

# Stakeholder Engagement in Enterprise Architecture: Enablers and Barriers in the Private Sector

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**Abstract:** Enterprise architecture (EA) is a growing discipline involving IT and business perspectives in organizations. While EA involves various stakeholders across different levels, challenges persist, particularly in stakeholder engagement. Most literature focuses on government contexts, but this paper delves into EA in private organizations, specifically the financial industry. Through in-depth interviews, the study identifies 24 factors influencing engagement between EA stakeholders and architects, categorized into organizational goals, organizational structure, and EA users. The study provides a detailed analysis of these factors, offering insights into both the barriers and enablers of effective EA stakeholder engagement in the private sector. It offers several implications for research and practice.


## 1 INTRODUCTION


Enterprise Architecture (EA) represents a critical organizational activity aimed at enhancing business and IT alignment (BITA) and fostering collaborative decision-making through the use of specific EA artifacts (Kurnia et al., 2021). As a comprehensive blueprint, EA directs the design, implementation, and operation of an enterprise's systems and processes (The Open Group, 2018). By establishing EA regulations, organizations can meet their objectives, advance key information systems (ISs), and support strategic business initiatives (Kotusev, 2020). EA plays a vital role in shaping business strategies, identifying business needs, guiding decision-making concerning business transformations, and managing relationships with service providers (Al-Kharusi et al., 2021). With stakeholders ranging from top management to software engineers, effective EA practice necessitates substantial collaboration to address the impact of EA transformations (Kurnia et al., 2021). Consequently, the success of EA practice is closely linked to the level of engagement between enterprise architects and other EA stakeholders.


Despite some studies recognizing the importance of engagement as a success factor in EA, the concept has received limited attention in current EA literature (Kotusev, 2020). Research indicates that engagement between architects and stakeholders often encounters challenges (Seppänen et al., 2018; Löhe and Legner, 2014). However, detailed examinations of these engagement issues remain sparse.

A review of the literature on stakeholder engagement reveals a limited number of studies addressing the factors that facilitate or hinder EA stakeholder engagement (Al-Kharusi et al., 2021; Kurnia et al., 2021; Kotusev and Kurnia, 2019; Levy, 2014). Notably, empirical research on EA stakeholder engagement has predominantly focused on the public sector (Al-Kharusi et al., 2021; Kurnia et al., 2021; Kotusev and Kurnia, 2019). Studies have also highlighted significant differences between public and private sectors in EA practices—covering EA scope, objectives, user attitudes and skills, planning, and regulations (Seppänen et al., 2018; Dang and Pekkola, 2017) — indicating that findings from public sector research may not be directly applicable to the private sector.

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Public sector organizations face challenges in EA implementation due to their long-term, mission-driven goals and complex bureaucratic structures, leading to difficulties in achieving agility and EA objectives (Dang and Pekkola, 2017). In contrast, private sector organizations, driven by profit and shareholder value, tend to adopt a more focused and agile EA approach (Seppänen et al., 2018).

The banking industry's complex stakeholder networks — including regulators, IT teams, and business strategists — make it an ideal context for studying EA stakeholder engagement. According to Efunniyi et al. (2024), the sector's regulatory complexity, high-risk exposure, and need for trust and transparency underscore the importance of effective engagement to align diverse interests, ensure compliance, and strengthen risk management.

These knowledge gaps underscore the need for our empirical investigation, which addresses the following research question: *What are the barriers and enablers influencing EA stakeholder engagement in the private sector, with a specific focus on the banking industry?*

To answer the research question and deepen our understanding of EA stakeholder engagement in the private sector, we conducted an empirical qualitative study of EA practices within a banking institution. Data were gathered through organizational documents and interviews and analyzed using a grounded theory approach. Our study identifies various enablers and barriers to interaction between EA stakeholders and architects, categorizes them into three groups — organizational goals, organizational structure, and EA user — and integrates them into a comprehensive theoretical model. Arguably, this research marks the first targeted investigation into the factors affecting engagement between enterprise architects and stakeholders in the banking sector. These findings are crucial for equipping future practitioners with the skills necessary to be effective in EA-driven transformations. As organizations continue to evolve through EA practices, understanding how to engage and collaborate with stakeholders becomes increasingly vital.

The paper begins with a review of the existing literature on EA stakeholder engagement, followed by a description of the research methodology, including data collection and analysis procedures. We then present the study's findings, make a comparison with existing literature to highlight similarities, differences, and novel insights, and discuss practical contributions. We conclude with a discussion, study limitations and propose directions for future research.

## 2 BACKGROUND

### 2.1 EA Practices and the Financial Industry

EA has garnered significant interest from both industry and academia due to its extensive application across various organizations. Recommended for enhancing change management, decision-making, and communication, EA is seen as a crucial method for translating business vision into organizational success. It achieves this through the development of core models and principles that guide an organization's future state and facilitate its growth (The Open Group, 2018). EA comprises a set of coherent techniques, models, and principles designed to align an organization's information systems, business activities, infrastructure, and structure (Hindarto, 2023). Encompassing processes, people, technology, and information, EA also considers their interactions with the external environment (The Open Group, 2018). It provides a framework for understanding an organization's current state, depicting its desired future, and creating a comprehensive blueprint for an integrated enterprise (Kurnia et al., 2020). EA practice involves enhancing and utilizing specific artifacts — documents that represent different aspects of EA — to streamline information systems planning (Kotusev, 2019). These artifacts can be categorized as guidelines, principles, and roadmaps, support strategic planning, and project management within organization (Kotusev, 2019). Overall, EA practice is essential for setting strategic trends, developing investment strategies, and managing projects effectively.

Financial organizations face significant challenges concerning BITA. Pressures from technological innovation make it increasingly difficult for existing market players to sustain profitable banking services. Banks and insurers are aware of the potential consequences of these changes and are thus revising their strategies and business models to remain relevant in a complex and dynamic market (Queiroz et al., 2020). The urgency of addressing these issues has increased following the financial crisis of 2007 and the subsequent Euro-crisis in 2011 (van der Beek et al., 2012). Organizations need direction due to the unpredictability and complexity of the current environment. Banking firms must carefully manage their risks, positions, and costs. However, the IT environments of financial systems and core systems with limited flexibility supported by a range of add-on systems (Farzi, 2022; Queiroz et al., 2020). EA has evolved from a strategy

for managing ISs and related business aspects into various EA practices that aid enterprises in aligning their business and IT processes (Gong and Janssen, 2019). Further, EA provides the capability to design the desired architecture, outline the transformation plan for the future, and offer controls for realization and decision-making. EA guides management in business process design and business development solutions to ensure alignment with organizational goals, strategy, vision, and mission (Farzi, 2022).

## 2.2 Stakeholder Engagement in EA

EA stakeholders are defined as individuals or groups within an organization who are impacted by EA services, whether through adapting to EA products or participating in EA decision-making (Al-Kharusi et al., 2021). These stakeholders pursue specific goals based on their roles in the EA process and the organizational stage in which they operate. Niemi and Pekkola (2020) highlight that the organizational position and hierarchy of an EA team can vary across organizations, which may influence the goals, concerns, and classifications of stakeholders in different settings. Stakeholders and their concerns can be organization-specific, with variations depending on factors such as organizational style (e.g., matrix or hierarchy), size, industry, domain, and the stage of the EA program (Niemi and Pekkola, 2020). Each stakeholder has a unique perspective on the value of EA relative to their needs and the optimal method for implementing IT solutions, considering the EA framework for the enterprise (Verley, 2007). The introduction of EA into an enterprise remains challenging due to the complexity and diversity of IS improvements and the influence of various stakeholders (Gong and Janssen, 2019). Kluge et al. (2006) found that stakeholder direction is crucial for realizing the benefits of EA, emphasizing that EA initiatives must focus on stakeholders to achieve success.

Stakeholder engagement is essential for implementing EA methodologies and principles to derive value from IT investments. Achieving stakeholder engagement is an ongoing process critical at all stages of the enterprise and is a fundamental aspect of IT investment governance (Verley, 2007). Kurnia et al. (2021, p. 3) define engagement as "active communication between architects and EA stakeholders, conscious participation of stakeholders in EA-related processes, collaborative decision-making, and mutual commitment to the planning decisions". Hjort-Madsen (2006) confirms that continuous collaboration and communication across

various functions and levels are crucial for EA success. The importance of engagement between EA stakeholders and architects is well-recognized in the EA literature. Researchers have identified stakeholder engagement, EA acceptance, and successful collaboration as key elements for EA success (Kotusev, 2020). However, the concept of engagement itself has not been thoroughly studied in the literature.

Collaboration between stakeholders and enterprise architects is often problematic. Several studies have documented the challenges in achieving effective engagement between EA stakeholders and architects (e.g., Ajer and Olsen, 2019; Seppänen et al., 2018; Löhe and Legner, 2014). Verley (2007) notes that a lack of interaction and collaboration between EA stakeholders and architects during an EA-driven transformation can lead to a deficit of mutual understanding and may result in resistance in EA practice.

## 2.3 Previous Related Studies

The search for relevant literature was conducted using the following keywords: "enterprise architecture AND stakeholder engagement AND (enablers OR facilitators OR drivers OR success factors OR catalysts OR supporting factors) AND (barriers OR challenges OR obstacles OR constraints OR hindrances OR limitations OR inhibitors)" across Google Scholar and several databases including ScienceDirect, IEEE, Scopus, and Springer. The inclusion and exclusion criteria, as proposed by Kitchenham and Charters (2007), were applied. Non-English studies and duplicates were excluded, while English-language, peer-reviewed articles, including book chapters, conference proceedings, and journal articles, were included.

During the process of searching for and selecting articles, a total of 97 articles were found in the selected databases. After applying the exclusion criteria, 52 articles were obtained. The next step involved selecting only the authoritative venues' articles (peer-reviewed articles), resulting in 46 articles. A preliminary examination of the articles was conducted to ensure their relevance to the topic, leading to the inclusion of 10 articles that covered a different scope of industries, including both commercial and government sectors. The remaining articles were excluded based on considerations such as the article's focus being inapplicable. The final number of articles included for in-depth analysis, considering their industry context, findings, and limitations, was 10, as shown in Table 1.

Table 1: Summary of publications assessing stakeholder engagement in EA practice.

Publication(s)	Industry	Findings	Limitations
<i>Publications Focusing Directly on Stakeholder Engagement Assessment</i>			
1 Banaeianjahromi and Smolander 2019	Private & public sectors, not specified	Identifies eight barriers and four recommendations for communication	Only investigates large companies
2 Al-Kharusi et al. 2021	Public sector, Oman	Suggests 12 factors affecting the engagement: (organisational, personal and technical)	
3 Kotusev and Kurnia 2019	Public sector, Australia	Finds 18 barriers of initiative-based and strategic engagement	Use a public organization
4 Kurnia et al. 2020	Public sector, Australia	Provides 15 barriers and 17 enablers to engagement	
5 Verley 2007	Public sector, US	Addresses major challenges in building engagement	
6 Levy 2014	Private sector, US	Proposes four pillars of engagement: (psychological, behavioral, procedural justice, and identity)	An initial view of engagement
<i>Publications Studying General Challenges in EA Practice</i>			
7 Ajer and Olsen 2019	Public sector, Norway	Identifies a very broad spectrum of problems associated with EA practice	
8 Seppänen et al. 2018	Public sector, Finland	Focusses on broader issues hindering EA practice	Focus on broader issues troubling EA practice many of which are unrelated to engagement
9 Löhe and Legner 2014	Private sector, Europe	Discusses how obstacles during EA development	
10 Hauder et al. 2013	Both sectors, many countries	Focusses on 20 EA-related challenges	

The first six publications specifically addressed stakeholder engagement in EA practice, and the research conclusions were directly related to factors influencing engagement. Banaeianjahromi and Smolander (2019) explore the causes and consequences of inadequate communication in EA practice and provide four recommendations for improving collaboration in both sectors. This research, however, centers on large organizations and does not consider medium or small organizations, which might experience different factors affecting collaboration. Similarly, Levy (2014) proposes four theoretical aspects of engagement: identity judgment, procedural justice, behavioral engagement, and psychological engagement. However, this study offers only a preliminary overview based on an individual private case study in the United States, which limits the generalizability of its findings. Furthermore, most research discusses the concept through case studies in the government sector.

Hence, the perspective of private sector stakeholders is missing. For example, Al-Kharusi et al. (2021) develop a comprehensive view of the factors that shape engagement through a governmental organization case study in Oman. Kotusev and Kurnia (2019) propose a comprehensive conceptual model that explains barriers to engagement and classifies them into direct and indirect barriers. Kurnia et al. (2020) provide a somewhat more realistic and theoretically supported perspective of engagement and alignment, as well as their correlation. Verley (2007) addresses key challenges in building stakeholder engagement in a U.S. government case study. Nevertheless, the organizations studied in these research efforts belong to the government sector and represent a somewhat special case of EA application. Therefore, the inferred models may be somewhat organization-specific. Kurnia et al. (2020) further emphasize the importance of conducting a study of organizations with various



contextual aspects, as this might be useful in evaluating the boundary criteria of their suggested models for EA practice engagement factors.

The remaining five publications identify general challenges in EA and were not recognized as factors influencing engagement. They focus on broader issues troubling EA practice, many of which are unrelated to engagement, but they may still provide valuable insights related to the engagement assessment (Ajer and Olsen, 2019; Seppänen et al., 2018; Löhe and Legner, 2014; Hauder et al., 2013). The notion of engagement has gained insufficient consideration from EA scholars (Al-Kharusi et al., 2021; Kurnia et al., 2020; Banaeianjahromi and Smolander, 2019; Kotusev and Kurnia, 2019; Levy, 2014; Verley, 2007). Despite its recognized significance, stakeholder engagement in EA practice is yet to be adequately addressed. Additionally, we observed limited EA studies in the financial industry, let alone studies that focus on the engagement of stakeholders. This gap in the literature is significant, considering the central role that the financial sector plays in the global economy (Farzi, 2022).

## 2.4 Synthesis of Factors Affecting EA Stakeholders Engagement

Understanding barriers and enablers of stakeholder engagement in EA is crucial for optimizing BITA. A synthesis of findings reveals 20 barriers and 27 enablers, as outlined in Tables 2 and 3 (Appendix A). The synthesis process involved systematically coding the barriers and enablers identified in the literature. The first step entailed reading the articles line by line to identify significant categories and concepts relevant to the phenomenon under study. Next, similar codes were grouped into broader themes, such as combining "strong governance" and "top management support" under the theme of enablers related to organizational goals. Finally, the analysis was refined by focusing on the most significant and relevant themes, ultimately providing a more focused and insightful understanding of stakeholder engagement in EA.

### 2.4.1 Barriers and Enablers Related to Organizational Environments

Six key barriers fall under this category. Complexity arises because government organizations interact with a multitude of stakeholders, each bringing distinct expectations and constraints (Ajer and Olsen, 2019). The diversity of business activities and the lack of a well-defined organization complicate

architects' ability to engage, build relationships, and achieve consensus on architectural planning (Kurnia et al., 2020; Ajer and Olsen, 2019). Instability, driven by political volatility, hampers the development of long-term architectural plans and goals, as political cycles demand immediate results rather than long-term solutions (Ajer and Olsen, 2019). The susceptibility of public institutions to external forces such as leadership changes and annual budget alterations, disrupts engagement and complicates strategic initiatives (Kotusev and Kurnia, 2019).

To address these barriers, several organizational enablers are crucial. Effective strategies involve developing clear EA artifacts (Kurnia et al., 2020; Banaeianjahromi and Smolander, 2019), managing stakeholder expectations and facilitating ongoing discussions, standardizing EA processes (Levy, 2014), and ensuring a well-defined development scope and adherence to guiding principles (Al-Kharusi et al., 2021).

### 2.4.2 Barriers and Enablers Related to Organizational Goals

Organizational goals in the public sector are often less defined compared to commercial entities, influenced by political rather than managerial decisions. This dynamic leads to conflicting priorities and a lack of constructive, long-term dialogue about the organization's strategic vision (Kurnia et al., 2020). Additionally, public sector organizations are characterized by higher levels of bureaucracy, which results in poor transparency and a crisis-driven culture. This is in contrast to private sector counterparts, which often prioritize proactive over reactive planning, further complicating strategic engagement (Seppänen et al., 2018).

Key enablers for aligning organizational goals with EA practices to enhance engagement include focusing on business problems to prioritize core issues critical to achieving objectives (Kurnia et al., 2020; Levy, 2014). Setting achievable goals that not only align with EA practices but also resonate with the broader organizational objectives is essential (Kurnia et al., 2020; Levy, 2014). Additionally, demonstrating EA's value, maintaining a business value orientation, ensuring strong governance and top management support are crucial (Al-Kharusi et al., 2021; Banaeianjahromi and Smolander, 2019).

### 2.4.3 Barriers and Enablers Related to Organizational Structures

Government institutions often face greater bureaucracy and more rigid decision-making

processes compared to private sector organizations. This rigidity hampers flexibility and complicates strategic engagement, particularly as architects may struggle to collaborate with external stakeholders involved in decision-making (Löhe and Legner, 2014). Additionally, governance issues such as misaligned IT governance and poor change management further hinder engagement because improvements in the IT landscape were often managed independently from corresponding shifts in business processes (Kurnia et al., 2020). The dynamic structure and silos within the IT department place excessive pressure on IT managers and senior business to fulfil a common attitude and architectural vision for integrating IT and business plans together and developing digital strategies (Kurnia et al., 2020; Verley, 2007).

To mitigate these challenges, several organizational enablers can enhance stakeholder engagement, including appointing specialized engagement managers (Al-Kharusi et al., 2021), promoting group ownership of EA initiatives (Al-Kharusi et al., 2021), providing advisory services (Banaeianjahromi and Smolander, 2019), and ensuring convincing collaboration between architects and stakeholders (Al-Kharusi et al., 2021). Additionally, establishing effective governance structures that align IT and business plans and support agile decision-making is essential (Banaeianjahromi and Smolander, 2019).

#### **2.4.4 Barriers and Enablers Related to EA Users**

Barriers related to EA users include difficulties in working with EA artifacts, resistance to change, fear of IT, reluctance to engage with IT, and challenges in communication with architects (Seppänen et al., 2018; Löhe and Legner 2014; Verley, 2007). These issues significantly impede effective engagement and pose substantial obstacles to the successful implementation of EA initiatives.

Effective engagement among EA users is enhanced by several factors. Raising awareness of EA's value is crucial (Al-Kharusi et al., 2020). Leveraging experience and robust change management helps navigate challenges (Al-Kharusi et al., 2020). Strong stakeholder commitment is essential for success, while architects' ability to communicate in business terms and understand the business context improves alignment (Kurnia et al., 2020). Additionally, proactivity, pragmatism, and interpersonal skills are vital for successful EA implementation (Kurnia et al., 2020).

Despite these insights, there remains a notable gap in understanding how these factors apply to different contexts, particularly within the private sector. Existing research predominantly focuses on the public sector, where characteristics such as higher bureaucracy and political dynamics significantly influence engagement factors. Consequently, further research is needed to explore engagement barriers and enablers in the private sector to improve EA and BITA across different organizational contexts.

### **3 RESEARCH METHODOLOGY**

Since the concept of engagement remains under-researched and inadequately described in the EA literature, no rational quantitative hypotheses or deductive propositions can be formulated. Thus, this research is exploratory and qualitative in nature. To comprehend the barriers and enablers affecting stakeholder engagement and related aspects, this study aims to evaluate the thoughts and opinions of individuals who have personally encountered the phenomenon (Parker, 1992). Data is primarily gathered through in-depth interviews at a private banking institution in Australia. According to Pentland's (1999) terminology, interview transcripts serve as a text, revealing respondents' explanations for what occurred to them, which sheds light on the underlying research issues, i.e., the characteristics of private sector engagement and the key factors influencing engagement in the financial industry.

To answer the research question, we set three specifications for the case organization: (1) a private sector organization specializing in the financial industry in Australia, (2) an organization large and complex enough to have many internal and external stakeholders, including an EA function, and (3) an organization struggling to establish successful engagement between stakeholders and enterprise architects. It was desirable to analyze an organization from the private sector, especially since most previous studies are focused on the public context.

Data for this research were gathered from organizational documents and semi-structured interviews. After obtaining consent, a formal request was sent to participants that included a description of the research, a consent form, and information about participants' rights. A total of 10 participants, consisting of representatives of all major players in the EA practice, were interviewed from September to October 2022. The average interview ranged between 45 and 60 minutes. The interviews were held in person and online using Teams (audio only). To keep

the interviewees comfortable and encourage them to share their perspectives and experiences, the discussion manner remained informal yet professional (Hermanowicz, 2002). All interviews were taped and accurately documented for evaluation purposes with the assistance of a third-party transcription service provider.

During data analysis, we applied the coding and categorization procedures suggested by Charmaz (2006). The process consisted of two fundamental phases: an initial stage involving the labeling of each term or sentence, followed by a selective, focused stage that synthesized, integrated, and organized large volumes of data using the most relevant or frequently occurring initial codes. This approach allowed themes to emerge directly from the interview data without relying on our predefined classifications, ensuring that the analysis remained grounded in the data itself. Notably, most of the interview findings naturally aligned with the predefined categories. Building on this, a hybrid classification approach was employed, aligning the themes identified in the analysis of case study findings with the classification established from the literature review. Throughout the analysis, memos were recorded to capture novel insights and emerging patterns, enabling the refinement of theoretical classifications and a reassessment of the significance of key factors influencing engagement.

## 4 CASE STUDY ORGANIZATION

The case organization referred to as AuBank (pseudonym) is one of the leading regional banks in Australia and offers real competition to those using and working in Australian financial services. AuBank has more than 150 branches, including more than 100 corporate branches and owner-managed branches. In total, AuBank employs more than 48,000 individuals across Australia. AuBank completed the purchase of CoBank (pseudonym) for its relatively mature online capability. The risk of merging technology systems is mitigated by the fact that AuBank and CoBank are serviced by the same core technology provider and so have similar technical platforms and architecture. The organization is currently in the second year of a multi-brand, multi-year digital transformation program after reinvigorating the business and introducing a new plan in February 2020. A multi-brand strategy involves different organizations with different interests from each other. They are still separate, with their own management structures; sometimes they have their own buildings, and they have different IT departments. Therefore, the first challenge facing the

organization is to align the different areas of work with various interests to ensure that all organizations are satisfied. CoBank operates as a standalone brand within the AuBank Group. The digital technology of AuBank is advanced, and the purchase of CoBank was intended to speed up the process of developing a shared, scalable digital technology platform.

## 5 CASE STUDY FINDINGS

The previously discussed, grounded theory analysis methodology revealed 24 various factors that influence engagement between EA stakeholders and architects in AuBank. Not all of these aspects are novel, and many of them have already been highlighted as fundamental issues of EA practice in general. Some of these factors have been mentioned in governmental contexts. Nevertheless, some issues were not earlier demonstrated as specific barriers or enablers to private sector engagement and were not placed in a specific context, such as banking industry activities. The 24 determined factors are divided into three groups proposed by Fottler (1981): organizational goals, organizational structure and EA users. Importantly, while the literature emphasized the role of the organizational environment, particularly in public sector contexts, this category did not emerge as significant in the private sector case study. Consequently, the final categorization retained three of the four original classifications, excluding the organizational environment due to its limited relevance. Figure 1 illustrates the research model developed in this study.

### 5.1 Barriers in EA Stakeholder Engagement

#### 5.1.1 Related to Organizational Goals

**Priority Conflict.** The diverse demands and priorities among AuBank's sub-units make it difficult to establish a unified vision for the organization. Each unit prioritizes differently based on its specific focus, leading to challenges in creating joint strategic plans.

**Budget Constraints.** AuBank's tight budget restricts its ability to implement long-term strategic changes, resulting in a focus on small, tactical adjustments. This budget limitation often frustrates architects and hinders their ability to develop long-term plans.

**Insufficient Coordination.** Architects' involvement in multiple projects and the resulting time and resource conflicts impede effective coordination.

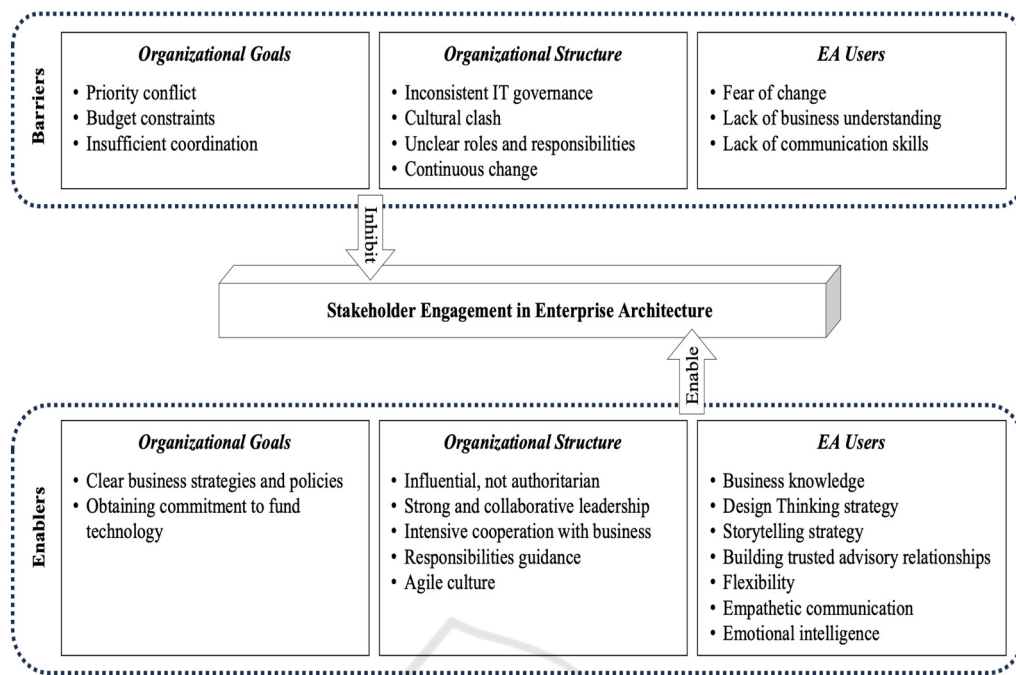


Figure 1: Barriers and enablers influencing stakeholder engagement in EA

This lack of coordination among internal teams and external partners complicates task completion and decision-making.

### 5.1.2 Related to Organizational Structure

**Inconsistent IT Governance.** Business unit executives at AuBank often make decisions independently of IT personnel, leading to a lack of alignment and complicating the collaboration between business and IT. This disconnection results in missed opportunities for cohesive planning and integration. *"We get blindsided a little bit probably from those initiatives, which are having in the business unit by themselves, where they're not engaging necessarily with EA team"* (Participant 4)

**Cultural Clash.** Participants stated that the presence of two somewhat different cultures due to the merger and acquisition affected the quality of engagement. It was immensely difficult to integrate two companies with different cultures and manage the impact of organizational differences between the two parties and the powers they possess, even if they are in the same industry.

**Unclear Roles and Responsibilities.** The merger has led to confusion about architects' roles and responsibilities, increasing the communication gap between stakeholders and architects and causing inconsistent expectations.

**Continuous Change.** Ongoing organizational changes from the recent acquisition can disrupt stakeholder engagement and diminish enthusiasm for long-term planning, especially if employees struggle to adapt to or maintain new processes.

### 5.1.3 Related to EA Users

**Fear of Change.** Fear of change undermines the enthusiasm of all participants at various stages of the organizational hierarchy and their belief in the potential to create an effective EA application given the lack of knowledge of upcoming changes, fear of the unknown and comfort with the status quo.

**Lack of Business Understanding.** Architects often come from technical backgrounds and lack deep business knowledge, which impedes their ability to communicate effectively with stakeholders who may not be technically inclined. *"IT people are not really communicating on a business level; you're dealing with business people that are not necessarily technical"* (Participant 2)

**Lack of Communication Skills.** Architects frequently use technical jargon and methods that business people find difficult to understand, leading to poor communication, limited trust, and challenges in aligning objectives.



## 5.2 Enablers in EA Stakeholder Engagement

### 5.2.1 Related to Organizational Goals

**Clear Business Strategies and Policies.** Well-defined business strategies and policies are crucial for engaging architects and stakeholders effectively. Clear objectives and continuous reinforcement of these goals help align strategies with organizational change. *“Business is all about trust and clear objectives, to the extent that we establish those early on and continue to nurture them. It does need constant reinforcement.” (Participant 3)*

**Obtaining Commitment to Fund Technology.** The architects emphasized that they were able to engage technology and business stakeholders by building their commitment and support to fund technology components through a long-term strategic plan. *“It’s not the case that people can just turn up and run a project; they need to get permission, they need to get funding, they need to get approval. And that will impact the [extent] to which you can [have] enterprise architects spend a lot of time on your project or not.” (Participant 5)*

### 5.2.2 Related to Organizational Structure

**Organizational Structure that is Influential, not Authoritarian.** An organizational structure controls how work is distributed within an organization. Thus, it allows groups to collaborate to manage tasks within their respective functions. At AuBank, this was interpreted as one of the keys to increasing engagement between the EA program and the business units, specifically obtaining those outside the EA program to participate in activities including monthly meetings and artefact development and review.

**Strong and Collaborative Leadership.** Some participants stressed that transformation is more likely to be effective and have better sustainability if management can rely on strong and collaborative leadership. Although senior management must articulate the future vision, the direct line managers must translate it into practical implications for the people involved.

**Intensive Cooperation with Business.** Architects should prioritize understanding the business and collaborating with business leaders rather than focusing solely on IT projects. A comprehensive understanding of business strategy and processes is crucial for effective digital transformation and promoting engagement. *“As an enterprise architect,*

*we just have to be interested in their business and what they do on a daily basis, which will allow us to have the right level of conversation to influence the direction of the technology strategy to support business strategy.” (Participant 6)*

**Responsibilities Guidance.** The participants stressed the need to guide the architecture group with some deliverables that would help provide at least some guidelines for distinguishing between different roles and responsibilities. Misunderstanding of roles and responsibilities will lead to conflicts within different teams and minimize the overall quality of engagement.

**Agile Culture.** Adopting an agile methodology post-merger can facilitate smoother and more sustainable change. An agile approach supports a holistic integration into organizational objectives and strategies, aiding in structural changes and aligning organizational behaviour.

### 5.2.3 Related to EA Users

**Business Knowledge.** The architects acknowledged the distinct languages that business and technology speak and considered the possibility that architectural language and models may be overly complex and cause misunderstanding and alienation. They coined the terms ‘business talk’ and ‘technology talk’ after realizing that their relationships with technology and business personnel relied on their business understanding and capacity to speak in a way that encouraged mutual understanding. *“You’re dealing [with] business people that are not necessarily technical. Enterprise Architects must consciously try not to talk like an architect.” (Participant 7)*

**Broad Communication Skills and Strategies.** Participants discussed a range of broad communication skills and strategies, highlighting several that have proven effective. The Design Thinking strategy involves architects collaborating with technology vendors and utilizing the Design Thinking Forum to select appropriate technology solutions and engage stakeholders, thereby fostering business growth through collaborative design. The storytelling strategy was also emphasized, as it aids in communicating architectural decisions in a way that business stakeholders can easily understand, thereby encouraging engagement and addressing any concerns. Building trusted advisory relationships was identified as another key strategy, with training and workshops enabling architects to deepen their understanding of stakeholders' business goals and motivations, positioning them as trusted advisors. Additionally, the need for flexibility was

underscored, with architects being required to adapt to unforeseen situations and maintain project momentum through flexibility, active listening, and negotiation. Effective communication was also linked to empathetic communication, where understanding and addressing the diverse needs of stakeholders fosters engagement through empathy and respect. Finally, emotional intelligence was highlighted as essential, with an awareness of stakeholders' emotional responses and the ability to manage relationships with emotional intelligence being crucial for enhancing engagement and navigating tense situations effectively.

## 6 DISCUSSION

This study examines the barriers and enablers influencing stakeholder engagement in EA practice within the private sector, specifically through an exploratory case study of a financial institution in Australia. Stakeholder engagement is a crucial but underexplored aspect of EA practice, particularly in the private sector. The research identifies 14 barriers and 10 enablers that affect stakeholder engagement (Figure 1), revealing some factors previously recognized in government contexts and introducing new insights specific to the private sector.

Barriers identified include cultural clashes, priority conflicts, insufficient coordination, continuous change, inconsistent IT governance, lack of business understanding, and budget constraints. These barriers are similar to those found in public sector EA studies (Kurnia et al., 2020; Ajer and Olsen, 2019) but have different underlying causes in the private sector. For example, in the private sector, budget constraints are often due to limited financial resources and a focus on tactical goals. In contrast, in the public sector, they are influenced by political factors and bureaucratic processes. The study also identifies new barriers not previously discussed in EA literature, such as poor communication skills and unclear roles and responsibilities, which can significantly hinder engagement.

On the other hand, enablers such as clear business strategies, committed funding for technology, leadership roles, intensive cooperation with business units, and an agile organizational culture facilitated engagement. Some enablers are consistent with those identified in the public sector (Levy, 2014; Verley, 2007), while others, such as storytelling, empathetic communication, emotional intelligence, and design thinking, are novel contributions to the EA literature. These new enablers suggest that effective stakeholder

engagement in the private sector may require a broader set of skills and strategies than previously recognized.

The findings align with and extend several established theories, such as Stakeholder Theory (ST) (Freeman, 1984), Organizational Culture Theory (OCT) (Schein, 1985), and Resource-Based Theory (RBT) (Barney, 1991). ST emphasizes the importance of engaging stakeholders to achieve successful outcomes, and this study supports that notion by highlighting the critical role of effective stakeholder engagement in achieving BITA within EA practice. However, the study also reveals sector-specific dynamics, such as the impact of competitive pressures and profit-oriented goals in the private sector, which suggests that ST may need refinement to better account for these nuances (Kotusev and Kurnia, 2019; Freeman, 1984). Similarly, OCT, which focuses on the role of culture in organizational success, is supported by the findings that cultural factors, including clashes and priority conflicts, are significant barriers to engagement. The private sector's competitive and profit-driven culture introduces complexities not fully addressed by existing OCT frameworks, indicating a need for a more nuanced understanding of how cultural factors impact stakeholder engagement in different sectors (Ajer and Olsen, 2019; Schein, 1985). The study also contributes to RBT by identifying enablers like agile culture and clear business strategies as valuable resources that enhance stakeholder engagement (Barney, 1991). However, introducing new enablers, such as storytelling and emotional intelligence, suggests that RBT could be expanded to include behavioural and psychological dimensions to reflect the complexities of stakeholder engagement better (Levy, 2014).

Sector-specific differences in barriers and enablers of stakeholder engagement in EA practice are also highlighted through our study. In the private sector, budget constraints are often linked to tight financial controls and short-term priorities. In contrast, in the public sector, they are influenced by political cycles and bureaucratic inefficiencies (Kotusev and Kurnia, 2019). The study draws on Public Choice Theory (PCT) (Buchanan and Tullock, 1965) and New Public Management (NPM) (Hood, 1991) to explain these differences, showing that while both sectors face budget constraints, the underlying causes and implications vary significantly. By confirming and extending existing theories and introducing new insights, the research offers valuable contributions to understanding EA practices and stakeholder engagement, suggesting that

organizations should prioritize enhancing communication skills and strategies to address individual issues and promote effective dialogue.

This study contributes to EA from both theoretical and practical perspectives. Theoretically, it presents the first investigation into the factors influencing the engagement of architects and stakeholders in private banking organizations. The identified factors represent the first research using a case study approach in this sector as previous research has not addressed banking-specific stakeholder engagement issues, creating a research gap. Thus, this paper provides insights into barriers and enablers related to organizational characteristics such as goals, structure, and EA users in the financial sector. Practically, the findings aid organizations in improving EA practices, with the suggested model serving as a guideline for identifying engagement variables. This model can help pinpoint problematic EA practices and implement corrective actions. Behavioural and psychological engagement skills (e.g., emotional intelligence, flexibility, empathy) and strategies (e.g., Design Thinking Forum, trusted advisor workshops) among enablers suggest potential improvements and offer specific recommendations for architects, making the insights both valuable and actionable for a diverse range of organizations aiming to enhance their EA practices. The findings from the banking case study hold broad applicability to other private sector organizations due to their shared core attributes of profitability, efficiency, and market responsiveness, indicating that the barriers and enablers of stakeholder engagement identified in the study may similarly manifest across various industries.

## 7 CONCLUSION

EA practice involves employing EA artifacts to facilitate decision-making and enhance BITA. It is a sophisticated and multidimensional organizational activity (Ajer and Olsen, 2019). As organizations continue to face engagement challenges hindering the realization of anticipated EA outputs, this research evaluates EA stakeholders' engagement in the private sector banking industry, focusing on organizational structure, goals, and people. The study investigates barriers and enablers influencing engagement in EA application and the effect of organizational contextual factors. This study identified 14 barriers and 10 enablers of engagement.

However, there are limitations to this study. Firstly, since the chosen organization is a financial

institution in one of the Australian states, the results may not be applicable to other banking organizations in Australia or other countries. Secondly, the study relies on participants' responses and a grounded theory approach, which may introduce inaccuracies and biases. Conducting a larger-scale study with more diverse banks using a mixed-method approach could enhance the generalizability of the findings.

Regarding future research directions, considering the analysis of different promoting and inhibiting factors, emphasizing the reasons for their occurrence, and addressing the governance strategies for these factors could provide valuable insights. Exploring the transitional relationships between promoting and inhibiting factors at different stages or investigating their mutual influences could further advance the understanding of EA stakeholder engagement.

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## APPENDIX A

Table 2: Synthesis of barriers to EA stakeholder engagement.

Category		References							
Barriers		1	2	3	4	5	6	7	8
Organizational environments	Multitude of stakeholders			X		X			
	Diversity of business activity			X		X			X
	Environmental instability		X						X
	Leadership changes			X					
	Annual budget alterations			X					
Organizational goals	Absence of a clearly defined structure								
	Lack of a well-defined goals		X		X				
	Conflicting priorities		X	X	X	X			X
	Crisis-driven culture		X	X	X	X			
	Poor transparency		X						
Organizational structures	Presence of external stakeholders						X		
	IT governance misalignment	X	X					X	X
	Poor change management	X		X					X
	Dynamic structure		X	X			X		X
	Silos within the IT department			X					
EA users	Difficulties working with EA artifacts			X			X		
	Resistance to change			X				X	X
	General fear of IT			X					
	Reluctance to engage with IT	X		X					
	Difficulty communicating with architects			X					X
Reference mapping:		01: Verley 2007      02: Kotusev and Kurnia 2019      03: Kurnia et al. 2020 04: Hauder et al. 2013      05: Ajer and Olsen 2019      06: Löhe and Legner 2014 07: Seppänen et al. 2018      08: Banaeianjahromi and Smolander 2019							

Table 3: Synthesis of enablers of EA stakeholder engagement.

Category		References			
Enablers		1	2	3	4
Organizational Environments	Appealing EA artefacts		X		
	Managing stakeholder expectations		X		X
	Standardizing EA processes		X		X
	Defining development scope		X		X
	Adhering to principles		X		X
Organizational Goals	Focusing on business problems		X		
	Achievable goals and values			X	
	Demonstrating the value of EA		X		
	Maintaining a business value orientation		X		
	Strong governance		X		
Organizational Structures	Top management support		X		
	Specialized engagement managers		X		X
	Group ownership		X		
	Provision advisory services		X		
	Ensuring convincing collaboration		X		X
EA users	Effective governance structure		X		X
	Awareness of the value of EA		X		
	Experience			X	
	Change management capability		X		
	Commitment			X	
	Speaking in business language		X	X	
	Business understanding		X		
	Proactivity and pragmatism		X		
	Drive to build relationships		X		X
	Interpersonal skills		X		
	Social engagement		X		
Reference mapping:		01: Al-Kharusi et al. 2021      02: Kurnia et al. 2020 03: Levy 2014.      04: Banaeianjahromi and Smolander 2019			