

The **FINDER** Project

'GAIA-X: The future of the European data cloud'

Highlights from the session held at Atos's Inclusive Digital Innovation in
Financial Services & Insurance Event Week (15th to the 18th March 2021)

Thought
Leadership **Atos**



Overview - What did the session cover?

“We are creating a next generation data ecosystem for Europe with global aspirations,” said Hubert Tardieu, chairman of the board of the GAIA-X AISBL at the GAIA-X summit in November 2020. His words did not overstate the importance of this collaborative initiative between almost 180 different organizations. Within a few months, GAIA-X has developed into a new European data ecosystem. What started as a Franco-German initiative is now growing with the participation of more EU Member States and companies and the creation of seven national GAIA-X hubs. In this session, Mr. Tardieu shared his perspectives on GAIA-X so far and its importance for collaborative digital innovation in financial services and insurance.

Who was on the panel?

The session was hosted by Atos Industry Director, Ivo Luijendijk, with an introduction from Adrian Gregory, SEVP, Global Head of Financial Services & Insurance at Atos and Global Head of Atos Syntel. Adrian spoke about the purpose of this whole week of topics: How technology and business can better serve people. The focus, he explained, was on collaboration, the drivers behind it and the impact. In this session, Adrian highlighted that Hubert Tardieu – an advisor to former Atos CEO Thierry Breton – would explain why GAIA-X is so important to the future of the financial services and insurance market in Europe.

GAIA-X and the financial services and insurance industry

Mr. Tardieu began by highlighting the fundamental need for an initiative on the scale of GAIA-X. His very first slide demonstrated the imperative in Europe by showing that, on average, just 26% of EU companies were using advanced cloud computing services in 2020. This percentage did not include email, cloud software suites or cloud file storage. It was based on those companies with cloud hosting of the company database, a CRM system, accounting software or computing power, all of which are fundamental systems for large enterprises.

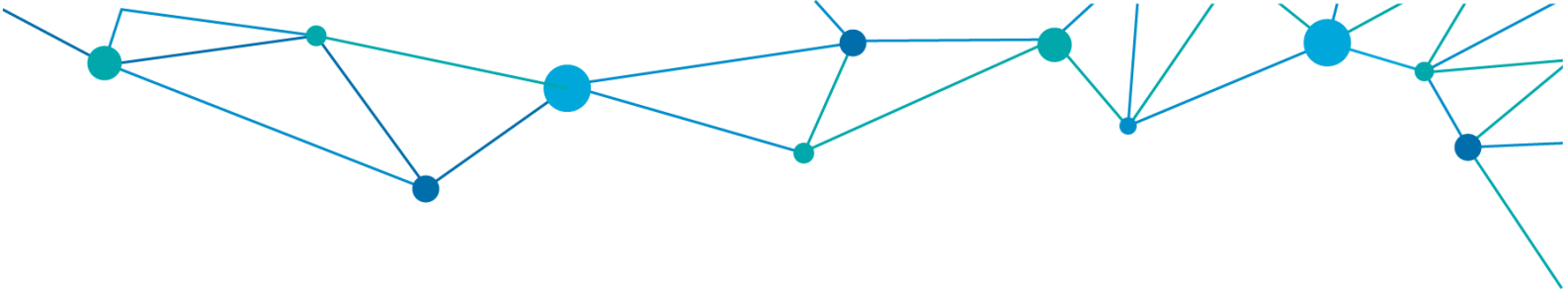
While progress has been made since 2018, this number is ‘well below par’ when compared to the same for US companies. Some of the northern European countries are leading the way, with over 50% cloud adoption, but even the likes of Germany (20%) and France (21%) were missing out on the benefits of cloud.

Set in this context, Mr. Tardieu explained that the initial role of GAIA-X was to double cloud penetration in Europe within 4-5 years.

How will GAIA-X achieve cloud adoption?

Mr. Tardieu explained that 22 founding members – among them cloud service providers and industry players – had used the first few months to define the multiparty governance for GAIA-X. This has provided the platform for Europe to “enter the digital era with cloud” by enabling the open, community-based implementation of policy rules, architecture standards and federated services. With these enabling mechanisms, active market participants can introduce ‘data spaces’ and industry platforms to form open ecosystems that can drive European cloud adoption forward.

Focusing on the current ‘Enable’ phase, Mr. Tardieu explained that initial research and discussions between members of GAIA-X had uncovered why European companies have not adopted cloud. He went on to say that understanding these reasons could help to speed up adoption within particular industries and organizations like banks.



Market participants had highlighted three particular barriers to cloud adoption:

- 1) The absence of portability (otherwise known as vendor lock-in or the risk of ‘mainframe syndrome’) – this was preventing companies from committing to cloud due to future risk
- 2) The potential lack of interoperability – whereby one party willing to share data with another party depends on that party having the same cloud infrastructure
- 3) The importance of data sovereignty – in which companies were reticent to move to the cloud because of the perceived risk that information could be used for reasons other than the reason it was shared in the first place

GAIA-X has been establishing a set of ‘policy rules’ or best practice for how to overcome these blockers. These are intended to become part of the architecture of standards that could then be implemented via federated services.

What are the GAIA-X objectives?

Around the time that the EU published its Data Strategy, GAIA-X released a white paper setting out its own approach to encourage faster cloud adoption across the region.

At the same time, GAIA-X has been working on policy rules regarding application portability and infrastructure portability. For application portability, the focus is on data and software and how to create the ontologies, data, information and APIs that individual industries can use as well as data and Platform-as-a-Service offerings required from cloud service providers. For infrastructure portability, the policy rules are aimed at addressing key issues regarding Identity & Access Management (IAM), Infrastructure-as-a-Service, self-description, as well as networks and interconnections.

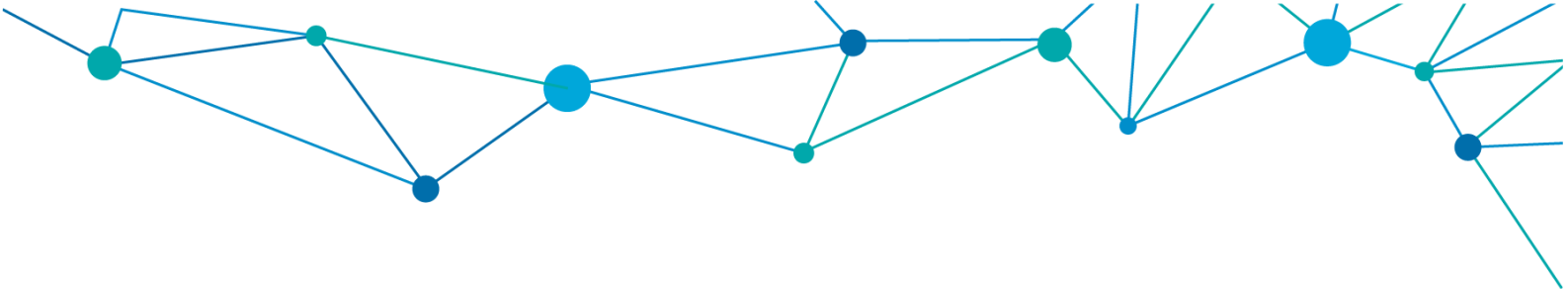
Focusing on industries

GAIA-X is facilitating new data spaces, Mr. Tardieu explained. These are arenas in which data can be shared within and between industries and could advance science, society and economies. Yet there is recognition of the importance of enabling market players to see the impact too.

The challenges of data portability, interoperability, and common commercial and legal frameworks have different implications for different industries, he said. That is where GAIA-X is helping participants come together to define use cases for their industries and to share information that can make industry data spaces possible. This collaboration is important. Not just at the data level but at the infrastructure level too – especially in such a highly regulated sector as financial services and insurance.

The work to-date in banking has shown that the sector has a distinct advantage. The payments regulation, PSD2, has already been up-and-running for two years. In that time, market players have had to share data with one another. So the API element of portability has been covered already. However, there is still work to be done to create the ontologies that will help the exchange of data between financial institutions and solve bigger use case scenarios.

One of the key challenges in the sector is how to become ‘compliant by design’. This is partly to do with compliance itself. But, as Mr. Tardieu showed, it is also about dealing with the high costs of compliance.



By helping the industry to define such use cases, the GAIA-X initiative can then try to find ways to use data and cloud infrastructure to overcome industry challenges. Not only this but also put Europe back in a more competitive position on the world stage, Mr. Tardieu said.

In closing, Mr. Tardieu said he believes the Economics of Data will drive the economy of the future – something we have already seen in the B2C space with the GAFAs (Google, Apple, Facebook, Amazon). Europe may have lost out in the battle for pre-eminence in the B2C space but it still has the potential to lead in B2B, he said.

In his view, GAIA-X is the only project that is addressing all the necessary elements together from root-to-tip. From the alignment of technical standards and services for interoperability and portability (the roots) through the federated trust and sovereignty services (trunk) to the definition of ontologies, APIs and technology standards for compliance (leaves). The aim is to deliver all this via open source and create ways to share and re-use services between members of GAIA-X.

As Mr. Tardieu concluded, GAIA-X is about creating, “A European momentum towards a global digital business approach.”

Panel discussion

Following his presentation, the remaining time was allocated to a Q&A session. Atos host, Ivo Luijendijk began by asking Mr. Tardieu about the impact of GAIA-X on the financial services and insurance industry and then introduced questions from audience members.

Q1 – Is there anything specific you can tell us about GAIA-X financial services and insurance initiatives?

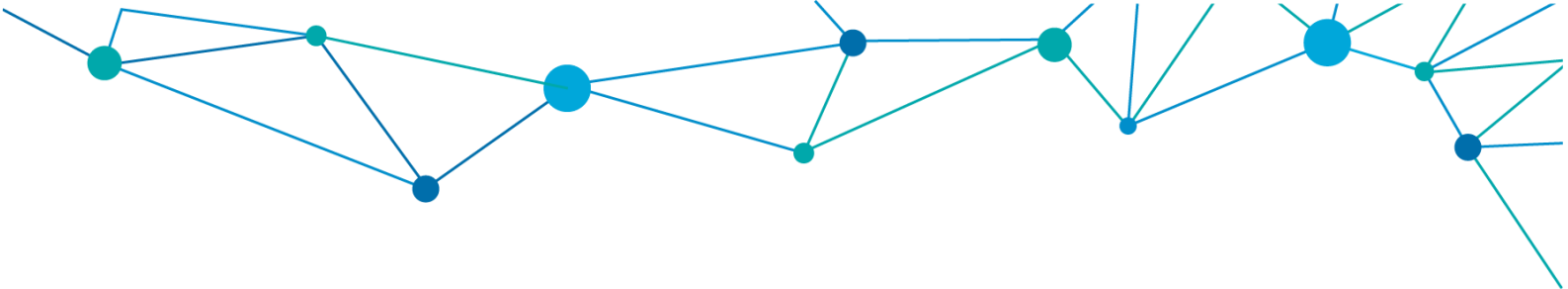
As I mentioned, this sector is ‘ahead of the pack’ because of PSD2. We wouldn’t have seen the huge development of FinTechs without it. But this is only half of the work. Data ontologies are key and you will soon see the priority use cases from the financial services and insurance sector start to emerge based on GAIA-X projects.

Q2 – Is this progress down to close collaboration within GAIA-X?

Banks have said that the cost of respecting regulations requires them to group together to do more with digital and to save costs. If individual banks went to the regulators with a plan to use digital to comply with regulations then there would be little chance the regulator would agree. But, by working together, they can increase the chance of success. And this isn’t just about sharing data, remember. It’s also about infrastructure too. Especially where regulations dictate compliance at a local level. You can’t just do it at the application level. This is something GAIA-X is working on.

Q3: This type of ‘moon-shot project’ has attracted a lot of interest but how are decisions made about what to focus on (for example, edge cloud)?

We know that Europe is late to cloud adoption. Even with 26% adoption, more than 70% of cloud services are delivered by US or Chinese hyperscalers. Right now, we’re looking at a distribution of 80% central cloud services and 20% edge cloud services. However, in the near future, this will flip and edge cloud will be predominant. This represents an opportunity to ‘redistribute the cards’ so the situation is better for Europe. That’s one of the reasons for focusing on something like edge cloud. Another reason for this focus is that



edge cloud is very aligned with 5G and industrial applications. While we are late to the party with central cloud, we can definitely catch up or lead with edge cloud.

Q4: In many cases being part of such a big initiative is the reason to get involved but are there also monetization concepts that might attract industry participants to GAIA-X?

Of course, our concern is how do we create data spaces in which those involved will be able to further their own interests too. We also think about how those who put the most effort in from the start don't lose out to those who might join later when the hard work is done. We reject the idea of selling data. It is an old-fashioned way of thinking.

In a recent webinar, we explored the idea of 'Tickenomics'. One example would be to suppose you are in a place with no transportation system. You are selling tickets (or lots) to travelers, to towns and to whole regions. At some point, you will have enough money to create the transportation system. And that is when the tickets become valuable. It might be slow getting started but as soon as everything is in place, it takes off quickly. So we are looking at ways we might introduce 'tickets' without the possibility of these leading to monopolies. However, first we will aim to deliver what we said we would.

Q5: GAIA-X is a private initiative and there are other initiatives (for instance, the EU Alliance for Industrial Data and Cloud) – how does Gaia-X link with these?

While GAIA-X is looking at things holistically, the EU project is looking at next generation infrastructure only. We are encouraging collaboration between cloud service providers and the users. This makes it different and gives us more capabilities to embrace industry problems and accelerate successes. The EU project is more of a siloed approach, without projects being tied to an umbrella mission. Ours may seem gigantic but we don't think that the big issues we are trying to tackle can be 'sliced' into smaller parts. In financial services and insurance, this is especially true at a time when cloud adoption needs to accelerate and there is so much change within the industry.

Q6: When will we see the first GAIA-X services on the market?

Here it is important to 'follow the money'. European governments have been handed back money to pursue their own spending in this area. The key for researchers and companies involved in GAIA-X is to understand this and find out where the money is available. Mario Draghi, the new Prime Minister of Italy, recently said that his country had been handed €60 billion but the country does not have a plan for how to use it. If your project fits within the GAIA-X initiative, then you can access these funds and create services for the sector.

About the Event

This session took place as part of Atos's 'Inclusive Digital Innovation in Financial Services & Insurance Event Week' (15th to the 18th March 2021). This is part of Atos and Radboud University's joint initiative FINDER (<https://thefinderproject.eu/>), funded by the European Commission.

The COVID-19 pandemic has been a catalyst for digital adoption across various aspects of our private and professional life. In the financial services and insurance industry, processes are increasingly tackled by leveraging data, machine-learning, and Fintechs/InsurTechs. Atos joined forces with practitioners, academics, and policy-makers to discuss how to yield benefits from these developments by re-positioning banks in the ecosystem, using Artificial Intelligence in insurance, mitigating risks in new venture collaborations and exploring the opportunities of the European GAIA-X project.