BLOCKCHAIN PLATFORM ECOSYSTEM: AN EMPIRICAL ANALYSIS ON THE ITALIAN BANKING SECTOR

Giacomo Vella[1], Luca Gastaldi[1]

[1]Politecnico di Milano, Italy

Giacomo.Vella@polimi.it

ABSTRACT

Digital platforms are increasingly relevant and continue to receive attention from scholars and practitioners. A key aspect that gained the interest of researchers is the role of the platform provider and how its dominant position can negatively influence the ecosystem of actors involved in the platform. However, a new technology that emerged in the last years could change the role of the platform provider: blockchain. We explore how blockchain could allow firms to collaborate by making joint investments in shared infrastructure without assigning market power to a platform operator and if this can reconfigure the role of the platform provider. The paper is based on a single, exploratory case study through which we have analyzed the Spunta Banca project, a blockchain platform promoted by the Italian banking association that is now live with the participation of almost the entire Italian banking system. Our work describes the process that brought to the creation of the blockchain platform, from prototypes to pilots and live deployment. We describe how the Spunta Banca decentralized platform is created discussing the role of ABI Lab as a platform leader.

Keywords*: blockchain, platforms, decentralization, governance*

1. INTRODUCTION

Digital platforms are the foundation of some of today's most successful businesses and are spreading in many industries (Trabucchi et al., 2019). Given the enormous effect of companies like Uber, Airbnb, Spotify, Facebook, Google, and Amazon, the extent of this phenomenon is easy to comprehend. Digital platforms are digital systems that promote commercial transactions and social activities by facilitating communications, interactions, and innovations (Cennamo, 2021; Gawer, 2014). Digital platforms have reinvented business models, challenged old industries, aided in the development of new products and services, and provided immense value for society during the last several decades (Cusumano et al., 2019; Evans and Schmalensee, 2016). Platform owners have amassed significant power and influence as digital platforms grow in dominance, and they frequently play critical roles in driving important stakeholders to produce value for their platform ecosystems (Boudreau, 2010; Kyprianou, 2018). Platform owners can occasionally direct digital platforms to pursue activities that profit them at the expense of other stakeholders if there are no effective checks and balances in place (Cohen, 2019; Srnicek, 2017). Stakeholders are growing increasingly concerned about platform owners' expanding dominance and the difficulties that arise as a result of power imbalances between platform owners and other stakeholders (Chen et al., 2020).

However, in recent years, a new technology, that challenges some of the underlying assumptions of this model, emerged: the blockchain. Blockchain enables the creation of a peer-to-peer network that can authenticate transactions, upon which applications and services may be built (Trabucchi et al., 2020). Blockchain allows firms to create platforms by making joint investments in shared infrastructure without assigning market power to a platform operator, increasing competition, lowering barriers to entry, and lowering privacy risks. (Catalini and Gans, 2016). Many experts consider blockchains to be one of the most disruptive technology discoveries in recent history, with the potential to profoundly alter the way collaborations are structured (Lumineau et al., 2021).

Blockchain can play a significant role in the decentralization of decision rights, as a blockchain-based platform is governed by rules collectively established and enforced by complementors, rather than by a central platform owner as in a traditional digital platform. This could imply a significant reduction in platform owners' power or render the idea of "platform owners" largely irrelevant (Chen et al., 2020; Lumineau et al., 2021).

The absence of intermediaries and a single platform owner in blockchain ecosystems, however, can also introduce new types of inefficiencies and governance challenges. (Catalini and Gans, 2016; Schmeiss et al., 2019). In fact, despite blockchain being usually presented as a technology able to transform digital services by removing the need for every kind of intermediaries, it is more likely to change the nature of intermediation by reducing the market power of intermediaries (Hawlitschek et al., 2018). Establishing decentralized governance in blockchain platforms is essential for their success but achieving the right level of collaboration between the participants is very challenging and could require the presence of a third party. Distributing governance power too widely can reduce the likelihood of collective action and the speed of decision-making (Hardin, 1968; Olson, 1974). Given these considerations, some authors argue that a moderate level of decentralization is more likely to accomplish incentive compatibility, improve informational efficiency, and assist in the achievement of desired governance outcomes (Chen et al., 2020). Despite the attention gathered by this topic and the increase in the appearance of business solutions based on blockchain platforms in practice, a clear definition of how they can be created and of how they modify the dominant position of the platform owner is still missing (Pereira et al., 2019; Schmeiss et al., 2019; Schneider et al., 2020). Some authors started addressing the problem of studying blockchain

platforms created by a single company, analyzing how the technology could mitigate the dominant position of the platform owner. However, research is still missing on blockchain platforms in which there is not a clear platform owner, but instead, the platform is created and managed by a group of different companies who can also be the users of the platform itself.

To address this scientific gap, we study a real case that emerged in the Italian banking sector: the Spunta Banca project. The project, promoted by ABI Lab, started addressing the streamlining of interbank reconciliation and led to the creation of one of the largest blockchain platform ecosystems worldwide. This work aims to understand how a decentralized platform based on blockchain could be realized and what is the role of the platform leader. The analysis of the case led to a clearer view of the creation of such a platform and the understanding of the practices followed by ABI Lab in its role. The article describes the process that brought to the creation of the platform, from prototypes to pilots and live deployment. By providing a description of a blockchain platform and how it has been created, this research contributes to the literature on collaboration and cooperation between organizations. From a practitioner's perspective, this research highlights the role of a platform orchestrator and the main decision taken in launching a platform that it does not own or control. These findings can help companies that are still struggling with the great effort of creating decentralized digital platforms with blockchain, together with the still unclear understanding of how they can create value.

The remainder of the paper is structured as follows: in the theoretical background, we introduce blockchain technology and its implication for platforms. Next, we present the study's methodology, followed by the results presentation and the discussion considering previous literature. In the last section, we offer some conclusions and discuss the limitations of the research.

2. THEORETICAL BACKGROUND

Blockchain has been introduced by Nakamoto (Nakamoto, 2008) as the underlying technology of Bitcoin. In October 2008, in the middle of the crisis of the U.S. financial system, Satoshi Nakamoto published his idea of a peer-to-peer electronic cash system "based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party." With Bitcoin, for the first time, value could be reliably transferred between two distant, untrusting parties without the need for an intermediary (Catalini and Gans, 2016; Zamani and Giaglis, 2018). Since then, many other cryptocurrencies started emerging, replicating some characteristics of Bitcoin, like the ledger structured as a chain of blocks, and adding other innovative features like the possibility of creating complex smart contracts in Ethereum (Kher et al., 2020). Since the end of 2015, however, blockchain began to gain traction also as a separate concept from cryptocurrencies. Blockchain started to be considered a disruptive technology and both academics and practitioners began to deepen and investigate it. Emblematic, in this sense, is the cover of The Economist of October 2015, which defined blockchain as a "trust machine", shifting the attention from cryptocurrencies to the underlying technology and its application to other use cases. The technology evolved and its applications went well beyond cryptocurrencies. Through the years, blockchain has been applied in many different sectors with an emphasis on the financial one. Nowadays blockchain not only is considered capable of generating impacts in many different use cases but is also increasingly defined by scholars as a foundational technology, which could bring transformations similar to the ones brought by TCP/IP protocol (Iansiti and Lakhani, 2017). Blockchain can reduce transaction costs, generate

distributed trust, and empower decentralized platforms (Chen and Bellavitis, 2020; F. Hawlitschek et al., 2018). As such, it could be an enabler of new business models that were previously unfeasible (Nowiński and Kozma, 2017), such as the ones brought by Distributed Autonomous Organizations (DAO) (Diallo et al., 2018). Of particular interest are decentralized business models and the ones that reduce the role of intermediaries (Catalini and Gans, 2016; Chen and Bellavitis, 2020). Blockchain can play a role also in the transformation of the business ecosystem potentially offering more distribution of power than in platform-based ones (Schneider et al., 2020). Blockchain is also an efficient tool to achieve and maintain decentralization of a platform, moving part of the problem from the organizational to the technical level (Jensen et al., 2019).

In the last years, consortia of companies started using blockchain to create platforms in which the technology provides a decentralized, immutable record of information that can also be used to develop decentralized applications. They have become popular among businesses looking to use blockchain technology's potential and extract real business value (Zavolokina et al., 2020). With the growth of blockchain technology, an increasing number of decentralized platforms have emerged, which are managed less by platform owners and more by community activities (Chen et al., 2020). Still, despite the progressive adoption of blockchain, institutions struggle to have a clear understanding of its benefits (Klarin, 2020; Weking et al., 2019). Several institutions, spurred only by media hype, started developing projects and experiments, without having fully understood how exactly blockchain could bring value. Efforts to apply blockchain to unsuitable use cases can result in little benefit and could negatively affect the perception of blockchain potential.

Thus, we aim to answer the following research question: how can digital platforms' governance be decentralized by the adoption of blockchain?

3. METHODOLOGY

Given the limited number of blockchain platforms built by companies that have reached a critical scale, an exploratory research approach is necessary. In particular, this exploratory research is based on a single case study design. The article takes an inductive approach to explore this emerging phenomenon (Gioia et al., 2013) to allow the development of a new theory based on the evidence presented in this case study.

3.1 *CASE SELECTION*

To address the research question and the knowledge gap on blockchain ecosystems, we study a real case that emerged in the Italian banking sector: the Spunta Banca project. The research is based on an exploratory case study. The case was selected because of several reasons. First, is one of the few blockchain platforms developed by companies in which the control of the platform is shared by the participants and not centralized in the hands of a platform provider. Second, from secondary sources, it appears as one of the few projects that reached an operative maturity level and generated attention and discussion both on a national and international level. Spunta Banca is a private permissioned DLT-based (for simplicity we use "blockchain" to refer to the technology used) project for interbank reconciliation. A consortium consisting of ABI Lab, SIA, providing the network infrastructure, NTT DATA, handling technical elements such as design and end-to-end support, and R3, providing Corda Platform together with 18 Italian banks/banking groups, participated in the development testing phases, delivering an industry-wide transformation. The project activities, coordinated by ABI Lab, involved a community of more than 150 representatives from the pilot banks and more than 80 people from the

development team (Stasi and Attanasio, 2021). The initiative began by addressing the streamlining of interbank reconciliation, which checks the correspondence of two separate banks' operations, such as transactions between their clients. The method enables the management of pending transactions as well as the reconciliation of flows and transactions that create entries in mutual accounts in Italy.

The construction of the infrastructure for Spunta Banca DLT led to the creation of a functional space to host other use cases and include different actors in its governance.

The Spunta Banca project is now live, and the relative ecosystem is composed of 91% of the Italian banks in terms of employees. and led to the creation of one of the largest blockchain platform ecosystems worldwide: the ABILabChain. Now ABILabChain intends to develop new applications, exploiting the platform that has been created.

3.2 DATA COLLECTION

To collect data, we considered multiple sources of evidence: the main source includes primary data, gathered through semi-structured interviews. To better prepare the interviews and gather additional information we relied also on secondary sources. We conducted semi-structured interviews with the main actors involved in the project: the Italian Banking Association (ABI), ABI Lab, NTT Data, SIA, and 5 Italian banks involved in the project since its inception. The interviews started from a set of predetermined questions to drive the discussion but given the exploratory approach, we let the informants go beyond predefined questions.

Stakeholder	Role	Respondent
ABI Lab	Italian Banking Association Innovation Lab	- Managing director
ABI	Italian Banking Association	- Head of Innovation
NTT Data	Technology provider and system integrator	- Head of Blockchain Service Line
SIA	DLT provider (SIA Chain)	- Head of Connectivity Services - Product manager
Bank 1	Founding member	- Innovation Manager & Head of Blockchain
Bank 2	Founding member	- Senior Demand Manager - Innovation, Payment & Global Transaction Banking
Bank 3	Founding member	- Head of Process Innovation
Bank 4[1]	Founding member	- Head of Fintech Ecosystem Management and Monitoring - Senior Innovation Manager
Bank 5[1]	Founding member	- Project Manager - Head of Payments Core Engine

3.3 DATA ANALYSIS

The interviews were recorded, transcribed, and will be analyzed by adopting an inductive approach, also due to the exploratory nature of the study. The text is coded by using in vivo code and building an inductive coding tree. During the coding, we labeled the essential elements and data and then we grouped homogeneous codes into categories, to synthesize the different variables that emerged. Despite the inductive approach, we define

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[1] The interview was conducted only in an unstructured mode and therefore not included in the results

more abstract concepts to contribute to the theory by also using the extant literature on digital platforms.

4. RESULTS

The project that led to the creation of the ABILabChain platform originates from the activities of ABI Lab, the Research and Innovation Centre of ABI (the Italian banking association).

ABI Lab started researching Blockchain and DLT in 2017, to analyze its characteristics, its potential applications, and the use cases that could benefit ABI's members. Then, to better understand the technology, the research moved on to a more experimental phase.

The project that finally emerged from the research activities of ABI Lab had the objective of creating a DLT platform that could be used by Italian banks as a mean to streamline processes and increase dialogue and interconnection among all the participants of the ecosystem. Each bank would have to participate in the platform with a node being able to promote use cases and benefit from the advantages offered by DLT.

The Italian banking sector is not new to collaborative projects, but what makes ABILabChain distinctive is the pre-competitive approach and the aim to involve the entire Italian banking sector.

> *Banks have always conceived their information systems, not in a unique form. The subject of consortia is an absolutely banking concept [...] Historically, we are used to working together.* (Bank 1).

ABI was used to orchestrate collaborative projects in the Italian banking industry. Hence, given that the project emerged from ABI Lab research activities and that ABI already had an established role as orchestrator of collaborative projects, it hadn't been necessary to create a new entity.

> *"A trick that is done in other contexts is to say "I create the WeTrade consortium": everyone gives resources to it and that is considered the super partes body. In this case, however, the consortium was already there: ABI Lab. It was ready so why to create another one!"* (ABI Lab).

Since the beginning of the project, ABI Lab had a pivotal role, not as a single decision-maker but more as an aggregator of the interests of the banks involved. After having assessed the feasibility of the project it was necessary to launch a call to find a technology provider that could help in the creation of the DLT platform. To do so, ABI Lab appointed a committee composed of one representative for each of the 18 banking groups involved at that stage. The decision to appoint a committee lengthened the time required for the tender but was essential to reaffirm the super partes role of ABI Lab and the ecosystem nature of the project.

> *"I still remember it; we were in the suburbs of Milan under an underpass when Romano told me: «We have to build a good tender». I was desperate: «But how? so we lose two months! It's not possible, we have to run!». But the fact that we made such a critical step so robustly was really a great strength and, in my opinion, we chose very well".* (ABI Lab).

After having selected the technology provider, the project moved on to a more operative phase. The technical requirements of the platform had to be defined and the needs of all the 18 banks had to be considered.

Banks have been engaged by ABI Lab to define the desired User Experience and the Use Case started to be developed. In December 2017, ABI Lab and NTT Data interviewed all the fourteen banks to collect their prerequisites and understand how they would have implemented the new solution.

> *"The initiative was of ABI Lab and we have done at least three or four meetings in the head office (at the time they could still be done) and we put on the table all of our operational process as well as indications according to us very important that they could not be excluded from the application that was being built. "* (Bank3).

> *"For the first part we were given 15 days to make a first study of the use case, so to understand well how each bank had implemented the Spunta. We toured all over Italy, we got to know all the offices of the Italian banks ... So we first had a meeting with them, gathering the requirements, designing the solution and a thousand meetings in between. When you have 14 banks at the table, each with its own systems because Spunta already existed before and therefore they had each already implemented their own system, it was not at all trivial to make a collection of the requirements. You went from old ones, in which there is the cursor and you move only with the keyboard, all black with green letters, the one just like the Matrix, [...] to others in which they said to you "We just changed this, we just bought it!". These are the nice things about working in distributed environments."* (NTT Data).

This project phase was crucial to design Spunta Banca to make the incumbent integration process as smooth as possible. In this phase, the role of ABI Lab as a pre-competitive player was key in making emerge and recording every need of the banks.

> *"The maieutic art, the ability to be told by the banks what they want, to be told even stomach ache ... we made many decisions by talking to the banks one by one and telling them "tell me the truth: what is it that you are not swallowing, what doesn't convince you? Let's try to understand it and manage it".* (ABI Lab)

> *"We made sure that all the specificities we had encountered in recent years were highlighted on this aspect. ABI Lab was very effective in making all our indications their own."* (Bank3).

The project was not only about adopting a common technical infrastructure. The DLT platform had to meet the requirements of all banks and had to be designed from scratch to implement the same rule for each participant. This added many issues that are not strictly related to software and hardware integration. For this reason, although the 18 banks were already customers of NTT Data, ABI has always been involved in project management and communication with banks.

> *"Why? Because it was one of the strengths of the project and it is one of the reasons, in my opinion, why so many projects fail and that is that, normally, technology companies do not have that management capacity or political sensitivity of escalation. That is, the strength of ABI is that, if a bank said "but I have the new software", ABI would come and say "Yes, but also the other 13 banks! We with the*

other 13 banks want to innovate and therefore you too must innovate". If that one complained, then ABI climbed to the bank's business chief and if that complained then the ABI chief went to the bank's chief and then they all magically calmed down ..." (NTT Data)

"At the time, if there hadn't been this guide which in the end had the role of both giving an institutional value to the project but also an institution that took charge of guiding the project itself. ... at the time if it hadn't been there, in my opinion we would not have succeeded. The presence of ABI has had a greater influence than having a single technological infrastructure. In my opinion that helped but it was not a fundamental and necessary condition for the project to go through." (Bank 3)

The individual meetings served the need to understand the individual requirement of each bank. Then to effectively build a common infrastructure each bank would have to agree on the same DLT components. Hence, after the individual meetings, the final details of the infrastructure had to be collectively discussed and agreed upon. Several components that now characterize the new Spunta Banca application have been collectively decided and designed in this phase.

"We met all the banks to collect requirements. We collected everything, condensed, interpreted, informed, read, and then arrived at the monthly meeting with proposals. And so we said, "You asked for this. Proposal 1 or Proposal 2? You asked for this. Proposal 1 or 2?". And then we went to vote so the banks also had this moment of voting for every proposal we made." (NTT Data).

"When we started to go into the details of the applications we arrived at what was then an exceptional thing ... to vote for the individual features with the palettes! It was a - I must say - very special experience" (Bank 2)

In this phase, it was crucial the participation of all the banks involved. In each meeting, at least one delegate of each bank had to be present to bring the interest of its company. ABI's role was key also in securing the continuous participation of all the stakeholders in each meeting.

"Then a list was made at the beginning of the meetings to find out who was there and who wasn't there, for who wasn't there they then called to ask "Why are you not here?". In short, they have always had this power in ABI and there has always been a great participation of all." (NTT Data).

Collective gatherings reaffirmed once again the centrality of the role of Abi Lab. The discussion required the presence of a third independent party to mediate the different points of view brought to the table by the participants. The collective discussion brought up problems that could not have been addressed without the expertise and the influence of Abi Lab.

"I must say that ABI and ABI Lab's role in this circumstance was truly central. The need for mediation, in addition to a considerable capacity for analysis and knowledge of technicalities, was fundamental, especially in the initial stages." (Bank 2)

One of the main problems that had to be addressed was the definition of the legal agreements that were needed to regulate the participation of each bank. Among the different tables of discussion, the most problematic was the "legal table".

> *"Or if you think about another table, a legal table, that was some crazy stuff...I mean having the various lawyers, various attorneys getting into discussions about the clauses, certain features, and whatnot... I mean it gave me white hairs!"* (Bank 2)

> *"Virtually every bank that participated in the project brought its own lawyers in addition to us who were mainly in the world of innovation. [..] Here the maximum difficulty is in hearing the legal people speak to each other in a completely different language compared to ours and also with a capacity for meticulousness or chicanery in wanting to emphasize some aspects that then maybe are important".* (Bank 2)

> *"No, the problem has been the legal offices ... delirium but really a delirium! Because there have been moments of great friction...really great friction because there were people who wanted to be the protagonists in these rooms where there were 34 lawyers."* (Bank 1)

In the end, the legal table had a successful outcome. Every bank agreed on the same rules and the project was able to move toward the implementation phase. This table was the one that most demonstrated the importance of the role of ABI Lab.

> *"But there were times when it really took a strong and important negotiating ability and from that point of view ABI Lab was really.... played a really key role."* (Bank 2)

> *"So putting them together was a job and an important commitment. But as I said before, there was ABI Lab and then Silvia who then really with great patience managed to bring this table forward".* (Bank 2)

> *"The big problems were relational, institutional [not technical] [...] a whole series of attentions, of needle and thread in the management of relations. This is project management...in the end, this is called project management.".* (Bank 1)

> *"They [ABI Lab] made all the banks sign the same contract. I don't know if you have ever tried to sign an NDA with a bank or a company: they always change a comma because every bank or every company says "You know, but in my template, there is this, in mine, there is this" etc., so that contract which commits all banks is signed identically by all banks. It's a huge, huge job... because if each bank had asked for something different, it would have been a mess."* (NTT Data)

Having embraced the concept of shared ownership of the platform, it was easier for ABI Lab to make all the banks sign the same onboarding contract. Indeed, if on the one hand, ABI Lab was inviting members to provide their requests in terms of policy and contractual terms, on the other side it was putting effort into combining them to find a compromise that all the banks could agree to and respect.

"In my opinion, if there had not been this third party we probably would not have been in a position to do what we have done, especially since the Spunta is an industry project because in the end, it is not something for which if you like it and if it suits you adhere otherwise not..." (Bank 2)

In the ABILabChain project, the role of ABI Lab was multifaceted. ABI Lab was the actor in charge of organizing the connection between different stakeholders, leaving the decisional power to the future participants of the platform from the beginning. ABI Lab did not position itself as an intermediary aiming at extracting value from the interaction that takes place on the platform but played as the star point of the project for the benefit of its members. The role of ABI Lab was crucial in ensuring that all actors could define shared rules to build a decentralized platform

Proposition: *Building a decentralized platform doesn't have to be a completely decentralized process. Even if there is not a platform owner you could need a third-party, independent orchestrator.*

5. DISCUSSION

In this work, we analyze the process of the creation of a decentralized platform. Although decentralization is often touted as the guiding principle of blockchain-based platforms (Walch, 2019), we argue that going too far in terms of decentralization can become counterproductive and that instead progressive decentralization might be a better strategy. For the purpose of this work, we consider the setup of the platform as distinct from its functioning. Blockchain can be considered as a mean to achieve decentralization and have a platform without a platform owner. But this does not mean that blockchain or complete decentralization has to be present since the platform's inception. We argue that progressive decentralization could be effective in successfully obtaining a decentralized platform. Blockchain technology then is an effective instrument to maintain the enforcement of the agreed rules and achieve trust between the participants. However, the rules must be collaboratively decided and agreed upon by the participants of the platform. The creation of a decentralized platform needs the agreement of the participants on different topics: from the technical requirements to the legal contracts. Hence, the role of ABI Lab proved to be essential in leading participants to reach an agreement. Even through the mediation role played by ABI Lab, the agreement was difficult to reach, without it would have been impossible.

As already highlighted, Italian banks are not new to the concept of collaborative projects, which is typical of the banking and finance industry.
In initiatives like Spunta Banca, banks are keen to cooperate in the creation of a common platform as they recognize a baseline of common needs upon which it is useless to compete. These projects represent an opportunity to build consortiums and cooperative networks able to create standards and synergies for the benefit of the whole industry.
Spunta Banca, and consequently the ABILabChain, is conceived to create coopetition and synergy at the core level of the platform, leaving differentiation and competition at the distribution or front-end level.
Even in case of new initiatives that would arise and be developed in the future, ABILabChain will be always considered as a fair ground in which shared governance and coopetition are more profitable than competition.

ABI was used to orchestrate collaborative projects in the Italian banking industry. Hence, given the non-competitive nature of the project, ABI Lab (and ABI) was already an institution with an established role as orchestrator of collaborative projects, it hadn't been necessary to create a new entity.

Given the common interest of the banks and the habit of collaborative projects, the role of ABI Lab could have been only to provide a place for impartial discussion while staying out of the actual project management.

To create a platform truly shared by the entire Italian banking system, however, it was necessary to involve all the banks and reach an agreement on shared rules.

Considering these circumstances, the common will to collaborate is surely a necessary condition but not a sufficient one.

Achieving consensus in collaborative projects like Spunta Banca is particularly time and effort-consuming. As confessed several times by all the interviewed representatives, most of the time issues were related not to technical but relational, administrative, and institutional reasons. The most critical factor to examine is governance. Because distributed technology necessitates distributed governance, a precise delineation of roles is essential from the start of the process. The nodes are connected to many entities that share a common infrastructure, which is a delicate and complicated factor.

Since the beginning of the project, ABI Lab had to play a pivotal role in order to preserve the continuous building of the platform. ABI Lab, though, did not act as a single decision-maker but more as an aggregator of the interests of the banks involved.

To do so, ABI Lab involved since the beginning the 18 founder banks in every decision to reaffirm the super partes role of ABI Lab and the ecosystem nature of the project.

In the Spunta Banca project, the role of a platform leader remains as the actor in charge of organizing the connection between different stakeholders. ABI Lab always claimed the willingness to create a pre-competitive solution and put effort into making this principle embraced by all the stakeholders. ABI Lab organized the activities around the design and the set up of the platform leaving the decisional power to the future customers from the beginning. Board meetings were an occasion to gather all the stakeholders around a unique table and create a situation of discussion to find agreements about strategic decisions and practical implications. The role of ABI Lab was not only to lead banks in taking decisions on the building of the platform, but also to be able to solve strong disagreements that happened along the way.

Considering that now the platform is shared among 100 Italian banks, by initially involving only the 18 founder banks and by acting as a platform orchestrator, ABI Lab kept a lower level of decentralization in the first phases of the project.

The initial centralization of the governance of the platform, however, was never seen as a means to favor a subset of actors. ABI Lab used the initial phase to efficiently work on the setup of the platform but always seeing as the final goal the involvement of the entire Italian banking sector. ABI Lab made all the 18 founding banks sign the same onboarding contract. Indeed, if on the one hand, ABI Lab was inviting members to provide their requests in terms of policy and contractual terms, on the other side it was putting effort into combining them to find a compromise that all the banks could agree to and respect. The fact that the contract is identical for all the members reinforces the idea that there is no difference among them in terms of vote or bargaining power. The same contract was then used also for the onboarding of the other non-founding banks. All the banks now adhere to the same rules and are supposed to actively participate in the periodical meeting to provide their feedback and collaborate on new developments.

With the Spunta Banca project, ABI Lab has now effectively allowed the entire Italian banking sector to migrate to a shared digital platform, with the potential to set up further business projects.

6. CONCLUSIONS

This study analyzed the case of a decentralized digital platform built on blockchain technology in which the platform leader is an "orchestrator" more than a "provider" and helps to reach decentralized governance. From an academic perspective, this research contributes to the literature on platforms and blockchain applications. From a practitioner's perspective, this research highlights the role of a platform orchestrator and the main decision taken in launching a platform that it does not own or control. This study has several limitations, which open avenues for further research. The main limitation is related to the generalizability of the achieved results, even though it is consistent with the exploratory nature of our work. The focus on only one case of platform development in a specific context, like the Italian banking industry, could lead to difficulties in the generalization in other contexts. Further developments could be accomplished to fill this gap. It would be useful to explore other cases of platforms structured in a similar method in another context.

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