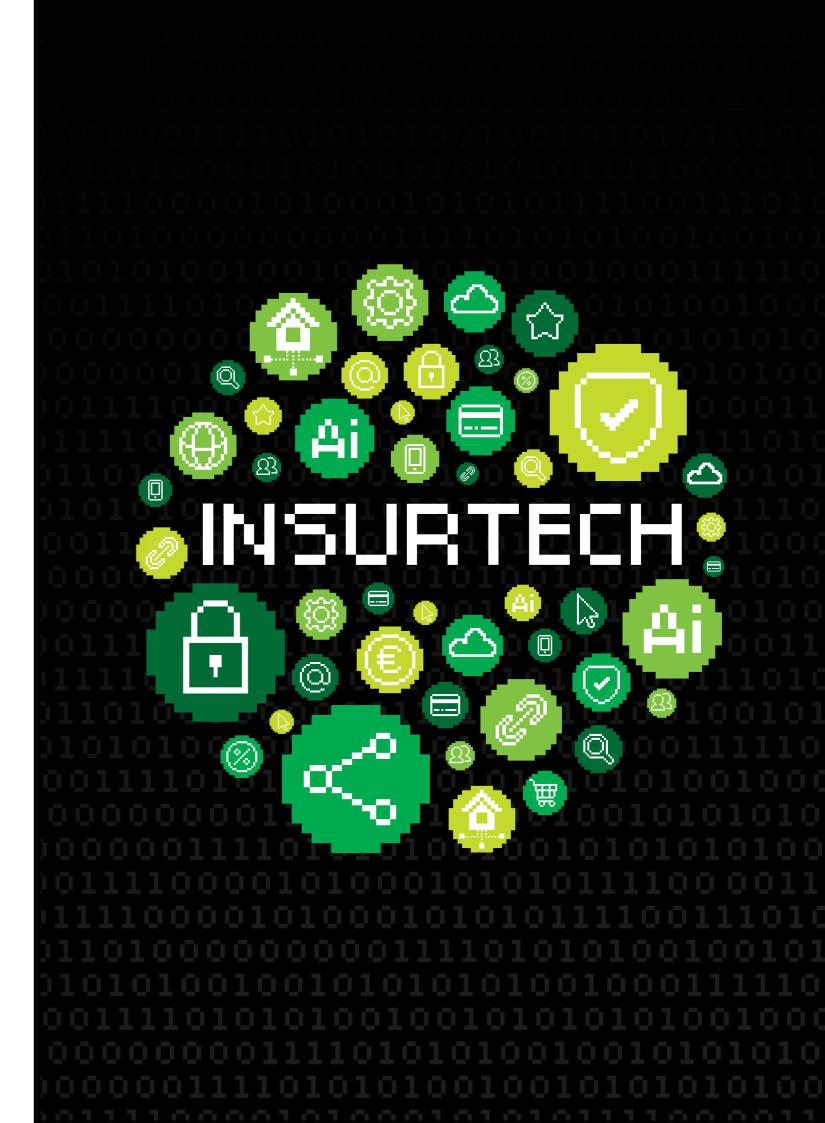
Talking about Blockchain and Crypto means talking about a market that has now reached a capitalization of more than 2 trillion dollars but, from the insurance point of view, represents a great opportunity because is for the 96% still uninsured. Companies, especially at an international level, are entering this market, which is certainly characterized by challenges such as cybersecurity but also, as far as Crypto is concerned, those linked to the volatility of their quotations.

Today, there are at least four directions in which companies can

develop in the Crypto market. The first one is just insuring risks related to cryptocurrencies, such as custody, theft of private keys, privacy and possible technological errors. The second directions concerns De-Fi and the management of smart contracts and therefore the possibility to create, publish and manage smart contracts in a Peer-to-Peer mode. Thirdly, the possibility for companies to accept crypto as a form of payment for insurance premiums and, finally, to use cryptocurrencies as an asset in the evaluation of both wealth management and underlying products. Each of these four areas already has a significant number of companies operating in the market. They may still be pioneers, but the speed of adoption of these solutions is increasing rapidly.

In our brief summary, we have tried to find a synthesis of what is happening in the Insurtech world. On one hand, we see Insurtech as a sound method, already in use by many companies, that might become even more successful if applied to Operating Model and Processes. On the other hand, we see Insurtech's future perspectives: we believe that Insurtech will be helping insurance companies entering the cryptocurrencies market in a structured and effective way.

Solutions and assets find their enablers in technology. [...] That's why Deloitte talks about hyperautomation: only considering these technologies in a contextual, integrated and organized way it is possible to make progresses in terms of automation, value exchange and optimization on insurance processes.



## 04 FinTech Stories

## **Application Modernization & Transition to Cloud**

#### MASSIMO MILANTA

CLOUD & SYSTEMS ENGINEERING LEADER, DELOITTE CONSULTING

#### **EDOARDO TORREGGIANI**

CLOUD & SYSTEMS ENGINEERING DIRECTOR, DELOITTE CONSULTING

Legacy Modernization is becoming a priority, according to a recent survey about Legacy Modernization programs conducted worldwide on Banking CIOs. Approximately 80% of the organizations consider Legacy Modernization a concrete priority while more than 50% are currently executing or planning to execute in the next 3 months specific programs on this topic¹. But why is core IT system modernization so crucial? There are several reasons that drive toward Core Modernization; some of them stay within the IT domain while many others are related to Business improvement, in general. It is worth to note that in the top-five selection there is no a direct link to the "Cost theme", which was always a highly rated reason to consider modernization programs.

The top reasons are instead focused on: **Efficiency, Digital Evolution, Customer Services and Time to Market**.

Increase operational efficiency **32%** 

Support digital transformation 24%

Improve customers/partners service 21%

Improve time to market 18%

Ease of systems integration 18%

Reduce maintenance costs 17%

Prevent downgrade on IT service level 16%

Support innovation 15%

Reduce IT landscape complexity 15%

Attract talents 12%

Gain market shares 10%

At the same time, COVID 19 had a major effect on cloud adoption, perhaps the main enabler to IT Modernization. Even the most skeptic organizations had a chance to rethink their Cloud strategy & journey during Covid-19 Pandemic. This unexpected and uncontrollable situation opened to the Cloud adoption with a consistent and accelerated pace. In 2021 Cloud Italian marked will go to register a +16% overall value increase since 2020 strongly pushed by Public & Hybrid Cloud Services which are estimated to grow by about 20% YoY<sup>2</sup>.

Cloud leads toward boosted performance thanks to its natural characteristics that have to be exploited:

**RIGHT SIZE** - Ensure that what you provision matches what you need. For example, for compute, you provision for CPU, memory, storage, and network throughput.

**INCREASED ELASTICITY** - Traditional IT costs and hardware requirements are designed for peak usage and are rarely turned off. Utilizing cloud, you can optimize cost to meet dynamic needs and turn resources off when they are not used.

**PAY PER USE MODEL** - Cloud providers offer a range of pricing models (on-demand and spot Instances for variable workloads and reserved Instances for predictable workloads). Choose the best pricing model to optimize costs based on the workload nature.

**AUTOMATE, MONITOR, IMPROVE** - Cloud services are natively designed to be automated, scripted in SW-defined architectures or integrated via RPA tools.

Furthermore, modern Cloud platforms offer powerful outof-the-box monitoring and analytics tools that allow better controlling on the overall solution in terms of availability and resource consumption (billing).

In this ever changing market context, legacy systems are slowing down business results, for a few key reasons:

**COSTS** - The rapid growth of digital interactions (i.e. 9% CAGR in Big EU Bank overall in the last three years, 30%-50% growth y/y in Primary Card Processors in the last year) is linearly increasing running costs without a correspondent growth in revenues. Old legacy systems can be an obstacle to fully exploit the "as-aservice" benefits

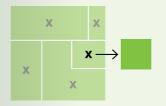
**OPERATIONAL RISKS** - Legacy systems are usually poorly documented and difficult to be transformed. They implement

stratified obsolete software implementations that do not allow to reach high standard of productivity and to use modern SDLC best practices.

**LEGACY KNOWLEDGE DRAIN** - The shift to digital architectures and the retirement of key "legacy" people is driving a shortage of know-how on outdated legacy systems, and a lack of Mainframe programmers.

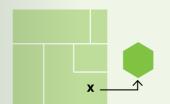
**AGILITY & SCALABILITY** - In general the issue is not the technical scalability (centralized mainframe architecture still can handle consistent volumes) but the economic scalability. Mainframe based or on-prem legacy solutions are dimensioned on "peaks", therefore they have an intrinsic cost rigidity.

In an effort to enable IT modernization, we identified the following main paths (figures below) for a modernization journey:



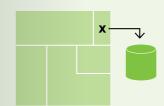
#### MODULAR OR FULL REPLACEMENT

A package or custom application is replaced or integrated into the existing environment. A special effort is put in the functional and technical reengineering of the interfaces.



#### CODE REFACTORING MODERNIZATION

Legacy SW (like Cobol baselines) is translated or re-engineered into a more modern language (usually Java) on a Open platform. Intermediate steps can optionally precede this path:
Java on Mainframe / Cobol on Open



#### **READ-ONLY REPLICA**

A "copy" of the Bank developed on a separate layer, based on open systems, that will fulfill part of the data enquiry requests coming from Bank channels, aiming to reduce the workload on the legacy systems.

Modernization programs do not come as easy as short-term journeys. Legacy Modernization typically deals with two key challenges that exponentially increase complexity. First, changing a running business platform and secondly, modernizing stratified and core application logic. This is why typically **two main strategies** are followed, when modernizing your own core informative system. In the first strategy, the program is split between **changing the tech platform and modernizing the applicative modules**. While in the second strategy, **a new platform is built, from scratch**.

Regardless the strategy, there are some common challenges that organization should address during their transformation program.

The first one is that Business case for Modernization is rarely sustainable only leveraging on cost reduction, therefore organizations should focus on other drivers such as enhanced performance and systems efficiency. Another challenge is the increased complexity created by the coexistence of legacy against new platform and architectures, as well as the need to redesign several organization practices, spanning from Security & Compliance processes to Budgeting and Controlling and also Lock-in risk management. From this comes the last challenge: a modernization program implies a change in company's culture, knowledge and skills as well as in its IT systems. Because, only aligning the human factor with the technological one, a modernization program could be considered accomplished

Figure on the left - Source: Building the Digital Business Case for Core Banking System Renewal April 2021, Gartner

<sup>1)</sup> Source: Core Banking Legacy Modernization to Enable Digital Business October 2020, Gartner
2) Source: Osservatorio Cloud Transformation, Politecnico di Milano, Research 2021

## 05 Cloud: don't panic!

#### **Agenda**

Introduction to the Cloud: why Cloud is not a threat

Success Stories: companies in the Cloud

Gaia-X: the European project for a digital ecosystem

Cloud and sustainability: is it possible?

Alessandro Piva – Director, Osservatorio Cloud Transformation, Politecnico di Milano

Incentives for transitioning to the Cloud

Ranieri Villa – Global Investment and Innovation Incentives Leader, Deloitte Tax and Legal

#### Introduction to the Cloud: why it is not a threat

#### **SPEAKERS**

#### MICHELE PAOLIN

CLOUD MIGRATION AND OPERATIONS LEADER, DELOITTE CONSULTING

#### NICOLA CINIERO

BOARD MEMBER, ELMEC INFORMATICA SPA

#### PIERANGELO SOLDAVINI

NOVA24 DEPUTY EDITOR-IN-CHIEF, IL SOLE 24 ORE

#### Michele Paolin what is your vision of the Cloud market? Is this the right time to move to the Cloud?

It's been more than 10 years since Italian companies started to use the Cloud, but they still have the same doubts about it: security, data privacy, data sovereignty and cost control. However, Cloud has evolved in the last ten years: now there is a whole ecosystem that can help companies addressing these issues and realizing the full range of opportunities Cloud holds for business.

The ecosystem is composed of companies like Deloitte and Elmec who have worked to bring their customers to the Cloud and have the right expertise to guide organizations in their Cloud journey. Universities and Academic institutions are also part of the ecosystem, as well as public institutions such as the EU or the Italian government. The former is heavily investing in the Cloud with the Gaia-X project, while the latter is planning important funding to support the transition to Industry 4.0, in the frame of PNRR - the National Recovery and Resilience plan that aims to support the post-pandemic recovery – putting digital transformation and Cloud as a cornerstone of its investment strategy.

Public institutions have identified in Cloud one of the key competitive advantage that will lead companies - even the medium-small ones that were amongst Cloud late adopters - to get what they need to compete with the rest of the world. The PNRR funding will offer around 20 billion euros for digital transformation projects, an opportunity that requires a careful planning to be fully realized.

In order to do so, my first advice is to identify opportunities for change: when the company has to make a change or has the contract for a Data Center expiring, that is the moment to consider Cloud-native tools to realize the new project against traditional ones. Companies can rely on their own ecosystem, identifying a trusted advisor to support them throughout this journey,

because not considering this opportunity at all will make them lose competitive advantage.

What are the steps of this journey? First of all, accepting and managing the "hybrid challenge". We are facing at least a decade in which we will be "Hybrid": on-premise architecture, Cloud and different kind of Data Centers will coexist in a company's IT strategy. This hybridization must be managed, must be accepted and must be governed. Then, once the hybrid is accepted, my opinion is not to go for "big bang" projects, migrating to Cloud all at once; but rather to design an adoption plan and adapt its pace to the pace of the company.

The other piece of advice I would give is this: whenever we are faced with choosing a new system or a new location for our systems, let's ask ourselves the "cloud-first" question: Is there a Cloud tool that can help me achieve my business goals? If yes, let's evaluate it, see if that's the right solution and if it's the right one, do it. If not, fine: let's go back to more traditional options. But at least asking yourself that first question, in my opinion, is the best way to approach Cloud Transformation.

Approaching the Cloud Journey is like getting to the top of a mountain: you can do free climbing, but you can also choose a way that is more peaceful and comfortable. The same applies to Cloud: you should choose the strategy that gets you to your target state and the best strategy is the one that is most suitable for your company, based on its structure and its business goals.

## Nicola, what is Elmec's Point of View on Cloud Adoption in Italian Enterprises? What are the most common blockers you see when you approach your clients and what are the benefits they experience after completing a successful cloud adoption?

It's almost 10 years since the Cloud concept has been announced on the market and I have to say that in Italy, despite a physiological delay, in the last two years we have witnessed a fair conversion to this technology by many companies and the public sector. Also, Italian companies are starting to perceive the Cloud as an opportunity in terms of data security and efficiency.

In this scenario, as rightly mentioned in the question, some blockers persist dictating resistance in the company's decision to migrate all or part of its applications to the Cloud.

First of all, it should be noted that we are witnessing a historical moment that is characterized by a real generational shift in the management of information systems: often those who are at the head of the infrastructure have little experience of new

technologies or, in any case, look with mistrust at the possibility of outsourcing activities that for 30 years have been managed internally. About this point, it is good to reiterate that the choice for a migration to the Cloud is not synonymous with loss of control, but it means scalability, cost efficiency and, above all, more focus on the core business.

The second most common blocker is related to the theme of data delocalization and related risks: the resistance that we often perceive in Customers is the fear that their data - allocated far away "who knows where" - are not adequately protected. However, this fear is now mitigated by the recent implementation of Data Regions within our boundaries (Elmec built directly a privately owned Data Center in 2016 to respond to the highest international standards as to say TierIV facility and Design); compliance with the principles dictated by the Gaia-X consortium from an EU point of view, is exactly addressing the same topic: governance and data usage.

Moving on to the second part of the question, the benefits that Cloud Adoption brings are many and we had the chance to listen to them through the testimonials of our Customers during the "Cloud: don't panic" roundtable.

First of all, it must be underlined that a last generation Data Center like the ones on which the Cloud is based (whether Public or Private) is by definition much better protected from cyberattacks than a corporate network (first at all because bigger Data Center means much more security specialist), in addition to the fact that in this way the risks related to the human factor (historically the first element of breach for a cybercrime) are minimized. So, the first benefit to highlight is definitely data and operations security. Since the management of data storage is outsourced, the second benefit that we notice is related to the fact that clearing space is synonymous of reduction of operational and energy costs, together with the scalability characteristic of the Cloud: you go to pay only the space you really use, with the possibility to buy more if necessary.

Another important benefit is related to talent acquisition: nowadays it's much easier for a company that manages a Data Center to find resources on the market with skills in emerging technologies (such as the Cloud). Otherwise Managed Service Provider natively have much more expertise on these new technologies, and over time will have less and less on legacy and dated technologies.

The last two benefits that I would like to mention are related to data, because the Cloud always guarantees secure back-ups, and to the independence that a Data Center guarantees from the problems related to an on-premises internal infrastructure, such as network provider dysfunctions or technology that by its nature will be subject to recursive updates.

In summary, if a serious cost-benefit analysis is carried out, there is no need to resist the adoption of the Cloud. The important thing is the secureness of the data and to rely on a reliable partner who can manage this delicate process with the guarantee of a gradual and clear roadmap that defines a path through milestones from "as is" to "to be".

Pierangelo Soldavini: in your career as a Journalist you often focused on innovative financial solutions. In your opinion, would you say that Cloud is the secret sauce that can turn any FSI player into a FinTech?

As the experience of the innovative players in the financial sector demonstrates, the ability to have the technology platform at hand is the key factor to have the flexibility needed to adjust the offer and to tailor the services on the requirements of a demand – both from a consumer and a business perspective – that is changing continuously and rapidly.

To keep the rhythm of the transformation the traditional financial players have the possibility to build the solutions in-house, as they were used in the past, or bring in the solutions from outside, from the fintech players, in the new open banking environment. In both cases they need to have the technology asset required to develop or adopt the new solutions. In this perspective, software, emerging technologies and skills are more important than hardware.

Today banks have probably the biggest data center all over the industries and this is part of their problem. They have to realize that the legacy IT system is hard and expensive to modernize and to keep at the pace of innovation. But more than that is the difficulty to onboard the new technological solutions needed to have the flexibility required for the new market based on tailormade and easy-to-use solutions.

Of course, regarding the financial services sector, we have a big problem concerning compliance and security, but there is no doubt that today the Cloud technology represents also for this industry the solution that enables the incumbents to concentrate on the development of new solutions and avoid being cut out of the market.

It's not only a matter of efficiency of software solutions and data management. First of all the Cloud nowadays represents the most efficient way for the adoption of new technologies to build the right solutions. Secondarily, the data analytics solutions that enable the development of services designed on the needs of the targets: not only relating to the technical solutions, but mainly concerning the skills to develop a culture of innovation.



#### **Success Stories: companies in the Cloud**

#### **SPEAKERS**

#### CALESSANDRO CALEFFI

CHAIRMAN, AUSED

#### MASSIMILIANO GERLI

GROUP CHIEF INFORMATION OFFICER, INTERCOS

#### GIANLUCA GIACCARDI

CHIEF PRODUCT OFFICER, TESISQUARE

#### SAVERIO NUCCI

CHIEF INFORMATION OFFICER, CORCYM

Saverio Nucci, CORCYM is a company that operates in the biomedical field and therefore, in the last period, has needed considerable dynamism in the face of market pressures. Why did you choose to adopt the cloud and how has your journey been?

CORCYM's choice to adopt the Cloud comes from the need to be dynamic, flexible and to be able to face the evolution of the market in an effective way. CORCYM is a very young company: it has been operating on the market since June 1st of this year when LivaNova and CORCYM completed the initial closing relating to CORCYM's acquisition of the LivaNova heart valve business. But it has a very intense Cloud experience.

We embraced the Cloud approach in December, in the first months of the project. We adopted a phased strategy to get to the Hybrid Cloud, identifying 3 layers to host our application portfolio:

- The first layer is the preferred one, that of SaaS applications, which certainly offer the best solutions from the point of view of cost optimization, security and user experience.
- The second one hosts all those applications for which we cannot use SaaS, but that we have decided to develop on the Public Cloud anyway. We worked with Elmec for all the management of the Public Cloud.
- The third layer is for all the applications where there may be problems of operating system, compatibility between the Cloud, the Operating System and the applications or where the application, because maybe it is a little bit obsolete, is very sensitive to issues related to the network, such as latency. To host this type of applications we have maintained small Data Centers.

In February we started the implementation phase: we made the

assessment of the applications that had to be placed in one of these 3 layers. For those that went in the Public Cloud we first identified which Provider to use, and the choice fell on AWS. In a second step, we identified in which of the various AWS Data Centers hosting our applications. The drivers were two: first, compliance, because privacy is becoming a very important topic for the management of applications; second, we are a medium-sized company that, however, is extended throughout the world, so we had the need to contain costs by using a single data center without, however, give up offering an optimal experience to all users around the world. For this reason we chose the Data Center that guaranteed the best performance according to the location of our users.

On June 1st, we became operational, totally independent, guaranteeing continuity, security and a great experience for our users. In the following months, we worked more on monitoring and governance optimization to improve economics and security, from an admin and user access point of view.

The Cloud is an opportunity that must be seized and that has generated a real competitive advantage, first of all in terms of Time to Market. In a very short time, we have been able to build an entire architecture and provide services that work 100%. Something that would be impossible using a traditional approach.

Secondarily, Cloud has been an advantage in terms of costs. The cloud offers opportunities for efficiency, but you have to figure out how to manage it to optimize the service, for instance shutting down servers when they're not in use. However, the main advantage moving from investment costs to operational costs: we belong to a very dynamic market, where it's difficult to do long-term planning or to imagine what will be the usage of a server, of an application for 5 years. Our requirement was to be dynamic and today if I compare the carve-out we did 3 years ago with this year's carve-out, it was much more focused on operating costs and less on investment. And that puts us in a position where we will be ready for any challenges that the market will offer.

The third benefit is that a kind of network economy has been created. Before the carve-out we already had some Cloud applications: like Salesforce, Concur and so on. What we've noticed is that, having fully embraced the Cloud - thanks also to the maturity of Cloud applications today - it's much easier to make these applications communicate with each other. And users are also more open to use the Cloud. So today we use even more Cloud applications that we already had internally – such as Concur or the whole Office 365 world. This is a benefit for the company because the cost of the applications is paid back by increased usage.

Last point is Security. We are a medium-sized organization, we can't afford a security structure that can meet today's challenges. For us, the Cloud has been an opportunity to rely on larger facilities than ours that can deal with this complexity more effectively, and keep only the governance part (Policy, Procedures and Access Management) in house. Our investment in the Cloud is amply repaying expectations and perhaps - I must say - even exceeding them in some cases.

Gianluca Giaccardi: TESISQUARE is also facing significant complexities, managing the supply chain digital transformation of 250 client companies, in such a critical historical period for the supply chain. From your perspective, why it is important to be on Cloud today?

Perhaps we should approach the problem from another perspective: how can you afford NOT being in the Cloud today?

Certainly, we have to deal with complexities, but I see the Cloud primarily as an opportunity for the market and for our customers.

The first opportunity is hyperconnection. Open architectures are becoming increasingly important: our services and solutions are increasingly communicating to external digital ecosystems. Companies are also increasingly using IoT tools, generating a new level of complexity in terms of the amount of data that need to be stored but also in terms of security and openness.

The second opportunity is economic, of course. The level of complexity has risen, but it's obvious that companies are asking the Cloud for what they feel they can no longer do internally or would require them exorbitant costs to deploy all the required levels of security. The Cloud allows you to operate with economies of scale by sharing the complexity with many players.

The third is a technological opportunity. Technologies are changing. Today we see containerized architectures and microservices that are the new architectural paradigms, but that doesn't mean that legacy systems will disappear completely. The Cloud gives us the ability to decouple different technological layers so that cuttingedge applications can coexist with traditional systems.

For 25 years, our company has offered its supply chain process digitization solution. What does this mean? It means being able to connect the different actors of the supply chain: suppliers, customers, consumers, every logistics operators. It means having the ability to be able to access web platforms that are distributed internationally and globally. Let's bear in mind that today Supply Chains are more and more global and also Italian companies are addressing not only the local market but the whole world.

In our history we have lived through different phases: we lived through the phase in which these applications were installed onpremise and, therefore, on the infrastructures of our customers, who then afterwards had the need to open their infrastructures to allow access to the different players in the supply chain in an omnichannel logic, with all the problems that this entailed, in terms of system availability, security etc. Then, over time, we began to approach the concept of hosting, where the installation instead of

on-premise is hosted on a server, on an outsourced infrastructure.

This concept has evolved, today we talk about "Software-as-a-Service": so our customers don't expect maybe even a software anymore, but they expect a service. And this is a new paradigm whose adoption has been further accelerated as a result of Covid. so, certainly then the disruptive effect of Covid has further accelerated this.

These considerations put us in front of an increasing level of complexity related to security, services and compliance issues. It's clear that an infrastructure and a service must guarantee all the requirements of security, in compliance with best practices, ISO 27001, and all industry regulations. Obviously, the level of service expected by the market must also be guaranteed. And then there are aspects of compliance such as external regulation (i.e., data protection); many times, however, compliance also means having to respond to internal policies.

The IT world has seen profound changes and we are now at a point of no return, so without the Cloud, it becomes impossible to manage this complexity. Of course, some companies are still resisting, but I see them more as the exception than the rule.

### Cloud is a point of no-return: Massimiliano Gerli is it so for Intercos as well? Does Cloud play a different role in the retail industry where Intercos operates?

The topic is extremely complex, we've already reasoned previously about laaS and Saas and it's quite a complex topic to deal with. The evolution from Private to Public, which accompanies the laaS technology - i.e. that of the pure infrastructure - is certainly a path that almost every company is facing, proceeding from the dematerialization of its own Data Centers and then moving its IT resources first towards a hosting - where resources are shared, but dedicated to the company - and then going further and using the Public Cloud solutions of the Global Players on the market. This path is often perceived and represented as an evolutionary path. On the other hand, when we think about Software-as-a-Service solutions, we find ourselves in front of a more complex solution where the variables multiply. The choice of adopting a solution rather than another, a Private technology rather than Public, is determined in an important way by the type of process to which it refers, by the complexity of the process, by the characteristics of the company itself, by its geographical distribution and by the the company's digital maturity level. This means that there is no one-size-fits-all solution, except that the Cloud is an opportunity that must be seized. More and more often we adopt Hybrid cloud solutions, putting together different IT elements and making them work well together. I think companies need to understand how to orchestrate information across different technology solutions and that needs to be evaluated in their specificity. I'll give you some examples from my recent past: when you need to work on omnichannel, consumer-facing solutions, whose complexity is limited and the speed of evolution extremely high, then Public Cloud solutions can certainly have enormous competitive advantages. Vice versa, solutions applied to much more vertical processes, much

more specific, where in some way the specificity is a competitive

advantage, then, perhaps you need to find different solutions. I think our goal as managers working in technology and the goal of the companies that support us in these paths, is to orchestrate complexity. Because technology is not so much a commodity, but it can be a competitive advantage.

One reason of complexity is Data security and Data Management. Here, the real issue is addressing the data more from a compliance perspective rather than from a security perspective. Because, especially in geographically highly distributed contexts, the cloud is still on an evolutionary path and the technological evolution does not always proceed and-in-hand with the evolution of the regulation. For a global company, working with a cloud provider can be difficult from the point of view of managing certain sensitive data that, due to regulations in Europe and elsewhere, must reside in certain specific places. This clashes a bit with the logic of the Cloud, especially with the logic of Global providers.

There are solutions, obviously. Basically, everybody is working on it. But, in my experience, this is definitely a topic of attention, especially when you manage consumer data that, from Australia to China, from the United States to Europe, fall under very specific regulations on the government of data and their physical location. And so the physicality clashes a bit with the concept dematerialized by the Cloud.

However, using data is the real competitive advantage for a company. No matter the business, the data, determine the possibility of elaborating decisions, analyzing KPIs, analyzing processes and therefore competing on the market. Well - whether it's Public or Hybrid Cloud – what is difficult to delegate is data orchestration. So, once more, I think our role is to worry a little bit less about infrastructure, to overcome our fears - because this is in some ways a legacy that we can certainly abandon - and to devote ourselves assiduously to the governance of the data, which is where the real value lies.

With Alessandro Caleffi, I would like to try to unravel this complexity, given that Aused - as an association that in some way is a sponsor of innovation and technological adoption - has carried out a survey of about fifty small and medium-sized companies on the Cloud. What is the opinion of Italian small and medium-sized companies on the Cloud?

Before telling you about the results of the survey, allow me a parenthesis dedicated to the methodology: we submitted the questions to the 50 companies of the Be The Change group, the most representative of the Italian entrepreneurial and industrial ecosystem. Of these 50 companies, 32 gave us their contribution; a very indicative sample from my point of view.

So, what do we see from the survey? We see that the Cloud is now a standard, used by 97% of our members in its various forms. However, this does not mean that the Cloud is a point of arrival for Italian companies, nor a point of departure. It is in fact an ongoing path. In fact, if 97% of companies have already undertaken Cloud projects, 66% say they will activate other projects in the next six months and, of these, 80% will use mainly hybrid solutions. Therefore, the use of public and private Clouds will be mixed

with hyperscalers' solutions, showing a very varied use of these technologies.

What is the level of confidence with the Cloud? More than 50% of respondents feel either fairly or very comfortable with managing this kind of technology. In my opinion, when compared to that 97% of companies that are already using the Cloud, this means that we as ClOs have had a chance to approach the Cloud, touch on it and maybe even make mistakes. We've also somehow tried to find the solutions, and now we feel confident to move forward with this technology.

This can also be seen from the fact that our community does not look favourably on the so-called "Big Bang" migration but prefers to opt for a "step by step" approach, putting in first place sustainability - both logical and technical - which also allows us to give continuity within the services we offer to our companies.

We also asked our community what the main operational risks are in these types of projects. The majority of members cited dependence on Cloud Service Providers as the main risk, while they see cost as the main reason they wouldn't want to go through a migration path.

These are two very common concerns, but in my opinion, they can be mitigated by developing a Cloud corporate culture and a proper governance plan. With the move to the Cloud, technical teams have to change their skin a little bit, change their roles, and so there has to be new governance within companies as well to support this type of technology within our functions, but also in the relationship with the rest of the business. Because obviously pricing models, management models, cultural models change and everything travels at a higher speed, making it necessary to fine-tune our ways of working.

On the cost issue, the Cloud requires us to move from a more investment-based model to a more operational cost-based model. Probably, on the one hand this is still to be understood, reengineered or re-adapted to business models. On the other hand, you still need to know and master the adoption curve properly to govern this type of technology in a timely manner and avoid overspending. We've had a lot of experience with this technology and we're still going to have a lot of experience with it, but perhaps today we haven't yet come close, as a community of CIOs, to really mastering this aspect 100%.

#### What skills do you need to put in place to manage the transition to the cloud?

This is a good question. I think it's primarily a governance issue. Which means thinking about the architecture - of the machines, but also of the data - before embarking on a project. Based on the needs of our business, being very clear on the way forward and then confidently embarking on that path. So, in my opinion, the real complexity is not so much the technology, but the internal change management of the company, the data governance and all the compliance and security aspects. In a nutshell, the Cloud is not so much a technology project as it is a change, a business transformation.

#### Gaia-X: the European project for a digital ecosystem

#### SPEAKER

#### FRANCESCO BONFIGLIO CHIEF EXECUTIVE OFFICER, GAIA-X AISBL

## We have discussed before on how much important Data Management is for European companies. Therefore, could you please tell us what Gaia-X is and its role under the aspect of Data?

It is a project that originated from a private association. The story starts from a government project funded by the BNWI, the German Ministry of Economic Energy, which then immediately became Franco-German. Ministers Altemeier and Le Maire decided to join a project for a supranational Cloud, which then became Franco-German. But, after a few months, this need extended to all of Europe and Gaia-X turned into an international non-profit association: AISPL stands for "Association Internationale Sans But Lucratif."

Gaia-X aims to bring together technology providers and manufacturers to create a true European alternative of digital platforms, in order to overcome a gap that sees us hostages of non-European technologies – that are not controllable, because they are private - and to enable the "European Data Strategy", which requires the creation of large data sharing spaces, through which value can be created on all economies.

What does Gaia-X do? Two things: one, it facilitates the creation of projects to create vertical Data Spaces, for example in the healthcare industry or in the public sector, put together data that can be shared across different actors and create competitive value and additional product or service value. On the other hand, we're creating a software infrastructure that would be attached to any hardware infrastructure to allow traceability of digital services in terms of identity and transparency: like the label on food products, we would be able to tell for digital services what's in there, where they're delivered, by whom, what jurisdiction they belong to. Sovereignty is control, that is, being able to decide what I buy, what service I use. Which, in the digital world today does not exist. Today we have no control of these digital platforms and, in the last year and a half, everyone has realized that our life depends on them. Our life! Not just the business of some IT company anymore. Data are a European asset and Gaia-X wants to address this issue with a private partnership: we are financed exclusively by the membership fees of our members that are more than 300 in 25 countries, 90% of them European.

#### Are you saying you want to draw borders around Cloud?

In truth, this is one of the most debated topics. I've spent my whole life in the digital business and I have to say that today thinking that the solution, the sovereignty, is to close the borders is wrong. Because data have no borders. I always make this example: if we were to rename the Cloud, to invent it today, we wouldn't call it "cloud", we would call it "roots". Because it looks much more like a root system, joining many trees into a forest. A forest as big as the Planet.

Thinking about segregating data doesn't make sense, otherwise we couldn't guarantee the knowledge of this data. Instead, guaranteeing control of flows, guaranteeing control of access, having control of the jurisdiction that is applied is something completely different. Like saying: I put my money somewhere; I don't know who accesses it, to do what, where it is. Or I put my money somewhere and I am sure that whoever accesses it has to ask me for permission - where it is is a relative problem, if I know it is safe. Today we don't have any of that, so I think there needs to be an evolution. At the same time I have the chance to put my money somewhere else, if I want to. Cloud today doesn't work that way. If you bear in mind this example, if you consider your data the same as your money, I think you will understand the importance of it. Too bad that data today is as valuable as money and a lot of people haven't figured that out yet.

#### What is the real value of Data Economy and why is Europe lagging about that?

Data Economy is often wrongly confused with the amount of value produced by the IT Business. This used to be quite a good approximation once upon a time when IT was considered mainly as a 'cost' component by all Enterprises and Public Administrations. Now the world has changed. Data are driving the business, through the insights they provide to optimize and improve it, and most importantly for the new business models they enable. And IT is no more a cost but the necessary 'enabler' for this new type of business. The question comes when trying to quantify the volume of this new business. Given data is intangible, it is hard to classify how much of the value produced by the existing products and services in any sector (from smart cars to smart fridges, to online insurances or banking) derives directly or indirectly by their data. But the future value for any of these will be largely driven by the added services created through data on top of them. Only this can win the battle of competition of Europe against the rest of the world, certainly not the cost of labor or the cost of raw material).

Europe is late in riding this opportunity because of a very poor as per yet adoption of digital technologies and transition to digital business models. The reason lies mainly in the fear to adopt highly addictive technologies producing an almost certain lock-in effect,

in particular cloud platforms, and therefore the retention of 80% of data and application in legacy systems and infrastructures.

One last but not less important factor, is that Europe has a high fragmentation into the SMB, and this causes a dispersion of precious data across hundreds if not thousands of small players that cannot boost the value of the information in their hands without the creation of federated data spaces. The good news is that data is raw material that regenerate itself continuously, and the quality of our data in Europe is by far the highest in the world, because the complexity, richness and level of excellence of our industries, our infrastructures, our cities, our public transportations, our tourism and natural environment, and of our richness of different cultures, makes our ecosystem a unique source of highly qualified information. Time has come when Europe realizes the need to start extracting value from our mines.

#### How will Gaia-X enhance the possibilities of data economy for Italian and European players?

The unique approach of Gaia-X tries to overcome the well know obstacles of the dominating existing data-infrastructures providing a new trustworthy generation of cloud that provides openness, transparency, controllability, and interoperability of services. In this way the fear of lock-in is reduced and the data owners are incentivized to exchange their data across their supply or product value chains. To do that Gaia-X offers a SW framework that enables the creation of Federations, i.e., interconnection among different service providers and owners in a trusted environment where commonly agreed upon rules are implemented by all participants.

The trust is provided by the technology layer of Gaia-X which is incorruptible and decentralized, so that no single player can take full control of it or alter the credentials verification that the framework implements.

Last but no least Gaia-X implements a new concept of distributed cloud, where scalability is not obtained through the concentration of data, but instead through the federation of different data end points, so that the data circulation is limited and data can be reached everywhere, given the future of data is intrinsically distributed and the traditional Hyperscaler model does not suit anymore.

Considering the very nature of the European economical fabric, Gaia-X assumes an even higher importance when the logical concept of Federation translates into a new model of cooperation across different service providers that, joining their forces together (data centers, skills, geographies, services) can create the necessary critical mass that no single player in Europe owns individually to compete with the larger non-European players.

In a nutshell, Gaia-X is going to provide a new opportunity to European competitivity not only in Europe but in the global market, whilst implementing an innovative model of distributed cloud that is needed and doesn't exist out in the market yet, and overcoming the fears that so far have reduced the speed of adoption of cloud by data owners thus preventing a significant burst out of the digital economy.

## What is the role of Blockchain in Gaia-X? Could you share with us some details on how you plan to use Blockchain technologies as a tool to regulate digital services and the exchange of data?

Nowadays the focus is no more on blockchain specific technologies, but more on the concept of decentralized architectures, and digital trust. Through decentralization all participants in a federation, or a chain, are equally empowered to verify the credentials of others and accept them.

Through blockchain, notarization and immutable registers of the credential verification for a service, can be recorded and made available transparently to everybody without running the risk to be modified or altered.

The power of blockchain is in the democracy and robustness of a model that cannot be corrupted by anyone without the consensus of all, and this in turns produced that higher level of trust that everybody expects from digital infrastructures. In other words, innovative technologies like the blockchain, digital signatures, identity management protocols like eIDAS and SSI, verifiable credentials and the innovative concept of Labels, that in Gaia-X we use to tag as a 'Regulation by Automation', is making possible a new world where cloud and data infrastructure will be very much alike the internet, where there is no single master, but all participants exchange data thanks to common standards, but with a higher level of control and trust deriving by the Federation Services and the Decentralized Services of Compliance that we add on top and that are intrinsically taking advantage of technologies like the blockchain (in particular the EBSI project).



#### Cloud and sustainability: is it possible?

#### SPEAKER

#### **ALESSANDRO PIVA**

DIRECTOR, OSSERVATORIO CLOUD TRANSFORMATION, POLITECNICO DI MILANO

Cloud market is constantly expanding year on year. However, apart from its economic value, Cloud could be a valuable mean for organizations to meet their sustainability goals. Would you like to guide us through and help us understand how Cloud can enhance a company's sustainability strategy?

The Cloud market has grown again this year. Today it is worth almost 4 billion euros (3,8 billion euros) and if we compare this figure with last year, the figure has almost quadrupled. On the other hand, if we see the growth of the digital market, comparing the same periods, we see that there has been a growth, between 10 and 15%. What does this mean? It means, first of all, that companies have embraced this technology, and today they can use state-of-the-art services. State-of-the-art services means efficiency.

Even if we don't measure it at the sustainability level, already the fact that the applications are designed centrally ensures greater efficiency in terms of sustainability. Then if we move from the application side to the infrastructure side, again centralization means using state-of-the-art systems. Even if the digital market has not grown as much as the Cloud market did, the centralization of infrastructure has allowed us to do better than we did before.

Today sustainability has become paramount for businesses and companies are investing in sustainability goals. Technological evolution and sustainability are also at the center of European and national recovery funds. Furthermore large international players, but also by national players, are more open to invest in Italy and to develop skills and technology based on Cloud in Italy. Together these three elements creates opportunities for companies to enhance their sustainability.

What are these opportunities? First, the design of the infrastructure itself changes profoundly. The cloud offers a pool of resources, which are not just application resources, but are also infrastructure resources. Furthermore, these services are offered in data centers managed by specialized companies.

From here come to elements: the first is understanding the level of efficiency of data center energy consumption, i.e. what is the actual consumption of IT equipment compared to the overall energy used to manage a Data Center. In order to do so there are several parameters that should be taken into account, including the PUE parameter, when new Data Center infrastructures are built.

However, that there is still a lot to improve, although centralized Data Centers have on average a high-efficiency rate compared to the distributed approach. The first direction to improve sustainability is enhancing the efficiency of resources consumption: wasting as little energy as possible and reusing it for other purposes. From this point of view, of course, there are state of the art construction techniques, which allow, precisely, to manage these aspects and which are based on technologies related to heat management and different modes of cooling.

The second element, on the other hand, is related to the energy consumption of a Data Center. It's true that centralization means efficiency, but it's also true that a Data Center is a place where a lot of energy is consumed. So here today we must also pay attention to the source of energy that is used and therefore we must switch from carbon-based sources to alternative sources that have the least possible impact on the ecosystem and the environment.

The fact that these infrastructures are centralized and the fact that many players in this sector are making explicit commitments in this direction, well, it's a factor that obviously can only be a good thing, because it allows for directed investments. We know that it is not easy to manage the ecological transition, but certainly, when the big players move, then the whole market gradually follows.

Other elements concern, instead, the life cycle of the infrastructures themselves. Therefore, being able to have good practices that allow managing the obsolescence of technology and that allow reusing as much as possible all those infrastructures that characterize a Data Center and that maybe in a traditional approach were not managed in the same way.

Efficiency from the point of view of resource utilization can in some way be used by the company both in the internal evaluation and in the external evaluation on financial markets. How does it affect the company from the point of view of branding, but also of sustainable impact?

The renewed attention to sustainability issues allows even more the Cloud to make a transition from being considered a simple IT issue to an added value for the entire business. This new dimension related to sustainability makes the cloud a topic of discussion that can easily enter the corporate board. Because sustainability topics are now the subject of investment by companies and also investment by the ecosystem of players who, at a structural level, are involved in the ecological transition of our country and create new opportunities for the company. I really liked what Dr. Bonfiglio said earlier: the Cloud in fact are not clouds, they are roots. They are roots that hinge on the organization and even more they hinge on the sustainable future of our Planet.

## **Incentives for transitioning** to the Cloud

#### PEAKER

#### RANIERI VILLA

GLOBAL INVESTMENT AND INNOVATION INCENTIVES LEADER, DELOITTE TAX AND LEGAL

Digital transformation is one of the goals of both the European recovery fund and the Italian PNRR (National plan for Recovery and Resilience). Would you mind guiding us through what does it mean for companies who are planning projects on the Cloud?

Indeed, not many companies know about these incentives. These are not actually Cloud-specific incentives, but most of the PNRR incentives do include Cloud.

Therefore, let's start with an overview of PNRR. This is part of the Next Generation EU: 750 million euros that the EU has reserved for supporting post-pandemic recovery. 28% of it goes to Italy - about 191 billion – but they come with some constraints: 37% should be used for sustainability projects, 20% for digitalization. Italy has also allocated internal resources to reach over 200 billion in total resources for recovery and resilience.

The plan is in 6 missions: the first mission is dedicated to digitization. This mission on digitization - called the Industry 4.0 Transition Plan - is partly on the public administration, but there are as much as 18 billion for private companies. The 4.0 Transition Plan is based on 4 pillars - which are the Research and Development Tax Credit, the Capital Goods 4.0 Tax Credit, The Pattern Box, and Training 4.0 - with the exception of the pattern box, three of these include funding for the Cloud.

The Cloud can be viewed both from a cloud spending perspective: system design and integration, solving migration issues and so on. There's a tool here that's the Research and Development tax credit that, when it includes 4.0, gives companies a 15% tax credit. And this is an initial tool that specifically mentions Cloud. It's not the only subsidized expense, but certainly one of the subsidized expenses. This, let's say, is a tool, for those doing something new compared to the industry with higher rates than the enterprise, of 15%. Or 10% if you implement the cloud for example in an ERP or a management system (without being part of the Industry 4.0 plan).

Instead, the normal expenses on Cloud, such as the investment in software or the payment of Cloud fees, is facilitated by another tool that is the tax credit for immaterial capital goods 4.0. If the Cloud is used for, let's say, everything that is Industry 4.0, Software-as-aservice is also facilitated, so the fee paid for the Cloud is facilitated to 20% non-refundable. And so are software purchases. If, on the other hand, we're not talking about 4.0, but we're talking about generic software - such as a management system or Salesforce

or other types that don't interconnect company assets - the rate drops, depending on the year to 10-6%. This 10-6% is granted, even though there's a lack of clarification from the Internal Revenue Service, but certainly the software purchase is covered. On the payment of the fee the question is, however, still doubtful. Then there's the staff training. Because, obviously, after Cloud Migration, my staff must be trained to use it to the fullest. Again, there are incentives here. Incentives that are in different percentages, let's say 30-40-50% depending on the size of the company - the smaller the company the higher the incentive with some limitations - let's say 250-300 thousand euro of all personal training expenses. So not only the staff, the teachers, not only the ancillary expenses such as premises, travel expenses, but also the time that my employees dedicate to training - even online - on the Cloud

It should be noted that these incentives are granted through a tax credit, but they are not a reduction in the tax burden. They are for all intents and purposes a non-refundable contribution in the form of a tax credit. It can also be used by companies with a tax loss - in international practice, it is defined as a Cash Grant equivalent - and, in fact, it is recorded in revenues and not as a reduction in taxes: a technicality, however, to explain that even subjects with a tax loss or even those who, for some reason, do not pay taxes may be interested in this instrument.

PNRR does not end there. Now, let's not delve into too much detail, but there are then a number of other grants, for example, the one on Digital transformation from Invitalia: 10% contribution and 40% financing. There's the SIMEST contribution on Digital Transition that also provides non-repayable and soft financing - SIMEST with 100% financing is 25 soft financing - for SMEs to transition to digital and also include Cloud expenses. And then we come to instruments, instead, at the opposite end: that is, to finance Cloud infrastructure such as the IPCEI. I mentioned it even though the date for submitting applications was May 14, so it has now expired, but to explain at system level even the Cloud infrastructure - which among other things requires the integration of the company's Cloud with Gaia-X, with the aim of creating a national Cloud.

#### Are these tools already available to companies to finance and invest in the Cloud?

Exactly. Why is that? Because Italy has correctly opted to be able through the funds of Next Generation EU, then that famous 28% of the 750 billion - to finance existing tools established in 2020 so, unlike other countries that today are lagging behind, because they are implementing new tools, Italy is financing tools that are already implemented. For this reason, the funds are all already available today and indeed, it is even possible to finance costs sustained in 2020 that, perhaps, had not been financed yet. On the other hand, on those that require a public invitation to tender, obviously the incentives start from the moment of presentation of the tender. However, the first three instruments that I have presented can also finance expenses already incurred; this is because the right to the tax credit is obtained by the company for the sole fact of having incurred the expenses. On the other hand, in those that are subject to a call for proposals - such as the SIMEST call for proposals for internationalization and digitalization - it starts from the moment the application is submitted.

## 06 Investors' ESG Preferences

SIAT Quantech Academy 2021

#### ALESSANDRO MASTRANTUONO

OPERATING MODEL TRANSFORMATION FSI PARTNER,
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The ESG topic is paramount for our industry and, in this article, we will approach the topic from a somewhat unique angle. We're not going to talk about the ESG topic within the investment, but we're going to use a slightly different angle, shifted to the end user. Specifically, we're going to address ESG preferences of investors and clients. It's an element that will be increasingly important in the future and increasingly at the center of the regulator's attention, leveraged for the development of sustainable finance. It is also an essential element that assets and wealth managers will have to incorporate into their marketing and communication projects in order to enhance their product and service offerings and create a competitive advantage.

But let's look in detail at the context in which all this is taking place. 2020 was the breakthrough year: a year in which the last doubts that ESG would be a revolution were swept away. In fact, our American colleagues at Casey Quirk estimated that the volume of sustainable investments will quadruple in 2025 compared to 2020, reaching \$13 trillion.

The characteristics of this growth are 3:

- **Global Nature:** the leading role in sustainable investing is played by the Eurozone, at least for now, with significant growth in the US and APAC.
- Accelerated conversions: almost half of the global growth comes from the conversion of existing strategies to sustainabilitybased investment processes.
- **Active investor demand:** investors are expected to direct \$3.2 trillion to sustainable investments by 2025.

Here's where the nature and ESG preferences of investors become a crucial issue in governing this trend. Investors today certainly show a strong interest in sustainable investments, but the preferences examined by various surveys show dynamism and variability.

As mentioned, regulators have placed at the center of their sustainable finance development initiatives, especially on the distribution world, the need to incorporate end-investor preferences within advisory processes. However, it is clear that the analysis of these preferences must be, in some way, framed. We still see confusion about the elements that need to be assessed to analyze ESG preferences: there is a lot of focus on what are the investment techniques rather than the objectives of financial instruments that invest in sustainable assets. Certainly, in order to create a competitive advantage for their offering, the challenge for advisors and asset managers will be to analyze investors' ESG preferences over time, adapting their marketing and communication strategies.

Analyzing the scenario that emerges from the analysis of investors' preferences, we note a certain consistency with the growing trend of sustainable investments. But what is more interesting is to analyze how these preferences are being formed. The environmental factor always comes first in ESG investments and, in particular, the focus on climate change. There is a trend among investors between those who focus on having a positive environmental impact and those who use ESG issues to refine their investments. There is an awareness of excluding several sectors that are deemed controversial - an element that should be considered in asset managers' exclusion strategies. There is also an additional element related to the trade-off that many investors are willing to accept. Preferences are influenced by the social and political context, which is why they have a very marked dynamic factor. Within the decision-making process, then, it is necessary to evaluate all the emotional aspects that emerge strongly in all the surveys - the concept of social norm, of the "right thing to do", push to declare one's interest in topics that one believes can benefit the community. The identification of global macro-trends is therefore crucial to anticipating market needs. Other surveys show, however, a shift in allocation drivers, which do not focus only on geography or asset class but shift to thematic aspects: there is a strong appetite for thematic aspects related to sustainability. So, the important element that comes out of sustainability analyses are the nuances of variability and dynamism that develop over time that need to be captured to drive the offering.

ESG and preference identification is also at the heart of regulatory intervention, particularly focused on distribution processes and product governance frameworks. Areas include the need to consider preferences in suitability models within advisory processes, which will drive product selection, and the aspect more related to product design and target market selection - hence, product governance processes. Generally speaking (as we have seen in the past with the MiFID implementation processes that everyone has had to deal with) there will be a long period in which

"ESG topic [...] is an element that will be increasingly important in the future and at the center of the regulator's attention, leveraged for the development of sustainable finance"

a certain stability will have to be achieved and, along this path, there will be important areas of impact that will concern products, processes and client engagement. This last aspect, in particular, is very important because there will be a change in some of the basic rules with which one relates to the client in order to build financial planning, while the relationship between the manufacturer and the distributor will involve information exchanges that will also include investor preferences, along with, of course, the need to adapt the entire data set and IT infrastructure.

We now turn to a brief focus on the regulator's definition of "preferences", where we see all the complexity inherent in the regulatory framework that must be implemented. In this definition, reference is made, for example, to all aspects related to the SFDR - the new disclosure regulation that gave birth to Article 8 and Article 9 products (promotion of environmental characteristics, specific objectives, but also negative effects on the sustainability factors with which asset managers will be confronted in making their assessments). In general, a very complex definition emerges, which will certainly pose several challenges to wealth managers. First of all, there is the need to have a very critical and pragmatic approach, as shown by the sentiment of all market participants, so that this process of analyzing ESG preferences is implemented in a way that fosters client engagement, gives value to the client and offers a value proposition in financial planning. A second challenge is to communicate simply and well to promote understanding of the change. You also need to understand how to segment various preferences into styles, useful indicators for product selection, and figure out how to manage preference analysis over time.

Deloitte pays great attention to these issues, trying to define a taxonomy of these elements to understand which of them influence the end consumer in defining a certain propensity for an ESG investment. In fact, being interested in sustainable investment products does not, in and of itself, give an indication of the client's goals and communication methods. Instead, it is necessary to define a clear taxonomy for the client, which can then be leveraged to understand the nuances in client preferences.

- · Clients not interested in ESG
- Clients who see this **ESG Investment as a mean to diversify their investments and mitigate risk**
- $\cdot\,$  Clients who see ESG investing as an opportunity to increase their returns by investing in "trendy" sectors
- Clients who do not want to invest in companies and sectors that may have a negative impact on society or the planet: an aspect that from various surveys emerges above all as a secondary objective compared to the others mentioned above
- Clients who do **impact investing**, producing a positive and concrete impact on the real economy

Alongside this taxonomy, an operational and product offering model must then be built, which often tends to be consistent with the ESG investment strategies that are implemented in the funds. The taxonomy must then allow for the implementation of the

regulatory part which must be implemented. But this preference analysis exercise, which we stimulate on our clients, also wants to have a business oriented and client-oriented approach.

This represents a first layer of preferences, but underneath that we see several nuances that emerge from each client's behavior, which are then the ones that will drive the evolution of the offering. Typically, a preference for ESG investing opens a whole range of possibilities that can be identified. It's definitely important to start by understanding the nature of the preference, understanding its nuances in detail, and then go on to segment the target client base from a sustainability perspective as well, and finally react to changes in product offerings.

Casey Quirk's colleagues identify four possible configurations of sustainability integration that define a trend in the evolution of the offering.

- **ESG Risk Mitigator:** use of one of many risk factors in portfolio creation and client disclosure
- **Client-led ESG provider:** flexible options on sustainable investments, depending on client values
- **Goal-oriented outcome provider:** options on specific sustainability goals (e.g. climate change)
- **Sustainability Purist:** sustainability is at the center of all investment processes

It is interesting to note a shift from a more generalist preference for ESG in the first two cases to a goal-oriented investment in the other two, focused on specific sustainability objectives with very specific KPIs and targets. This is a theme that ties in well with the concerns of "greenwashing" envisaged by some operators in the financial world and beyond, ending up by transforming the ESG integration that is increasingly appearing on the market into something that succeeds in achieving specific sustainability objectives, even beyond performance.

This brings us to the last topic: analyzing preferences to understand their dynamic nature helps the marketing process to define and respond to customer expectations. But in addition to this, the fundamental element for enhancing one's value proposition and differentiating oneself from the various competitors is to define an innovative communication strategy capable of amplifying contact with clients. Knowing how to communicate well means first of all understanding what the topics of interest to customers are. During 2020 there was a very substantial increase in communication activities related to ESG, with an estimated value of +140%.

In a recent survey, concern about the issue of greenwashing also emerges: there is a lot of attention on the subject and many ex-Article 8 and 9 products were not found to be in line with the guidelines of the Paris Agreements, making greenwashing and the consequent reputational risk one of the points of greatest attention, which will be even stronger in the years to come as a result of the further growth of the ESG market.

It is therefore crucial to be able to communicate with the client and to know how to convey your results. For this reason, Deloitte has developed 5 key points to build an effective communication strategy:

- **Be transparent:** be able to communicate your results in a transparent and authentic manner. From this point of view, it is useful to be aligned within the entire corporate communication strategy.
- Interacting with clients in the investment journey: this concerns both distributors and manufacturers and is articulated through interaction with the client and ESG analysis of the portfolio, also in this case by enhancing the results and trying to understand the expectations and perspectives that clients have, also by comparing themselves with the new areas of ESG offerings.
- Talking about results: being able to communicate results using a fact-based, science-based approach that respects the KPIs defined at the product strategy level can make all the difference. Some large asset managers are already working on this, achieving results and recognition from the market.

- Leveraging technology and data: linking to what has been said before and to regulatory requirements such as those related to the negative effects on sustainability factors, this aspect should not only be seen from the perspective of compliance with regulatory guidelines, but is above all an opportunity to use data and KPIs as an integral part of the management and investment process and a key element of communication.
- **Being creative:** going beyond simple product communication becomes an important factor in terms of market positioning and helps to create a competitive advantage.

In summary, we believe that the client's point of view from an ESG perspective, their preferences and expectations, are a world that should be explored in-depth. There are many reasons for this, but the main reason is because it involves an emotional element that introduces an element of variability and affects the client's decision-making process in terms of investment choices. A very important factor, on which to work in order to create competitive advantage.

CHOICES
LEVERAGING
TECHNOLOGY AND DATA
ESG BEING CREATIVE
BE TRANSPARENT
INVESTMENT JOURNEY
CLIENT EXPECTATIONS
DECISION-MAKING
TALKING ABOUT RESULTS
INTERACTING
WITH CLIENTS

## A very dynamic year

Fintech and Insurtech Trends from Italy to the world as seen by Politecnico di Milano Fintech and Insurtech Observatory

#### INTERVIEW WITH LAURA GRASSI

HEAD OF FINTECH & INSURTECH OBSERVATORY,
POLITECNICO DI MILANO

## Laura, which are the main topics covered by this year's research in the Politecnico diMilano Fintech & Insurtech Observatory?

In the wake of 2020 that changed radically people's and firms' behavior, 2021 has been a very dynamic year for Fintech. In such a context, our research team covered a broad range of topics: we analyzed both the demand and the offer side of Fintech & Insurtech services aswell as initiatives promoted by regulators.

Being an Italian institution, we focused more on the Italian framework, nevertheless, we have certainly kept a close eye on what is happening in the rest of Europe and in other interesting areas such as Africa, the Americas and the Far East.

#### Would you like to start from the demand side?

Italian consumers show an encouraging level of awareness of Fintech & Insurtech services compared to the previous years: 92% of them knows well at least one service (+8% on 2020 data). Among these, smartphone payments and money transfer via web apps are two notable examples: 71% of users is acquainted with the first and 59% with the latter. Furthermore, it is even more remarkable that, for most users, the experience is not limited with the knowledge, but also involves the active usage. 54% of users have tried smartphone payments and 44% have used money transfers services via app. Besides that, consumers are more prone to share their personal information with their financial institution as they understand more and more that data are key for innovative and customized services. Moreover, data show that consumers are considering more and more startups and innovative players for the provision of financial services.

Naturally, individuals are only a portion of the demand for Fintech & Insurtech services. Indeed, in the last years we noticed an increasing demand coming from SMEs which are looking for cheaper and more tailored financial solutions. This need was even magnified by the lockdowns that forced these businesses to radically modify the channel of interactions with financial institutions.

Alongside consumers and SMEs, which have always been part of our analysis, this year we expanded our research perimeter to what falls in between, namely the category of microenterprises<sup>1</sup> and professionals. As predictable, this category has its own necessities while it shares some peculiar preferences with consumers and others with SMEs.

For example, as of today, professionals and microenterprises are less willing than consumers to consider innovative actors and startups for the provision of financial services, on the other hand they are more prone to share their sensible data with banks and insurances.

We also noticed that, compared to SMEs, this category is less demanding in term of offer customization in the choice of a bank, while it takes more into account the comfort of having a branch close to the workplace.

#### What about the offer side, how is it evolving?

When we refer to the innovative offer in Fintech & Insurtech, we should always have the Open Finance framework clear in mind. Indeed, the innovative process involves all the players that gravitate around the financial world: incumbents, customers, universities, incubators, startups.

We gathered data from all these players, however we focused our efforts mainly in the study of startups which are the real engine of innovation.

The sector is growing globally at an unceasing pace, in 2020 we mapped - and studied in detail - 2541 Fintech & Insurtech startups worldwide (+110% vs 2018). Among these, 60% operate in the field of banking services, followed by investment (35%) and insurance (15%). The offer is manifold, both in terms of target sectors and in terms of age groups and professions of the end customers. Not surprisingly, the Anglo-Saxon world is the most advanced with 980 startups in the US and 296 in the UK.

About the Italian ecosystem, we are still concluding our research, however, the first insights are already really encouraging: we are noticing a considerable growth on past data.

### Sustainability is definitely a hot topic, and every industry is looking at it, how do Fintech & Insurtech startups deal with it?

Fintech & Insurtech startups are starting to consider sustainability in their value proposition. Unexpectedly, or maybe not, the few African startups, also given the nature of the context in which they operate, are extremely sustainability-oriented, with 54% of them declaring attention to these issues, while the European and the American ones are less committed, 24% and 22% respectively.

Being sustainability is a serious matter, we decided to go beyond what startups declare. We studied their business model and we identified 10 different architypes based on how they are sustainable and what issues they tackle.

Italian startups commitment, along with many more data will be announced the 14th of December in the Observatory's Final Conference during which Deloitte and several other market players will share their view.

<sup>1)</sup> In accordance with the European Union directives, microenterprises are business with less than 10 employees and a turnover not reaching 2 mln €

# Blockchain 3.0 and the age of "Decentralized Internet"

The evolution of Blockchain technology and the role of Decentralized applications (DApps)

#### VALERIA PORTALE

HEAD OF BLOCKCHAIN & DISTRIBUTED LEDGER OBSERVATORY,
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#### GIACOMO VELLA

RESEARCHER, BLOCKCHAIN & DISTRIBUTED LEDGER OBSERVATORY,
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Blockchain technology was born with Bitcoin in 2008, to create a new peer-to-peer cryptographic virtual currency without intermediaries and governed by algorithms. Over the years, the technology has evolved and new opportunities, business models and unprecedented project governance systems have emerged.

To frame the evolution of this sector over the years, the Blockchain & Distributed Ledger Observatory of Politecnico di Milano study the topic with the mission to drive the Italian market into the right development.

In particular, the Observatory identified three different stages in the use of this technology.

- **Blockchain 1.0:** the "Internet of Value". The first stage of evolution of Blockchain and DLT, where the technology is strongly linked to cryptocurrencies and to value exchange;
- **Blockchain 2.0:** the "Internet of Smart Contracts". In this second phase smart contracts, transaction programmability and nonnative tokens are introduced, enlarging the number of potential applications and the business sectors impacted;
- **Blockchain 3.0:** the "Decentralized Internet". This is the stage where the concept of decentralized application (DApp) emerges. Blockchain becomes an enabling infrastructure for the creation of censorship-resistant DApps, backed up by distributed networks.

These three stages are not exclusive and do not necessarily represent an evolution in terms of maturity. Rather, each stage is characterized by specific benefits and the elements of innovation of the various phases are linked to each other: Blockchain 3.0 applications are still based on cryptocurrencies, tokens, and smart contracts, but the technical elements are combined into new, increasingly complex and interoperable business solutions that bring forth constantly evolving ecosystems.

While Blockchain 1.0 and 2.0 projects are often characterized by the existence of "application specific" Blockchain platforms (i.e., developed exclusively to support a specific business application), Blockchain 3.0 is characterized by a paradigm shift: platforms development is strictly separate from applications development. In fact, in projects that fall into the latter category there is a separation between Blockchain platforms and the decentralized applications, developed on top of them through smart contracts.

Blockchain and DLT technologies act as an enabling infrastructure for the creation of DApps, which become independent business solutions and not just the transposition of existing business processes on Blockchain. Consequently, in the Decentralized Internet phase (or web 3.0), platforms are becoming more and more "general purpose": they are not addressed to a single, specific use case but are used mainly as enabling tools for the development of multiple applications.

To better understand the evolution towards the Blockchain 3.0 stage, the Blockchain & Distributed Ledger Observatory has conducted specific research on the 100 most relevant DApps on the market. The analysis has been conducted through an analysis

of the most relevant DApps per number of users (4.4 millions users driven by 100 DApps)<sup>1</sup>.

DApps have grown considerably in the last years, both in terms of number and active users interacting with them. To understand what kind of trends are driving this growth, the Observatory analyzed many different features of this DApps: from the type of governance to the revenue model adopted.

Specifically, a strong prevalence of decentralized finance (DeFi) has emerged: 2 out of 3 applications operate in this sector, which has exploded over the last year, attracting considerable capital from users. As of November 2021, the Total Value Locked in the several DeFi protocols has passed 250 billion dollars.

Another noteworthy area is the Gaming sector, which despite counting only 20% of applications in the analysis sample, involves 37% of users. This is undoubtedly an area with high growth potential, in which Non-Fungible Tokens are often used to represent in-game assets.

NFTs are one of the most significant trends in the Blockchain world, which has seen growing interest in recent months. DApps operating as marketplaces for this type of asset are not many in the sample, but the use of NFTs involves several sectors. Gaming is a clear example, but also in the financial realm NFTs find several applications (e.g., to represent financial securities).

The DApp space is in great turmoil and their growth is contributing to define the directions of development of Blockchain and Distributed Ledger platforms, as well as providing us with valuable insights on how these technologies can play a role in business sectors, even for traditional companies.

<sup>1)</sup> The sample involved a total of 112 DApps, identified through two separate extractions of the first 100 DApps per monthly user on the dappradar.com website, integrated with information from several secondary sources. The first extraction was performed on February 28 2021, the second on April 30 2021.

## 09

# Promoting Integral Human Development and Peace in the Digital Age

New technologies in the post-covid world: an ethical approach to FinTech and development

#### A call for a human-centered FinTech



#### SPEAKER

#### PAOLO GIANTURCO

CORE BUSINESS OPERATIONS AND FINTECH LEADER DELOITTE CONSULTING

Fintech start-ups develop complex tech platforms that, through innovative technology solutions and faster digital processes, increase the velocity of transactions, credit decisions, e-commerce proposals, digital marketing persuasions, etc.

We can choose whether this vast quantity of operations led by digital that affects the future of ordinary people will either be good or bad. This choice is up to all of us.

#### A more inclusive world

Our commitment, globally and locally, is to generate through our services and resources a real impact that benefits our people and clients and the entire social and environmental ecosystem where we operate. With the future of financial services rapidly taking shape, this is only the first step of a study about how a human-centered financial technology can build a more inclusive world.

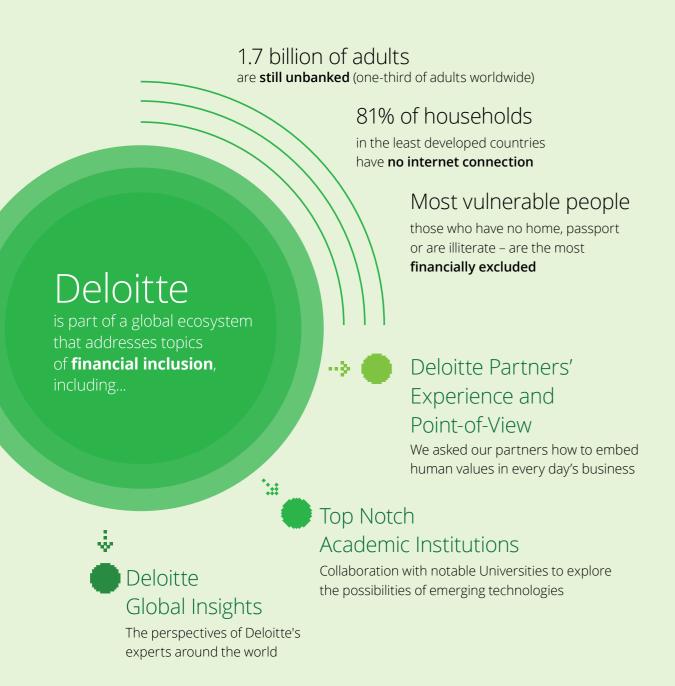
## Would you like to be part of it? Join our endeavour

Send us your contribution about how financial service can create a more just and equitable world. **Join our endeavour** – your contribution will become part of our upcoming position paper.



#### All rights included

## Access to **digital economy** and **technological empowerment** around the world



"Financial Inclusion means that individuals and businesses have access to useful and affordable financial products and services that meet their needs — transactions, payments, savings, credit, and insurance — delivered responsibly and sustainably.

- THE WORLD BANK"

#### Deloitte Partners' Experience & PoV

We asked our partners what are **the core values** they apply in their personal experience to address **Fintech and emerging technologies ethical implications** 



ANDREA LEUZZI
Digital Operations Leader – Deloitte Consulting

Values at the core

Technology allows for improved financial inclusion of the unbanked, but it can be harmful too, especially when some core values are not taken into account



ANDREA RIGONI Global Government and Public Services Industry Cyber Leader – Deloitte Risk Advisory

Impact on society

The perspective is to look at technology in its relationship with humans, not just individuals but as a society



GIANMARIA TRAPASSI

Deloitte Digital FSI Lead – Deloitte Digital

Human touch

The relationship with clients is increasingly dictated by algorithms and less and less by personal knowledge of the client's state of mind and overall situation



 $\begin{tabular}{ll} \textbf{MARIANGELA ZINGAROPOLI} \\ \textbf{Operating Model Transformation FSI Partner} - \textit{Deloitte Consulting} \\ \end{tabular}$ 

Human developement

Financial innovation can improve services and access to credit, but it must be used in the right way. For example, automation can be a chance for career developement: freed from repetitive tasks, people can take upskilling and reskilling paths to achieve better job positions



DAVIDE TURCHETTI
DCM Digital Customer Leader – Deloitte Consulting

Responsibility

Ethics applied to new technologies is a topic of absolute relevance in the academic world. I personally believe that we have to ask ourselves this questions more often, because we have the responsibility to shape the leaders of the future. If not us, who will?

## FinTech Talks Closing Remarks

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BO EMINENCE & FINTECH CHIEF OF STAFF AT DELOITTE CONSULTING ITALY MMIONE@DELOITTE.IT Collaboration was one of the 3 main drivers of recovery, defined during the V edition of Fintech Talks.

One year later, Collaboration is more important than ever. In fact, I think it is the only way for Financial Institution players to keep innovating at pace.

As Daniel Marovitz said, banks can decide to become a "walled garden" and, therefore, miss out every opportunity out there or instead they can decide to approach the market and the overall Fintech ecosystem to discover new perspectives, exchange ideas and be closer to innovation and customers.

Indeed, this requires a certain degree of curiosity and openness. Let's take cloud for example: until recently, cloud was not widely used in FSI, now it's a standard. I won't be surprised to see the same thing happening with Crypto.

Today banks are hesitant to approach Crypto and the decentralized world, mainly because of the complexities and the possible hurdles they might encounter. Nevertheless, understanding the crypto world will be strategic for their future positioning.

Partnering, trust and collaboration between banks, fintech and incumbents is the key to managing those complexities and entering in this new world. They should only be brave enough to take this step and marching together towards the future.

See you at our next issue!

- Paolo Gianturco

#### THANK YOU!

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