






Blockchain Adoption Decision-Making Process in Business: An Empirical Study

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Abstract. Recent research has highlighted gaps between blockchain technology and its adoption decision-making process on the corporate level. This paper aims to resolve these gaps, exploring the issues and processes that need to be considered before utilizing blockchain-based solutions in various domains. We collected data using 10 semi-structured interviews among blockchain professionals that have already adopted blockchain in their companies or were involved in the adoption decision-making process. We analyzed the data using the Gioia approach and identified five dimensions that must be considered before blockchain utilization, namely infrastructure, business models, operational processes, management and environmental impact. Additionally, based on the collected data we provide questions to ask before considering blockchain and a final framework that includes 18 sub-themes of the identified dimensions. Our study extends prior frameworks that might help organizations utilize blockchain according to their business strategy. Based on our findings, we also put forward directions for future studies.

Keywords: Blockchain · decision-making framework · corporate domain

1 Introduction

Blockchain has recently been expanding from a niche technology to a viable solution for different domains [1]. For example, recent studies show the potential of blockchain in the supply chain [2], banking or financial industries [3], unified identification and verification systems [4], medical records keeping and pharmaceutical tracking [5], asset management [6], etc. Blockchain utilization in various business cases has far-reaching effects including transparent transactions, disintermediation in crucial processes and their automation, increased efficiency and confidence among stakeholders in an organizational ecosystem, etc. [7]. As organizations are focusing on operational efficiency and effectiveness improvement, adopting and using blockchain may address problems with inner processes and information exchange in traditional corporate management and external collaborations [7]. Nevertheless, even though the technology is gaining momentum and attracting more companies, there is still limited empirical research on developing a decision-making process framework that organizations can use when deciding on whether to adopt blockchain. In the existing literature, we identified the following

research gaps. First, no unified framework considers the feasibility of using blockchain as a relevant solution for a particular use case. Second, the prior studies mostly cover factors that impact blockchain adoption or discuss various blockchain types and how to choose the right one (e.g., [8, 9]) without focusing on the decision-making process. Third, only a few studies covered blockchain adoption frameworks and provide constraints that influence the intention to utilize the technology [10, 11]. Hence, existing research is focused on various factors that lead to blockchain adoption in various domains, the applicability of various blockchain types and models on how the technology can benefit businesses (e.g., [12–16]) and there is still no clear understanding of the decision-making process from the practitioners perspective. To address these gaps, we investigate adoption factors, challenges, and decision-making steps involved in blockchain implementation and determine the following two research questions:

RQ1. What is the decision-making process in organizations in relation to blockchain?

RQ2. What are the most important dimensions to consider during the process of blockchain adoption and implementation in organizations?

To answer the research questions, we conducted a qualitative study with 10 semi-structured interviews with blockchain professionals. Compared to the current literature, this study contributes to the existing knowledge in several ways. First, while prior research focused mainly on three dimensions (e.g., technology, organization and environment), we included business models and management dimensions as well to broaden aspects that need to be considered before blockchain adoption on the corporate level. Second, we empirically tested existing findings. For example, we support that legal regulations, stakeholders' readiness, financial resources and infrastructure readiness [17, 18] are among the main dimensions to consider before blockchain adoption. Finally, this paper expands existing knowledge and proposes a new model of the decision-making process related to blockchain adoption.

The remaining paper is structured as follows. Section 2 covers the literature background related to blockchain adoption constants and adoption models. In Sect. 3 we explain the methodology used in the study and explain data analysis techniques. Results are described in Sect. 4 alongside the adoption process framework and potential questions to ask before blockchain utilization. Finally, in Sect. 5 we conclude the findings.

2 Literature Background

During the literature review, we have identified two major themes of research studies. The first theme identified various factors that lead to blockchain adoption decisions [9, 11, 17–20]. The second theme focused on the suitability of blockchain and the appropriate type of blockchain needed for a particular use case [8, 15]. Despite these important contributions, practitioners lack a framework that can guide them in the decision-making process when they consider adopting and implementing blockchain in their organizations. At the same time, the prior literature covers narrow solutions and provides frameworks for a single domain. For example, Sternberg et al. [35] and Sunmola et al. [11] cover blockchain adoption in the supply chain, focus on the challenges associated with the technology and provide essential constraints to consider before and during blockchain implementation. Azogu et al. [36] focus on the healthcare domain, Farahmand and Farahmand [20] give

insights from the energy sector and Roth et al. [21] cover the public sector. Despite this valuable contribution, only a few studies focus on blockchain adoption in a cross-sector context. For example, Chhina et al. [10] focus on the stages and actors involved in the adoption process, while Gökalp et al. [17], Dehghani et al. [18] and Toufaily et al. [9] provide a detailed empirical investigation on factors that have an affect blockchain adoption.

Furthermore, authors in the prior literature claim that blockchain adoption research is linked with obstacles, potential barriers and benefits for various domains [22–24]. Any doubts are linked with blockchain-related challenges and the key ones identified in the literature include technical risks (e.g. scalability), infrastructure requirements, regulatory uncertainty, mistrust of early decision-makers, and lack of necessary competencies. Some authors remain sceptical about blockchain adoption and are urged to consider alternative solutions rather than follow hype trends (e.g., [25]). For example, Radanović and Likić [26] point out that blockchain integration in healthcare could lead to higher expenses, at least initially. This is due the cost of implementation can offset any savings achieved by reducing bureaucracy and increasing efficiency.

From a business models perspective blockchain technology offers new opportunities for decentralised communication and trust, potentially impacting corporate business models [27]. Scholars provide a number of research for blockchain integration models focused on the implementation of new and existing systems and proof-of-concept demonstrations (e.g. [28, 29]). Blockchain technology adoption can improve the profitability of various organizations, and improve the productivity and efficiency of businesses, prompting them to rethink their current business strategies [30, 31]. Nevertheless, because the technology is still in its early stages and research into the implications of various types of blockchain (public, private, and consortium) is limited, its relevance in business model innovation requires further research. Hence, before making a major investment in blockchain infrastructure, companies must carefully consider the potential benefits and dangers since the utilization of blockchain technology requires significant investment and skilled labour [30]. To conclude, the phenomenon of blockchain adoption requires multilevel, empirically tested research involving various interdependent parties to expand the existing knowledge.

3 Research Method

3.1 Data Collection

In this study, the data collection is divided into two steps. In the first step, we collected data through online semi-structured interviews with 10 participants from 10 different companies (see Table 1). The participants for the interviews were selected based on snowball sampling. When selecting the participants for the interviews, we ensured that they were willing to take part in the study voluntarily and had experience in implementing blockchain in their organizations. During interviews, we focused on three themes: the background of the organization, competitive advantages related to blockchain, and factors influencing blockchain adoption in the particular case. The interviews were recorded and transcribed for further analysis. In addition, notes were taken during the interviews. After analyzing the data, we identified a list of dimensions and sub-dimensions that the

organizations considered when implementing blockchain. In step 2, we reached out to 5 interviewees who agreed for a second round of one-to-one interviews where we showed them the identified dimensions and requested them to prioritize the dimensions based on their importance. We have also asked them to justify their prioritization. These interview sessions were also recorded and transcribed. In addition, notes were taken by the researcher. After analyzing the collected data, we developed the final decision-making framework.

Table 1. Interview participants

Participants	Country	Position	Industry	Interview duration	Involved in the second round
Expert 1	Estonia	CEO	Consultancy	1:16	Yes
Expert 2	Kazakhstan/ Turkey	Consultant	Consultancy	0:54	Yes
Expert 3	Finland	Principal technology strategist	Banking	1:03	No
Expert 4	Belgium	CEO/co-founder	Supply chain	0:45	No
Expert 5	UAE	Senior Consultant	Consultancy	0:53	Yes
Expert 6	Switzerland	Co-founder	Supply chain	0:28	No
Expert 7	Finland	CEO	Information Technology and Services	1:17	Yes
Expert 8	USA	Senior tech specialist	Government official	1:42	Yes
Expert 9	Australia	CEO	Information Technology and Services	0:33	Yes
Expert 10	Netherlands	Co-Founder	Supply chain	0:41	No

3.2 Data Analysis

To analyze the collected data and classify issues, we used the Gioia method [32] which allows us to optimize the analysis process and extract all insights from interviews. The data analysis contained three main stages. First, we repeatedly looked over the collected empirical data and assigned codes to describe various content parts. Second, to create more abstract notions also referred to as second-order concepts, we classified the linked codes. Third, we combined the second-order ideas into four broader dimensions: infrastructure, business models, operational processes, management and environmental impact. Figure 1 shows the dimensions together with the related sub-dimensions.

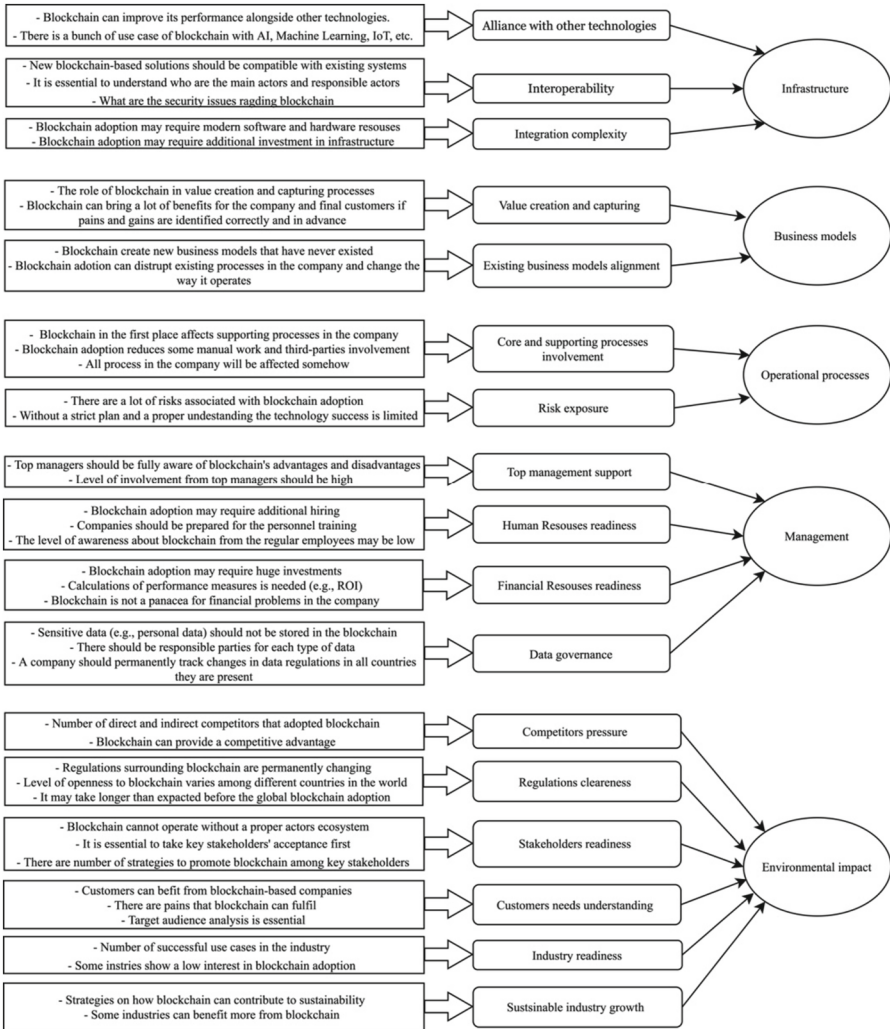


Fig. 1. Data Analysis

4 Results

From our interviews, we understood that every case is unique and the decision-making process significantly varies. Nevertheless, it is possible to identify and summarize the most important steps to consider before blockchain adoption. We also observed that organizations are most interested in permissioned solutions since there are too many insecurities and uncertainties around permissionless ones. Based on our empirical data, we identified 5 main dimensions that experts consider when making adoption decisions regarding blockchain. In Table 2 we summarize the identified dimensions with a

short explanation and based on the collected data provide 27 potential questions companies should ask themselves before blockchain implementation. Next, we explain these dimensions in more detail.

4.1 Infrastructure

The resources and tools that enable blockchain-based systems to work effectively are blockchain infrastructure [12]. Blockchain is more than just computer code since it combines both hardware and software. Our interviewees mentioned that their organizations must pay upfront investments in terms of infrastructure and training before implementing blockchain. They have also mentioned the interoperability issues regarding blockchain and existing information systems that are used in organizations. They described that these are often heavy investments, which may result in looking for alternative solutions. For example, Expert 5 from the financial industry mentioned,

“After 2 years of trying, we decided to choose an alternative solution... blockchain requires additional investments in new infrastructure for interfaces, hardware, people... it is not so easy to link various systems together and now we are not looking for blockchain anymore”.

Our interviewees also noted the complexities of changing existing infrastructure in comparison to establishing new infrastructure for newly established companies. For example, Expert 8 from the consultancy agency added that

“When a startup is established based on blockchain ideas the infrastructure is created for blockchain. For existing businesses, the situation is way complex and requires a detailed technical architecture analysis”.

Our interviewees also discussed the fact that blockchain-based infrastructure development requires different skills. They also mentioned that if the infrastructure contains both blockchain and other solutions, skills from different areas would be necessary. Furthermore, the experts need to understand the interoperability issues among different systems. In order to highlight these issues, Expert 4 mentioned,

“It is important to note that existing knowledge of software project management is not sufficient for implementing blockchain... So we need to be sure that if there are multiple solutions in place, it will be possible to make them communicate with each other so the aspect of interoperability is also a challenge”.

In line with the above, experts also mentioned that it is essential to consider what other technologies will be used (e.g. IoT or AI) when developing infrastructure for blockchain. Finally, a few experts argued that businesses do not want to use a blockchain as it would restrict their options for future external collaboration. They think the resources or infrastructure available for blockchain development are not enough, which is a potential obstacle or constraint to implementation.

Taken together, the frequent themes surrounding infrastructure that were highlighted during the interviews were interoperability, infrastructure readiness, and alliance with

other technologies (IoT, AI). Consequently, we have included these sub-themes in the proposed decision-making framework.

4.2 Management

“When you start thinking about blockchain the question should be not about blockchain”, Expert 10 claims. Several experts mentioned management and its support when making a decision about blockchain adoption. From the interviews we found that senior managers are more concerned with technical performance, perceived benefits and profitability and this finding is supported by the literature (e.g. [33]).

Our interviewees argued about strict requirements for additional education before adopting blockchain not only for regular employees but for business owners in particular. Experts from consulting agencies claimed that on the market, there is a huge potential for blockchain but without proper knowledge about the technology and surrounding environment, a lot of worthy projects fail. At the same time, 2 experts draw attention to the financial side of blockchain adoption and take into consideration all of the potential costs associated with the technology. For example, Expert 2 mentioned,

“For me, it is clear that there is a huge gap in education and awareness about blockchain itself... we can create a fully operational blockchain-based solution but they fail because of knowledge absence and because company owners decided just to follow hype... it is about people and may take months and a great deal of money to create a governance system for people”.

Hence, our interviewees are certain that to make the technology fully operational it is essential to have skilled employees, arrange additional training for the current staff member and open additional hiring if needed. To support this statement, Expert 4 mentioned that

“It is really hard to find the right balance between making people understand the benefits of blockchain, without necessity entering too many technical details that were not understandable by them”.

Additionally, most experts mentioned data governance must be considered before blockchain adoption since most companies view the disadvantage of public blockchains because of their excessive transparency. Our interviewees view data privacy, in terms of anonymity and transparency, as a contributing factor to the permissioned blockchain adoption focusing on the benefits and the controlled nature of such solutions. For example, Expert 8 mentioned,

“There is no pressure from governments in our case: the data access is limited, all parties involved are trustworthy, the ecosystem is private, sensitive data is stored on the cloud services ... but transparency and data immutability bring the whole industry (supply chain) to the next stage... there is strict control on who adds data, what type of data and who verifies it”.

Overall, the themes surrounding the management dimension include top management support, human resources readiness, financial resources readiness and data governance.

4.3 Business Models

In the business model domains we identified 2 themes and included them in the final framework: value creation and capture, and the existing company's business model alignment. Those themes were identified according to the expert's vision of blockchain adoption in organisations that can lead to a unique digital infrastructure that facilitates innovation in business models. Our interviewees mentioned that blockchain has the potential to transform companies' operations, offering new opportunities for growth, efficiency and sustainability in various spheres. For example, Expert 5's opinion on this matter is:

"Companies should consider adopting a new strategy and a completely different approach doing business... it is mostly about new business opportunities and value networks".

Because our experts are more familiar with the kind of innovation that blockchain enables, they are looking for opportunities related to start-up creation. Additionally, they focused not only on the company level solution but also provided some examples of value that individuals can generate (e.g., an open market for everyone to start a business around blockchain, low competition among blockchain professionals, new work opportunities, etc.). For example, Expert 9 added that

"Proportionally, more money can be made in the blockchain technology market... The value is vivid for both companies and individuals",

Additionally, our interviewees mentioned that among the main reasons why companies fail with blockchain implementation are the desire for independence and autonomy, regulation of industry and individuals, dependence on demand, duplication of projects, inability to control the project, desire to work with only one communication channel and new money-making tools. Nevertheless, Expert 2 added that

"Blockchain is transforming the entire digital culture and business models, it is unparalleled, and we should expect this technology to become fundamental in the world in the very near future. Activity is higher than you think".

Overall, almost all experts are confident that the technology is trying to solve a problem that had not been solved by previous technologies and there are so few successful global cases that support the new way of doing business. But the main problem is explained by Expert 1,

"People who are very, very enthusiastic about the technology may fail...the point is that they don't look at the business and do not know how to look at the market... you would need to have an interdisciplinary approach...It's really important to understand the business you're trying to serve".

4.4 Operational Processes

The operational process associated with blockchain adoption varies depending on the specific domain or sphere. All processes in a company can be classified as core and supporting [34]. The main difference between them is that the core ones are important for the fundamental value creation of the organisation, while the latter is important to the smooth running of the organisation as a whole. Our experts added that core operational processes directly impact the company's bottom line, while ancillary operational processes contribute indirectly to the organisation's success by providing the necessary infrastructure and assistance. Additionally, experts highlighted the importance of a detailed analysis of all processes in the company before considering blockchain adoption and understanding how blockchain can improve them in the short and long term. For instance, Expert 6 claimed,

“Understanding the core processes of the organization that will be affected by blockchain is among important steps to take... while the technology will change the supporting processes and improve the way the company operates”.

Additionally, our interviewees mentioned that there are scenarios for effective blockchain implementation in almost all areas of business but associated with a number of risks. We combined answers from experts 2, 5, 7 and 9 and linked them with 3 types of risks. 1. Systemic risks that include market risks, currency risks (standard currencies volatility), and random risks (unexpected economic crises or changes in the industry). 2. Non-systemic risks: user errors and lack of knowledge, fraud at the smart contract level, technical problems with protocols, poor management of companies leading to inability to meet the obligations, and high project leverage. 3. Regulatory risk: adoption of a law, the introduction of a package of by laws, formation of a broad judicial practice. Expert 2 added the following:

“The winners are not those with superficial knowledge of the field, but those who fundamentally develop in all areas, monitor the market and continually update their skills”.

Collectively, the themes included in the final framework surrounding operational processes include core and supporting process involvement and risk exposure.

4.5 Environmental Impact

Based on the conducted interviews, we identified 6 themes that can be taken into consideration in the analysis of the environmental impact: competitors' pressure, customer needs understanding, regulations clearness, stakeholders' readiness, industry readiness and sustainable industry growth. Our interviewees mentioned that the environmental impact of blockchain adoption on the corporate level has become a hot topic in recent years and competitors and consumers analysis is essential because it provides insights about market needs and preferences. Experts mentioned that with this knowledge a business can develop strategies to help it stand out from its competitors, attract and retain consumers, and succeed in the long term. In this case, Expert 6 mentioned:

“We are not the only one developing solution in that field... One of the problems with the blockchain is that it has a level of complexity, which is much bigger than others working on other technologies. So it’s very important that when you are ready to launch it, it already includes all the elements that you and all involved members need”.

In the case of laws, the blockchain itself is a new technology and there is still no clear vision from central authorities on how to regulate the industry and experts claim that the speed of blockchain adoption depends on clear regulations. Nevertheless, we found that experts are not positive about the current state of regulations and are waiting for debates surrounding blockchain. Our interviewees mentioned that regulation has to be adequate and understandable not only for companies but also for individuals. For example, Expert 9 mentioned:

“I do not share the optimism that there will be anything adequate in the next 2–3 years. We are going down the same road as 25 years ago when regulating the Internet”.

At the same time, Expert 1 added: *“The legal body is not ready. Because as I said, the lowest or assuming is paradigm central planning and central control. Decentralization means the complete change in the current structure”.*

Our interviewees also discussed the challenges surrounding readiness of the key stakeholders. Some experts were positive about the openness of their partners to transform business using blockchain, while others faced resistance and had to create a new promotion strategy among stakeholders. For instance, Expert 4 mentioned:

“At least for us we knew what blockchain was, and because one of the main problems was that everybody was associating blockchain with cryptocurrency. So it was not easy in the beginning to explain to them why we’re using blockchain, it was something new for them”.

Finally, experts slightly covered industry readiness and sustainability trends. In most cases, they agreed there is still a limited number of success stories around blockchain and all industries are not ready for blockchain adoption. While some businesses have embraced blockchain as a revolutionary technology, others are still hesitant to explore its advantages and disadvantages. Blockchain technology is most commonly adopted in sectors that rely heavily on transactions and data management, such as banking, supply chain management and healthcare. Nevertheless, our experts are confident that to achieve sustainable industry growth businesses must overcome regulatory obstacles including data privacy and security before they can fully utilize blockchain.

Table 2. Summary of decision-making factors and potential questions to ask

Definition	Description	Potential questions
Infrastructure for blockchain		
Interoperability	Blockchains' capacity to connect and interact with other systems in a coordinated manner	What requirements must a blockchain-based solution meet to operate successfully with existing systems?
Integration complexity	A set of all required resources to smoothly integrate blockchain	Do you consider all hardware and software resources? What are the maintenance and system updates requirements?
Alliance with other technologies	Blockchain can be considered alongside other technologies (e.g., AI). A clear understanding of what technologies will be connected with blockchain and why	How many technologies will be connected with blockchain? What infrastructure is needed?
Business models		
Value creation	What value can the company create for the final customer utilizing blockchain	How does your company create value and what is the role of blockchain in the process?
Value capturing	What value can the company generate and turn into profit utilizing blockchain	What benefits will you gain from blockchain adoption?
Existing business models' alignment	The way blockchain affects existing models in the company;	Does blockchain disrupt the current business models of your company or are slight adjustments needed?
Operational processes		
Core and supporting processes involvement	The number of core and supporting processes that will be affected by blockchain adoption	To what extent the blockchain adoption will influence the core processes? To what extent the blockchain adoption will influence the supporting processes?
Risk exposure	Evaluation of all potential risks related to blockchain adoption	How are you going to measure blockchain-related risks?
Management		

(continued)

Table 2. (continued)

Definition	Description	Potential questions
Top management support	The level of involvement and awareness about blockchain	Do top managers understand the whole nature of blockchain technology and the challenges associated?
Human resources readiness	Knowledge level about blockchain among employees, required training time, the relevance of additional hiring, etc	Do you have skilled employees that are aware of blockchain? Do you need additional training for personnel and how long will it take?
Financial resources readiness	The efficient number of financial resources to cover the whole blockchain adoption process	Do you have enough financial resources to adopt the technology? What is an expected ROI and how long will it take?
Data governance	Set of standards and requirements on how data is stored, processed and gathered; responsible actors	Is there a requirement to store a large amount of data? What governance strategies are the most appropriate for the case?
Environmental impact		
Competitors pressure	Assessment of competitors' readiness and openness to digital transformation trends; ability to provide unique solutions using emerging technologies	What are your direct and indirect competitors? What competitive strategies were crucial to blockchain commercial success in your sphere?
Regulations clearness	Set of rules to avoid legal and regulatory fragmentation during blockchain adoption and utilisation	What is the regulatory environment related to blockchain in the industry? What are the strategies to ensure that a company is able to respond to changes quickly after blockchain adoption?
Stakeholders readiness	The number of participants in the network for smooth operation; support from the key stakeholders	What are your strategies to promote the acceptance of blockchain among the main stakeholders?

(continued)

Table 2. (continued)

Definition	Description	Potential questions
Customers needs understanding	Ability to create a clear vision of user persona including current customers and new potential markets	How do you review your product development efforts related to blockchain to ensure be in line with what the customers want?
Sustainable industry growth	Set of activities on how blockchain can ensure sustainability in various domains	How can you ensure that you can contribute to sustainable growth in the industry?
Industry readiness	Set of frameworks, successful use cases and research in the particular domain	Are there any success stories and use cases of blockchain adoption in your industry?

4.6 Decision-Making Framework

From our analysis, we developed a process model for decision-making and important dimensions companies must consider before blockchain adoption (Fig. 2). To validate the model, five experts agreed to prioritize dimensions according to their experience and vision. The experts prioritized the dimensions into three levels. Experts assigned priority by considering a detailed analysis of the possible technology adoption effects, ensuring that both its advantages and disadvantages are considered. Priority levels also make sure that the technology is aligned with the organisation’s goals and values. By determining which factors are most important, decision-makers can make more strategic decisions about whether a particular technology is right for their company.

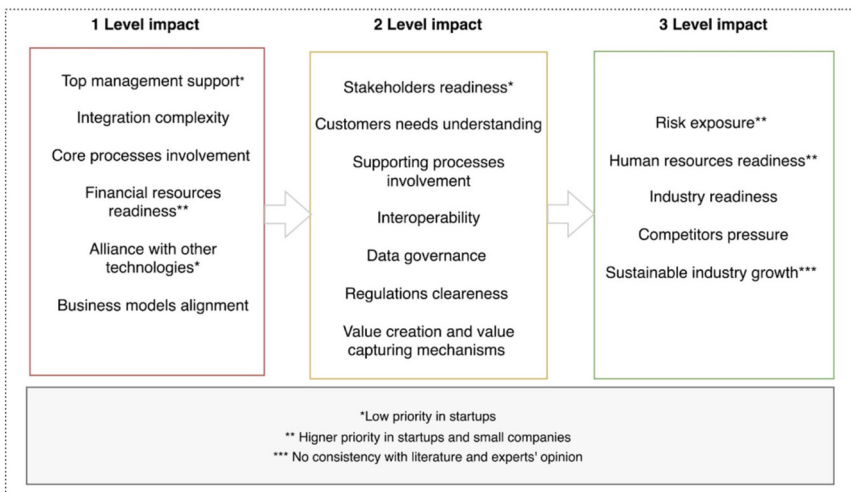


Fig. 2. Blockchain adoption decision-making framework

We found the importance of various factors depending on the size of the company, the experts' background and their position. For example, in startups that are created around blockchain, experts give less priority to stakeholders' readiness and top management support, since the decisions to adopt blockchain are made by business owners and "*stakeholders are never ready*", according to Expert 1. At the same time, experts mentioned that for small companies and startups, it is highly important to control and understand all risks associated with blockchain adoption and prepare human and financial resources. There are a lot of discussions around blockchain and how it can contribute to sustainability. In that case, there are a lot of assumptions and speculations around this topic but more time is needed to notice a real contribution. Indeed, experts did not have a clear vision on this point and opinions were divided into completely different directions. Overall, our work provides a guideline on what dimensions alongside potential questions can be considered before adopting any emerging technology. Even though there are a lot of use cases discussing the applicability of blockchain, the technology still is not a panacea for most of them.

5 Discussion

5.1 Theoretical Implications

Our paper has two major theoretical implications. First, we found the major concepts related to blockchain adoption in companies. Under these concepts, we have identified five dimensions: infrastructure, business models, operational processes, management and environmental impact. Afterwards, we provide a detailed description of all dimensions and their prioritization according to experts' comments. We divide impact factors into 3 levels to explain the most crucial ones for practitioners. For example, we found that top management support and the technology integration complexity are considered highly important ones, while industry readiness and competitors' pressure do not hinder business people from blockchain adoption. Second, under the prior research, we identified that there is no clear answer when to use blockchain at the corporate level. Our results revealed that it is highly important to consider all dimensions in specific requirements, challenges, and potential benefits of blockchain adoption.

5.2 Practical Implications

Our study has several practical implications. First, during the interviews with our experts we revealed that global blockchain adoption is associated with a number of challenges and among the most important is a limited understanding of the technology itself. A lot of business people consider blockchain following hype without a proper analysis of other possible solutions. We provide a detailed framework of potential dimensions to consider with a 3 level of impact factors to guide decision-makers in various domains. Additionally, we found that the prioritization depends on the size of the company and awareness about blockchain among the main stakeholders. Second, the decision-making process of any emerging technology adoption is a complex procedure that requires a detailed analysis. We provide a summary of decision-making factors and potential questions to ask before blockchain utilization.

5.3 Limitations and Future Research Directions

The current study has several limitations. First, we conducted 10 interviews with experts from different countries during the research. Future research can expand our findings by considering a more extensive set of experts from various domains and countries. At the same time, the study can be limited to one country or a particular domain to provide a more comprehensive understanding of the challenges surrounding blockchain and the factors that lead to its adoption. Second, we provide an adoption framework based on the collected data from the experts and future validation through the case studies may broaden the findings. Third, future research can also focus on understanding the specific criteria that influence practitioners' intention to adopt blockchain in different use cases.

6 Conclusions

Blockchain technology has recently attracted a lot of attention. In this study, we identified the dimensions that business people take into consideration before blockchain adoption on the corporate level and developed the adoption decision-making framework to support the technology utilization process. The current research derived the following conclusions. First, we contributed to the existing knowledge with empirical findings and revealed the importance of looking at a broader perspective before blockchain adoption. Second, during the interviews data analysis using the Gioia method we identified 5 core dimensions and 18 sub-dimensions surrounding blockchain utilization. We validated the final framework by means of the second round of interviews with 5 experts and found that the decision-making process and priority of dimensions depends on various factors (e.g., size of the company or awareness level about blockchain). Third, the deeper insight into the business people's perspective reveals many directions for improvement.

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