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AGILE GOVERNANCE MANIFESTO CONTEMPORARY READING: UNVEILING AN APPRECIATIVE AGENDA

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ABSTRACT

In 2016, fundamental principles and behavioral guidelines were introduced[1] to support the implementation of agile governance. This paper explores the evolution of Agile Governance and how these principles can enhance its implementation. We critically review the Agile Governance Manifesto and compare it with perceptions and factual information by examining our research and practice for fifteen years. The study provides a grounded understanding of the topic and presents an agenda with 12 emerging research and practice topics in agile governance. A framework is also proposed to organize these topics into two central lines, guiding future research and practice.

Keywords. *Information Systems, Agile Governance, IT Management, Project Management, Software Engineering.*

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1. INTRODUCTION

Although governance primarily pertains to the governing processes and structures of an organization, encompassing decision-making systems and controls (Moe, Šmite, Paasivaara, & Lassenius, 2021), agility emphasizes the ability to swiftly respond and adapt to changes, while lean focuses on reducing wastage. Both agility and lean are interconnected regarding delivering value, although there can be instances where these approaches clash. Wang et al. (2012) propose that striking a rational balance between the two can lead to a unified "agile" approach that yields superior outcomes compared to their separate application. We embrace this integrated approach for the agile approach considered in this paper.

Since the publication of *"Foundations for an Agile Governance Manifesto: a bridge for business agility"* in the Proceedings of the 13th International Conference on Management of Technology and Information Systems (Luna, Kruchten, Riccio, & Moura, 2016), agility and lean thinking have advanced as pertinent approaches in domains extending beyond agile software development (Henriquez & Moreno, 2021), encompassing areas like managing emergent technologies to enhance business flexibility and security (Pal, Tiwari, & Haldar, 2021).

The *agile* and *lean* paradigms serve as a survival mechanism for many firms operating in turbulent and competitive markets (Škare & Soriano, 2021). In the realm of public management, it aims to establish responsive government mechanisms (Balakrishnan, Awamleh, & Salem, 2022) and cultivate dynamic capabilities[1] within public organizations (Panagiotopoulos, Protogerou, & Caloghirou, 2022). It addresses customer expectations in the automotive sector (Giacosa, Culasso, & Crocco, 2022) and drives new product development (Tseng, Aghaali, & Hajli, 2022). In the context of enterprise social media, it strives to foster employee agility (Pitafi, Rasheed, Kanwal, & Ren, 2020). In healthcare, it emphasizes lean management principles to promote socially responsible innovation in the U.S. healthcare system (Batayeh, Artzberger, & Williams, 2018). It also influences how startups and established companies innovate their business models to mitigate uncertainty, engage stakeholders, and foster collective learning (Bocken & Snihur, 2020). Additionally, it plays a role in integrating financing and technology management by coordinating various techno-financing systems and strategies to facilitate rapid enterprise growth (Tou, Watanabe, & Neittaanmäki, 2020).

Simultaneously, governance is intricately linked to the capacity to direct and govern an organization, whether a company, government, or society (Bloom, 1991). In essence, governance is a fundamental catalyst for facilitating action within an organizational context. It serves as a cornerstone for fostering active participation from all units of the organization, promoting enhanced enterprise agility, and bolstering its overarching strategy (Luna, Marinho, & Moura, 2020).

Initially conceived as a deterministic approach to steer software development (Qumer, 2007), the concept of *Agile Governance* (AG) has evolved into an adaptive and reflexive approach with a broader emphasis on enhancing organizational performance, competitiveness, and sustainability. As a result, its application has expanded across various domains (Founoun, Hayar, Essefar, & Haqiq, 2022). AG is conceptualized as *"the capability of an organization to sense, adapt and respond to changes in its environment, in a coordinated and sustainable way, faster than the rate of these changes"* (Luna et al., 2016).

[2] The term "*capability*" regards to a feature, *faculty* or process that can be developed or improved (Vincent, 2008).

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While governance plays a vital role in driving organizational performance, its inherent controls may sometimes impede an organization's ability to adapt to change swiftly. Recognizing these challenges, the *Agile Governance Theory* (AGT) emerged several years ago to examine and elucidate phenomena associated with how teams can cultivate intrinsic dynamic capabilities to detect and respond to organizational, regulatory, or requirement changes (Luna et al., 2020). AGT endeavors to equip teams with the readiness to respond effectively and foresee such changes in a coordinated and sustainable manner whenever possible. Additionally, AGT offers mechanisms for describing and analyzing the factors and agents that impact the practice of agile governance within organizations, which are often concealed or challenging to identify.

A systematic literature review about the state of the art of AG (Luna, Kruchten, Pedrosa, Almeida Neto, & Moura, 2014), abbreviated here to SLR-AG, published nine years ago has pointed out people as a central element of governance and management and teamwork ability as the driving spring to conduct organizational changes, very few works have been published about this subject on agile governance topic.

At this point, the foundations for the *Agile Governance Manifesto* (AGM) stand out as a behavioral instrument to assist teams in embracing change as a natural element of the organizational environment, seeking to empower people as agents of transformation, technological or cultural.

In this broad framework, this paper seeks to shed light on the evolution of Agile Governance applications. It discusses how the previously established fundamentals can enhance the implementation of agile governance within organizations.

These insights arise from a comprehensive and systematic examination of the findings of fifteen years of research on agile governance phenomena. This approach involved an inductive analysis, which focused on deriving conclusions and patterns from the observed data in several studies, such as systematic and exploratory literature reviews, observation, and interaction with representative agents of the phenomena under study, using distinct data gathering techniques, such as meta-ethnography, semi-structured interviews, focal group, on citing few and at the same time, using a structuralist perspective aimed to understand the underlying structures and principles, values, and behaviors ruling the agile governance phenomena. Considering the accumulated knowledge and empirical evidence over this extended period, these reflections seek to provide a well-rounded and informed understanding of the subject matter.

The subsequent sections of this paper will delve into the evolution of agile governance applications (Section 2) and explore the conceptual development of meta-principles and meta-values, along with their corresponding implications (Section 3). Furthermore, we will present the research and practical implications in Section 4, followed by a concluding summary in Section 5.

2. AGILE GOVERNANCE

Agile Governance (AG) has undergone a notable evolution since its inception in the realm of Software Engineering (Qumer, 2007) and subsequent exploration within the context of software product lines (Cheng, Jansen, & Remmers, 2009; Dubinsky, Chulani, & Kruchten, 2008). Over time, it has extended its application to *Information Technology Governance* (ITG) (Luna, Costa, Moura, Novaes, & Nascimento, 2010), serving as an approach to guide and manage technological products, services, and companies to foster business agility.

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Recent studies have demonstrated the expanding range of *Agile Governance* (AG) applications. AG has been found to influence various factors related to adopting and managing emerging technologies in the banking industry, including enablers, hindering variables, and barriers. These factors enhance business operations and deliver organizational values (Saheb & Mamaghani, 2021). AG is being explored within the international high-tech small and medium-sized enterprise (SME) context to develop dynamic capabilities that assist these SMEs in achieving agility in their cross-border activities (Jafari-Sadeghi, Amoozad Mahdiraji, Busso, & Yahiaoui, 2022). In the realm of global business, AG is being applied to promote sustainability practices within the supply chains of multinational companies operating in emerging markets (Soundararajan, Sahasranamam, Khan, & Jain, 2021). In education, an agile approach emphasizing self-direction, collaboration, and streamlined procedures is proposed to foster innovation in university teaching and learning (Wirsing & Frey, 2021). AG is also being considered as an input for the development of instruments for digital governance, aiming to enhance detection, decision-making, and response capabilities in dynamic business environments (Vaia, Arkhipova, & DeLone, 2022). In the context of smart cities, AG is facilitating the utilization of new technologies for urban planning and enabling active citizen engagement with decision-makers (Founoun et al., 2022; Hahn & te Brömmelstroet, 2021). Furthermore, AG is being explored as a guiding framework to overcome challenges and navigate dynamic environmental conditions during the Covid-19 pandemic (Halim, Astuti, & Umam, 2021; Janssen & Voort, 2020).

Despite the increasing application of Agile Governance in various domains, the related phenomena were not thoroughly explored until a few years ago. In order to enlighten the nature of these phenomena, the *Agile Governance Theory* (AGT) was developed (Luna, 2015) as an instrument to analyze and describe them.

According to the author's standpoint, it is contended that gaining a deeper understanding of the fundamental nature of *agile governance phenomena*, as well as identifying their constituent elements, mediators, moderators, and disturbing factors, can lead to the reasonable inference that these findings will assist organizations in attaining superior outcomes when implementing agile governance. These benefits include cost and time reduction, heightened quality and value delivery, and increased success rates in practice.

The reference to "AG phenomena" instead of a "phenomenon" is initially made based on the findings of the SLR-AG (Luna et al., 2014), which highlights 16 distinct application contexts (categories) organized into four major groups where Agile Governance (AG) manifests itself.

The AGT further corroborates that these phenomena can be classified as AGT phenomena in the plural form, as they manifest differently in each organizational context, adapting to their particularities. These adaptations primarily consider the influencing factors (*empirical indicators*). Additionally, the theory acknowledges the existence of commonalities among the *constructs*, the *interaction laws* that explain constructs behaviors, and the *system states* they strive to attain. This understanding is firmly supported by the theory when we examine the characterization of the eight progressive AGT theoretical scenarios that teams experience as they strive to achieve business agility. By analyzing these scenarios, we gain insights into the systematic progression and evolution teams undergo toward attaining organizational agility.

Furthermore, the AGT places agile governance within a chaordic spectrum between the innovative and emergent practices stemming from the agile (and lean) philosophy and the processes and mechanisms required by governance issues. The concept of chaordic philosophy, initially proposed by Dee Hock, the founder and CEO emeritus of the VISA credit card association (Hock,

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2005), characterizes a system of an organization combining chaos and order elements (Hock, 1999). It represents a harmonious and fertile business environment where the coexistence of chaos and order creates an ideal habitat for learning, transformation, growth, creativity, and innovation. In this context, agile governance finds its place, drawing upon the dynamic balance between the freedom to explore new approaches and the need for structure and control.

Moreover, the SLR-AG identified two distinct behavioral patterns within agile governance phenomena based on four major groups. The *first pattern* primarily encompasses application areas associated with Software Engineering and Manufacturing groups. These areas strive to incorporate governance practices that address their core concerns while leveraging the existing agile culture within their environments. In contrast, the *second pattern* predominantly encompasses application areas within Enterprise and Multidisciplinary groups. These areas emphasize the integration of agile methodologies with the preexisting governance capabilities to achieve improved, expedited, and adaptable outcomes in their core issues.

AGT has been formulated to provide individuals with a tool to comprehend their organizational context. This theory appears to be particularly valuable in identifying the impact of external environmental/organizational factors [E] that give rise to disruptions within the internal environment and the effects of moderator factors [M] that can hinder progress. With this enhanced understanding of the organization, teams can develop agile [A] and governance capabilities [G] and effectively apply them in a coordinated and integrated manner to their business operations [B], thereby enhancing the value delivered [R]. The letters between brackets identify the theory's constructs. Consequently, the organizational context under examination evolves, improving organizational competitiveness (by enhancing the ability to perceive and respond to changes in competitive environments) and enhancement of organizational sustainability (through addressing the root causes and mitigating moderator factors).

To illustrate the applicability of AGT, let us examine the concept of "Ambidextrous Governance", which is sometimes mistakenly equated with Agile Governance. According to (O'Reilly & Tushman, 2004), an "ambidextrous organization" refers to a way of operating where organizations can pursue disruptive innovations and generate new competitive advantages while concurrently maintaining their ability to conduct their traditional business operations. It is achieved by integrating the roles of managers, entrepreneurs, and leaders. It involves separating processes, structure, and culture between the emerging structures affected by innovation and the existing traditional organizational structures. These are managed through a closely integrated senior team to ensure operational resilience (Iborra, Safón, & Dolz, 2020).

In this context, "Ambidextrous Governance" is described as a dual governance model in which firms alternate between traditional and agile ITG mechanisms (Vejseli, Rossmann, & Garidis, 2022). On the other hand, Agile Governance aims to exert influence over the entire steering system of an organization, encompassing the perception, response, and coordination of every component of the corporate body. When viewed through the lens of AGT (Luna et al., 2020) and considering the previous characterization, Ambidextrous Governance would be classified as a 'specific agile approach' since its influence is limited to a localized outcome or a specific stage within the organization's value chain (Porter, 1985). Ultimately, in this ambidextrous approach, a portion of the organization would not fall within the scope of agile influence.

AGT suggests that the organization should iteratively and incrementally develop agility and governance capabilities. It means that processes, structures, and cultures can coexist as the

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organization evolves and builds these capabilities. However, any operational redundancy that arises during this transition phase must be temporary. In the long term, having multiple cultures within the same organization can be detrimental rather than beneficial. For example, regarding ITG mechanisms, AGT emphasizes the importance of agility and resilience. Simultaneously, these mechanisms must also adhere to compliance requirements. Compliance is not a matter of choice but a necessity to conform to relevant regulations and standards.

Additionally, the approach presented in AGT underscores the importance of thoughtfully and balancing using agile and lean capabilities according to the context experienced. This approach aims to foster resilience, adaptability, and swift response (effectiveness) in a coordinated manner while simultaneously striving to minimize waste (efficiency) during organizational transformations resulting from adaptations and responses to change. AGT advocates recognizing that certain situations may necessitate a predominantly agile approach, prioritizing quick reactions and adaptability to avoid missing market opportunities, even if it may entail some rework and potential waste. Conversely, there may be contexts where a predominantly lean approach is more appropriate, focusing on minimizing rework, responding slower, and gradually adapting to change to prevent wasteful practices. The underlying principle is to balance agility and lean principles based on the situation's specific needs and demands, aiming to achieve optimal effectiveness and efficiency while managing waste effectively during organizational transformations.

AGT characterizes agile governance as a socio-technical phenomenon that places individuals as change agents within organizational contexts, with technology often playing a crucial role in driving transformation. The socio-technical nature of agile governance stems from the necessity to comprehend and navigate the intricate intersections between technical and social elements. This understanding enables decision-makers to effectively address the social forces that influence technological decisions and the choices available to society regarding the use of technology. By recognizing the interplay between technical and social aspects, AGT empowers decision-makers to approach agile governance with thoughtfulness and intentionality, considering technological choices' broader implications and societal impact.

Most of the proposed foundations for the *Agile Governance Manifesto* (AGM) (Luna et al., 2016) are derived from the insights and perspectives offered by the analytical system provided by the AGT. The following section will delve back into these foundational aspects.

3. FOUNDATIONS FOR THE AGILE GOVERNANCE MANIFESTO

The *Agile Governance Manifesto* (AGM) was proposed as a guideline for adopting an iterative and people-centric approach to governance. It encompasses the following elements: (i) a statement composed of nine essential values, (ii) a team mission guided by two dimensions, and (iii) six meta-principles. We will now explore each of these elements in detail.

3.1 Statement and Values

In the original writing AGM (Luna et al., 2016) states:

"*We are uncovering better ways of steering the governance in our institutions by doing it ourselves and helping others to do so. Through this work, we have begun to value:*

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***Behavior** and **practice** over... process and procedures.*

*To achieve **sustainability** and **competitiveness** over... to be audited and compliant.*

***Transparency** and **people's engagement** to the business over... monitoring and controlling.*

*To **sense**, **adapt** and **respond** over... to follow a plan.*

That is, while there is value in the items on the right, we value the items on the left more."

The statement and values hold significant importance in guiding and shaping the approach to governance. They provide a clear and shared understanding of the principles and beliefs that underpin the desired governance practices. The statement concisely expresses the collective intent and aspirations, while the values outline the fundamental principles that drive decision-making, behavior, and organizational culture.

A statement and values help create alignment, foster a sense of purpose, and provide a common language and framework for governance discussions and actions. They should serve as a compass, guiding individuals and teams in making decisions and taking actions consistent with the desired governance approach.

Furthermore, the statement and values act as a reference point for evaluation and reflection, enabling organizations to assess their current practices, identify gaps or areas for improvement, and align their actions with the intended governance direction. They provide a basis for continuous learning, adaptation, and growth, ensuring that governance practices remain relevant and effective in an evolving organizational context.

The statement and values provide guidance, clarity, and alignment to pursue effective governance practices. They might be considered foundational elements that inform decision-making, shape organizational culture, and contribute to institutions' overall success and sustainability.

3.2 Team Mission

The term "team" is used broadly in AGM, encompassing various complementary connotations within an organizational context. It can refer to technical personnel, business professionals, and even the steering committee.

The team mission in AGM is stated as follows:

"Thus, in every organizational instance, the team recognizes as its core responsibility the provision of "useful value to the business", considering the following dimensions of its mission:

- ***Incrementally**: Through an iterative approach, the problems are divided into smaller pieces and solved.*
- ***Potentially deliverable**: At the end of each iteration, each delivery must have a recognizably useful value (make sense) for the business."*

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The importance of a team mission lies in providing a clear and shared purpose for the team members. It is a guiding framework that aligns their efforts, motivates their actions, and ensures they work towards a common goal. A team mission seeks to foster a sense of unity, collaboration, and collective responsibility among team members. It helps them prioritize their tasks, make informed decisions, and focus on achieving the desired outcomes. Additionally, a compelling team mission can enhance team cohesion, engagement, and overall performance, giving individuals a sense of meaning and contribution to a larger objective.

3.3 Meta-principles

The authors' choice to use the term "meta-principles" instead of simply "principles" in AGM is noteworthy. Adopting the Greek prefix "meta" reflects their aim to provide a comprehensive and transdisciplinary approach to understanding the agile governance phenomena. By employing this prefix, the meta-principles are intended to promote a holistic and inclusive perspective that transcends individual disciplines within agile governance. This approach seeks to encompass the broad nature of agile governance, recognizing the interconnectedness of its various components and disciplines.

Principles are essential in teamwork, providing a foundation for effective collaboration, communication, and overall team performance. They promote a positive team dynamic, effective communication, and a shared commitment to success. They guide cooperation, trust, and continuous improvement, enabling teams to work cohesively and achieve their goals.

In this paper, we exercise the freedom to revisit the discussion of these principles while preserving their fundamental essence. Initially, the AGM has put forward six meta-principles for agile governance, aiming to provide guidance for future research and, more importantly, steer practical implementations:

1. Good enough governance: "*The level of governance must always be adapted according to the organizational context*". The level of governance must be tailored to the organizational context, avoiding stifling initiatives or jeopardizing team sustainability. Achieving business agility requires finding the right balance in governance and adapting it to suit each organization's unique conditions and timing. This meta-principle prompts practitioners and researchers to consider the specific constraints faced by each organization while ensuring that regulatory aspects and market rules are not compromised. It encourages a thoughtful approach that respects the individual characteristics of each environment. For instance, what may be appropriate for one organization could be excessive for another, at least within a certain timeframe. The question to consider is whether investing in this "extra" level of governance is worthwhile when we put the team's operational capacity at risk. This meta-principle was originally proposed in 2014 and encapsulated in the AGM in 2016. We observe positively the concept of "tailoring" being adopted by various bodies of knowledge and frameworks in the market, such as the most recent editions of PMBOK (PMI, 2021), COBIT (ISACA, 2019), and ITIL (AXELOS, 2019), as a corroborating and assimilation of this principle by ITG practitioners.

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2. Business-driven: "*The business must be the reason for every decision and action*". In any organization and at every level, business strategy should guide decisions. This means that all decisions made within any business unit, whether at the organizational or sector level, should prioritize and align with the business requirements and priorities. Individuals must consider the impact of their decisions, designs, and approaches on satisfying business needs. It is important to foster a culture that permeates the entire enterprise and influences collective behavior, promoting a shared understanding of the organization's goals. By aligning the business layer with the governance layer, the various units within the organization can establish a symbiotic relationship. This facilitates increased flexibility and faster response times when the business demands swift infrastructure adaptation to meet evolving needs.

3. Human focused: "*People must feel valued and incentivized to participate creatively*". People should be recognized as vital agents of change and the driving force within organizations, and they should be encouraged to contribute creatively to achieve business objectives. Leaders play a crucial role in maximizing the value individuals bring to the company by strategically motivating them and fostering their engagement. However, traditional governance approaches often focus predominantly on structures and processes, overlooking the importance of understanding people as integral and innovative components. Recognizing people's significance and establishing effective mechanisms to incentivize and facilitate relationship-building, communication, and collaboration are essential for successful governance initiatives.

4. Based on quick wins: "*The quick wins have to be celebrated and used to get more impulse and results*". The achievements of teams in quick wins should be celebrated and given equal importance to problem-solving efforts. Furthermore, the momentum gained from these wins should be consciously utilized to drive new results. When aligned toward a common goal, quick wins aim to accumulate small successes that generate significant acceleration for the organization in the medium and long term. This progress should be continuously monitored and adjusted. As the team matures, it experiences smoother operations, reduced waste, and improved coordination among stakeholders (e.g., people and business units). The positive energy generated by these victories should be harnessed to provide feedback and motivate the team to continue advancing governance initiatives, thus emphasizing its value.

5. Systematic and Adaptive approach: "*The teams must develop the intrinsic ability to handle change systematically*". Teams must cultivate an inherent ability to manage change effectively by adopting an adaptive approach that aligns with the organization's current circumstances. Instead of solely relying on predictive methods, teams, and business units should strive to function as adaptive organisms. This entails embracing change as a natural aspect of the business environment and adapting to new factors that emerge from the evolving landscape and business requirements. Rather than attempting to anticipate every possible scenario within a given timeframe, the focus should be on adapting to the ever-changing dynamics and needs of the business environment.

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6. Simple design and continuous refinement: "*Teams must deliver fast and always be improving*." It means opting for more straightforward and feasible solutions that can be enhanced with minimal waste at the earliest opportunity. The aim is to embrace a simple design and refine it as soon as possible, striking a balance between agile and lean approaches. The architecture of solutions should focus on optimizing the desired outcomes with the available resources. In other words, sometimes it is preferable to create something simple that yields immediate results and invest more to improve it at the first opportunity, even if it entails some rework. This approach is more advantageous than pursuing a complex solution that consumes significant time and resources, potentially causing delays in responding to business changes or even being obsolete when finalized.

4. REFLECTIONS ABOUT PRACTICE

We advocate using the AGM meta-principles with a set of meta-values to help teams achieve superior business outcomes. These meta-values not only aid in distinguishing the conventional governance approach from agile governance but also serve as a behavioral guide. In Section 3.1, you can find a comprehensive set of meta-values that teams should consider. By adhering to these values, teams can effectively fulfill the mission outlined in Section 3.2.

The meta-values emerge as enduring beliefs or ideals shared by team members and stakeholders about what is and is not suitable or appropriate in their attitudes. Agile governance is primarily about behavior and practice rather than rigid processes. While processes and procedures are already well-established in the governance context and are often mandated to be followed, many requiring audits, regulations, or certifications as international standards, agile governance goes beyond these formal requirements. It emphasizes the behaviors and actions that drive effective and responsive governance.

Furthermore, we consider that embracing Agile Governance is crucial for enhancing organizational competitiveness by strengthening the ability to sense and respond to changes in competitive environments. It also enables organizations to enhance their sustainability by addressing the root causes and mitigating factors that affect it, as characterized in AGT. The AGT proposes a balanced combination of Agile and Governance capabilities that act as a buffer between enterprise resources and the dynamic business environment. These capabilities enable firms to adjust their resource mix and maintain their competitive advantage, which would otherwise be quickly eroded. As a result, these capabilities strongly emphasize resource development and renewal, making them particularly valuable for firms operating in rapidly changing environments.

Regulatory frameworks such as the Sarbanes-Oxley Act (Congress of the United States of America, 2002) in the U.S. and the Basel Accords (Bank for International Settlements, 2010) in Europe are examples of statutory mechanisms that must be addressed by team behavior and governance practices. Organizations need to establish robust security and auditing measures, ensuring business predictability. It aims to mitigate business risks, prevent fraud occurrences (or provide means to detect them), and ensure transparent management practices.

The team members may have some awareness of agile, lean, and governance concepts through literature, reports from other teams, courses, or other sources. However, developing competencies in these areas requires considering three essential pillars: (i) *knowledge* - understanding what and why to do; (ii) *skill* - knowing how to do it; and (iii) *attitude* - having the desire and motivation to take action.

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When organizations provide training courses or team members proactively seek to enhance their knowledge, they address the first pillar. Engaging a coach to assist the team in integrating acquired knowledge into their day-to-day practices and developing their skills addresses the first two pillars. However, the third pillar, which revolves around people's engagement, is often the most challenging to achieve and cultivate.

Fostering genuine *engagement* among team members is crucial for developing new competencies. It requires creating an environment where individuals feel motivated, empowered, and committed to applying their knowledge and skills. Achieving this level of engagement can be a complex endeavor but is essential for effectively developing and implementing agile and lean practices within the organization.

Conversely, achieving good governance requires capabilities such as flexibility, responsiveness, and adaptability, alongside an efficient and coordinated approach across multiple business units (UK Government, 2019). Simultaneously, the mentioned capabilities reside in the agility paradigm, as advocated by Yawised, Apasrawirote, Chatrangsan, & Muneesawang (2022).

4.1 Bridge's analogy

The metaphorical depiction of the bridge, as shown in Fig. 1, was introduced to illustrate the systematic symbiosis of the components in the *Agile Governance Manifesto* (AGM). Drawing inspiration from Beck's (2000) original view on eXtreme Programming (XP) principles and values, this bridge metaphor is a rich symbology, illustrating how integrating the proposed principles and values forms the foundation for achieving the team's mission and goals.

Considering this analogy, the *Agile Governance Manifesto* (AGM) serves as a "behavioral bridge", facilitating teams and organizations in their journey towards achieving business agility. In this metaphorical representation, the manifesto's meta-principles act as sturdy pillars that support the entire set of manifest elements. These foundations are further fortified by values, which serve as essential bindings, delineating the long-term objectives of applying *Agile Governance* and establishing criteria for success. The values also provide guidance for cultivating behaviors that foster an appreciative organizational culture, thereby strengthening the overall infrastructure. Within this comprehensive framework, the team's mission becomes the designated path to be followed, enabling practitioners to transition from a conventional approach to attaining business agility. Moreover, to uphold and concretize the values, meta-principles play a crucial role by guiding the development of practices and serving as governance mechanisms for teams to achieve and sustain business agility in a viable manner consistently.

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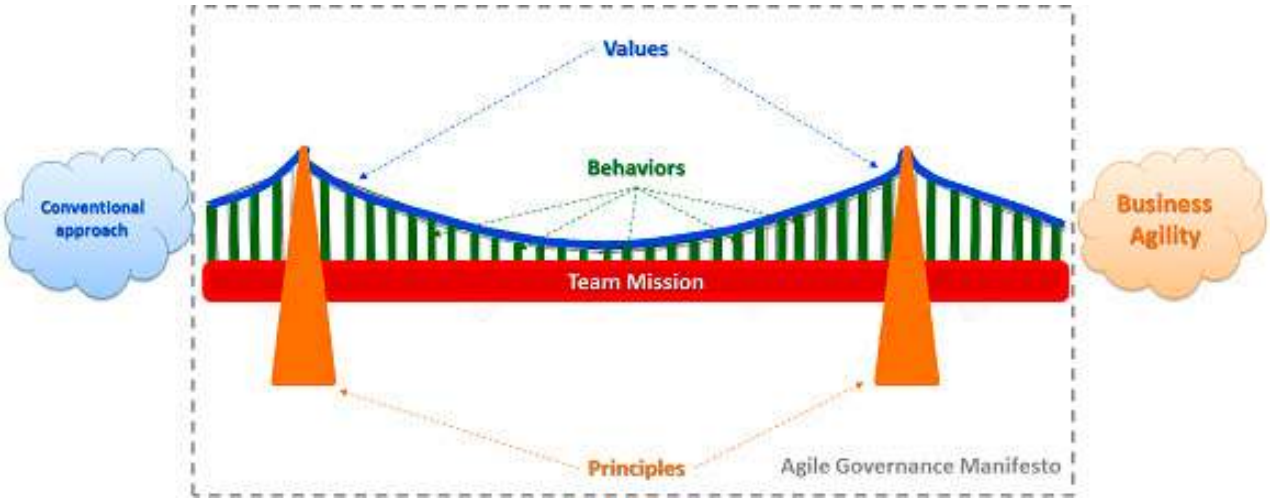

Figure 1. Agile Governance: Bridge's analogy. Source: (Luna et al., 2016).

4.2. Governance Office

Aiming to facilitate the practical implementation of the manifesto's elements within organizations, we propose the establishment of a *Governance Office* (GO). The GO serves as an organizational entity entrusted with multiple responsibilities focused on coordinating governance initiatives. Its primary objective is to foster the effective development of a cluster of organizational steering capabilities anchored in three key dimensions.

Firstly, the GO is responsible for strategically planning the organization's direction, ensuring alignment with overarching goals and objectives. This entails formulating strategic plans encompassing agile governance principles and values and setting a clear roadmap for the organization's agile transformation.

Secondly, the GO plays a vital role in establishing mechanisms and frameworks that guarantee the successful execution of strategic planning. This involves designing and implementing governance structures, processes, and policies that enable effective decision-making, accountability, and performance monitoring throughout the organization.

Lastly, the GO assumes the critical task of sensing and responding to change. By staying attuned to the dynamic external environment, the GO proactively identifies emerging trends, market shifts, and evolving customer needs. This enables the organization to adapt its strategies, practices, and governance swiftly approaches to maintain relevance and competitiveness.

By establishing a Governance Office, organizations can create an enabling environment that practically supports implementing the manifesto's elements. The GO is a central hub for coordinating and driving agile governance initiatives, empowering the organization to navigate complexity, enhance responsiveness, and embrace continuous improvement.

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Given that governance initiatives are intertwined with various aspects of business processes management, product management, and service management, it becomes apparent that the Governance Office (GO) can encompass or ensure alignment with the missions of other organizational entities. These entities include the Project Management Office (PMO), Service Management Office (SMO), Process Management Office (P'MO), Product Management Office (P''MO), and more recently, Data Governance Office (DGO), Compliance Office (CO), Research Governance Office (RGO), among others.

The GO acts as a central coordinating body that fosters collaboration and synergy among these different offices, ensuring their activities align with the broader objectives of agile governance. By establishing clear lines of communication and promoting cross-functional collaboration, the GO facilitates the integration of project management, service management, process management, and product management into the overall governance framework.

Fig. 2 is an initial version of the GO concept proposed by the AGM in 2016, and it serves as an initial representation of the relationships among these entities. It illustrates the interconnectedness and alignment of their missions within the broader context of the Governance Office. This visualization offers a starting point for understanding the potential synergies and collaborative efforts between these offices, emphasizing the need for coordination and integration in achieving organizational objectives.

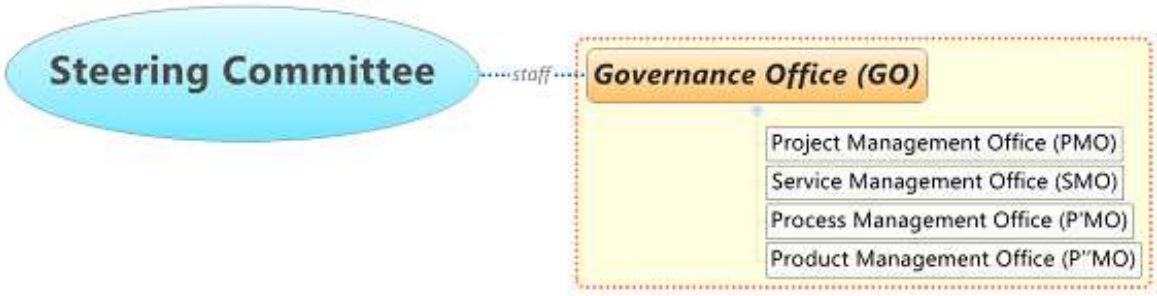

Figure 2. Governance Office relations. Source: (Luna et al., 2016).

By encompassing or aligning with these various offices, the Governance Office strengthens the overall governance framework, promoting consistency, efficiency, and effectiveness in managing business processes, products, services, and projects.

The Governance Office serves as the operational body of the steering committee, playing a crucial role in guiding teams and ensuring adherence to the established governance standards set by the organization's policies. As the central hub for governance and management, the Governance Office assumes multiple responsibilities.

Firstly, the GO Team acts as a consultant, providing expert advice and training to teams and helping them navigate the complexities of agile governance. Additionally, they carry out audits and performance monitoring to ensure compliance and identify areas for improvement.

The Governance Office also functions as a center for information and control. It houses valuable resources such as charts, diagrams, documentation, and schedules, which serve as essential references for governance activities. It acts as a knowledge repository and facilitates easy access to the information and tools required for effective governance.

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Furthermore, the GO is the home of the governance and management team, serving as a supportive environment where the team can collaborate and work together. It fosters a sense of community and provides the necessary infrastructure and resources to empower the team in their governance-related responsibilities.

In future publications, we intend to delve deeper into this topic, exploring the various facets of the *Governance Office* and its role in driving successful agile governance within organizations.

4.3. Agenda: Agile Governance Research Framework

Considering that agility is a different way of thinking, supported by a distinctive way of working, we might think that a Research Agenda for developing the Agile Governance field of study would be structured at least in two lines of investigation: (1) an **instrumental** line: dedicated to contributing to better ways of working, focused on enhancing work methodologies, developing tools, frameworks, bodies of knowledge, and practical applications; and (2) a **behavioral** line: dedicated to helping people internalize the agile thinking, dedicated to investigating ways to cultivate positive attitudes towards change and facilitate adaptability in response to evolving situations.

Given that agility represents a paradigm shift in thinking that a befitting approach to work must accompany, it makes sense to contemplate these two issues in a Research Agenda to explore the latent synergy among them.

The first line of investigation, the instrumental line, would enrich the work practices by refining work methodologies and developing innovative tools, frameworks, bodies of knowledge, and practical applications. This line of research seeks to contribute to creating more effective and efficient work practices, enabling organizations to harness the benefits of agile governance.

On the other hand, the second line of investigation, referred to as the behavioral line, would center on assisting individuals and teams in internalizing the principles of agile thinking. This line of research would explore strategies to foster positive attitudes toward change and cultivate a mindset of adaptability in response to evolving situations. By understanding agile governance's psychological and behavioral aspects, researchers can identify ways to facilitate adopting and implementing agile practices within organizations.

By embracing both the instrumental and behavioral dimensions, the Research Agenda for developing the Agile Governance field of study would provide a comprehensive approach that addresses the technical and human aspects of these transformative socio-technical phenomena.

In an effort to translate this understanding into practical application, our initial endeavor was to outline a design that could serve as a research framework encompassing these two lines of investigation, as illustrated in Fig. 3. We have termed this design the Agile Governance Research Framework (AGRF). Subsequently, we position certain topics examined in this article within this framework, including the Agile Governance Manifesto (AGM) and the Agile Governance Theory (AGT).

Next, we aimed to situate within the Agile Governance Research Framework (AGRF) a selection of research endeavors conducted over the past 15 years and ongoing research initiatives. This positioning serves the purpose of examining the coherence and consistency of the proposed framework.

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In order to keep the figure symmetry, we chose only five research initiatives for each research line. However, we experienced no discomfort in positioning all our research teams' past and ongoing research endeavors within the framework. The resulting arrangement can be observed in Fig. 3.

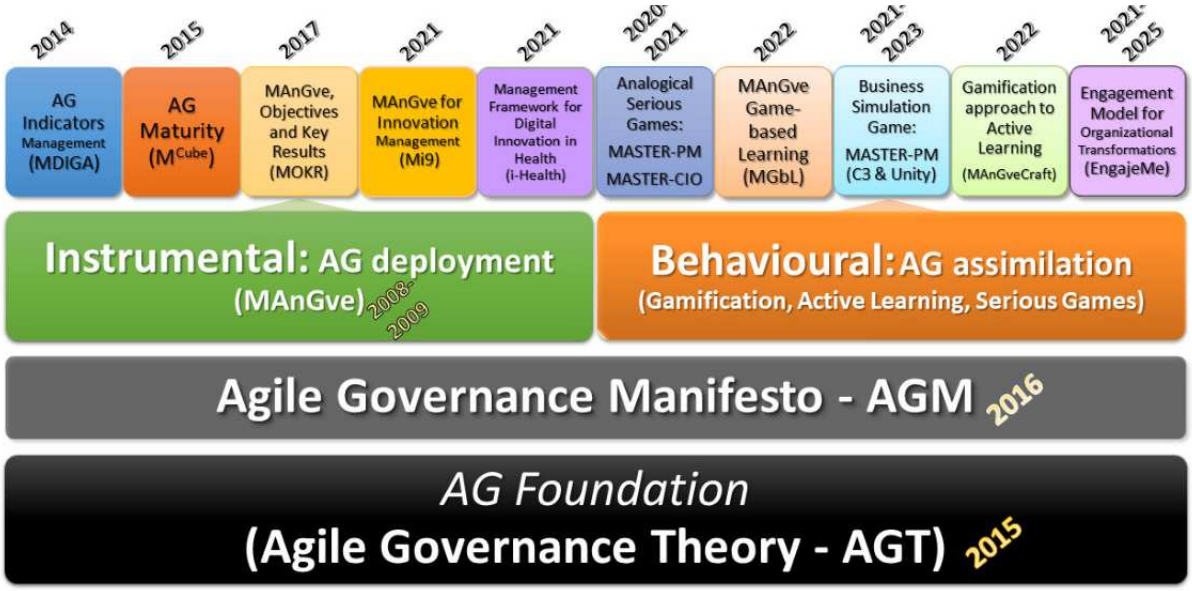

Figure 3. Agile Governance Research Framework. Own elaboration

This framework can be improved by other researchers and research groups developing investigations on agile governance. The fact that we were able to satisfactorily fit our investigations into the two lines of research identified in the framework only means that other potential lines of research may exist but are still not being investigated by our team.

The purpose of this section is not to provide an exhaustive characterization of each element within the mentioned framework but to offer illustrative examples that create a more comprehensive context for the framework's application by fellow researchers and practitioners. By presenting these examples, we aim to facilitate a deeper understanding and encourage wider utilization of the framework in diverse research and practical contexts in the coming years.

The Agile Governance Theory (AGT) serves as a fundamental basis for various elements of the Agile Governance Manifesto (AGM). Within this context, the AGM appears to function as behavioral guidelines aimed at assisting individuals and teams in understanding and implementing the systematic thinking provided by the AGT. The knowledge base of the initial layer can be enriched by incorporating new theories. Similarly, the manifesto can be enhanced by integrating knowledge generated by new research, encompassing fundamentals, practical experiences, and technical and scientific expertise.

In the AGRF **instrumental line**, we can contextualize some research endeavors. **MAnGve** is an *agile framework* designed for agile governance implementation (Luna, 2009). MAnGve serves as a catalyst, orchestrating and accelerating the deployment and enhancing IT services and ITG (IT Governance) processes (Luna, 2009). Drawing upon the valuable insights gained from years of applying MAnGve, a book titled "MAnGve: Deploying Agile Governance" (Luna, 2011) was published in 2011 to cater specifically to practitioners in the field.

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MOKR emerges as an approach that integrates the MAnGve framework and OKR (Objectives and Key Results) methodology. This combination enables organizations to leverage their strategic planning instruments as drivers of institutional governance. By adopting MOKR, organizations can effectively monitor the compliance and alignment of their operations with the overall strategy. It empowers organizations to track progress, ensure strategic alignment, and assess the appropriateness of their strategies in real time, leading to more effective and responsive governance practices (Luna, Ribeiro, Maciel, de Farias Júnior, & Moura, 2017).

MAnGve-i9 (Mi9) is a framework for Innovation Governance and Management, which was originally designed for Science, Technology, and Innovation (ST&I) Ecosystems. Mi9 offers a structured framework for guiding the governance and management of innovation projects, fostering collaboration, and facilitating the successful execution of innovative ideas (Luna & Lima, 2021).

In the **behavioral line** of the AGRF, we can exemplify some research endeavors that delve into the human aspects of agile governance. Given that engagement often presents itself as a recurring obstacle during organizational transformations and substantially influences the effectiveness of learning, both in training and managerial contexts, we embarked on some investigations to explore the potential of active learning and serious games in fostering an engaging learning process. Our objective was to gain deeper insights into the factors that influence engagement's occurrence and long-term sustainability, recognizing its significance in driving successful organizational outcomes.

As a result of our efforts, we have successfully conceived, designed, developed, and evaluated some serious games. Initially, we focused on creating analog collaborative games, specifically **MASTER-PM** and **MASTER-CIO**. This endeavor provided valuable insights and propelled us towards designing a transdisciplinary game-based learning (**MGbL**) approach, which we subsequently evaluated across different undergraduate courses (Luna, Silva, Lima, & Rocha, 2022; Silva, Albuquerque, Lira, Lima, & Luna, 2022).

Recognizing the pivotal role of projects in driving organizational changes, we then proceeded to advance the development and enhancement of a digital *Business Serious Game* (BSG), which represents an evolution of the original **MASTER-PM** concept. This interactive tool aims to offer new avenues for experiential learning, decision-making, and action in the context of project management. By engaging with the BSG, we aim to foster the development of essential skills that assist both aspiring professionals (students) and practitioners in effectively navigating dynamic, competitive, and turbulent environments characterized by frequent or intense changes, where managing the resulting dynamics presents a significant challenge.

Based on the evaluation data of this game development, the research team is working on conceiving a model called **EngageMe**. This model seeks to comprehensively describe the phenomenon of teamwork engagement by examining and characterizing the behaviors of inhibiting, moderating, mediating, and stimulating factors. Through this ongoing endeavor, we strive to deepen our understanding of teamwork engagement, its intricate dynamics, and its impact on organizational changes.

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The exercise of populating our research initiatives illustrate a first attempt to test the coherence and consistency of the proposed framework (AGRF). However, it is important to note that a spectrum of intriguing and complex topics arise, presenting themselves as compelling subjects for further investigation within this agenda. In the following discussion, we will concisely characterize these topics to stimulate the development of new research in this field.

1. Considering inherent **instrumental** research line characteristics of the framework:

1.1 Analyzing AG Practices: Conduct empirical research to investigate the implementation and efficacy of agile governance practices in diverse organizational contexts. Explore the influential factors contributing to the successful adoption of agile governance, identify the challenges encountered, and develop strategies to overcome them.

1.2. Designing AG Metrics and Measurement: Develop and evaluate metrics and measurement instruments to evaluate the impact and outcomes of agile governance initiatives. Investigate how agile governance practices influence critical performance indicators, including cost reduction, time-to-market, customer satisfaction, and quality enhancement.

1.3. **Exploring the integration of Agile and Traditional** Governance Models: Investigate approaches to integrate agile and traditional governance models, aiming to create a transitional hybrid governance approach that facilitates organizations with challenges in assimilating an agile culture to transition smoothly to agile governance. Explore strategies for striking a balance between agility and compliance, ensuring that governance processes support innovation and flexibility while meeting regulatory and compliance requirements.

1.4. **Agile Governance in Digital Transformations:** Explore the role of agile governance in supporting and accelerating digital transformation initiatives. Investigate how agile governance principles and practices can enable organizations to navigate and leverage emerging technologies, deal with changes arising from them, and analyze AG's impact on digital transformation outcomes.

1.5. A**gile Governance in Global and Distributed Environments:** Study the dynamics, implications, challenges, and opportunities of implementing agile governance in global and distributed organizations. Investigate how agile governance practices can effectively coordinate and align activities across geographically dispersed teams, departments, and external partners.

1.6. Agile Governance in Artificial Intelligence (AI) Adoption and Implementation: Explore the intersection of agile governance and artificial intelligence (AI) technologies. It aims to investigate how agile governance practices can effectively guide and govern AI adoption and implementation processes in organizations. The research explores the challenges, opportunities, and implications of integrating agile governance principles into AI initiatives, focusing on ensuring transparency, ethical considerations, and responsible AI deployment.

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1.7. Agile Governance in Global Digital Health: Investigate applying agile governance principles and practices in the context of global digital health initiatives. Explore how agile governance can support the effective implementation and management of digital health technologies and solutions on a global scale, helping institutions and authorities respond quickly to health emergencies of global proportions. Examine agile governance's challenges, opportunities, and implications in ensuring digital health systems' successful adoption, interoperability, and sustainability across diverse healthcare ecosystems.

2. Taking into account the inherent characteristics of the framework in behavioral research line:

2.1. Engaging People in Organizational Transformations: Investigate strategies and approaches to effectively engage individuals in organizational transformations, whether technological or cultural. It aims to understand how to stimulate individuals and teams to actively participate and embrace changes becoming part of Agile Governance initiatives.

2.2. Investigating AG in Complex Environments: Explore applying agile governance principles and practices in complex and dynamic environments, such as large-scale enterprises, government organizations, multi-organizational contexts, and multi-stakeholder collaborations. Study the necessary adaptations and modifications to implement agile governance effectively in these contexts.

2.3. Organizational Culture and Agile Governance: Examine the role of organizational culture in enabling or hindering the successful implementation of agile governance. Investigate the impact of cultural factors on the adoption and effectiveness of agile governance practices, including leadership styles, collaboration practices, and decision-making processes.

2.4. Agile Governance and Ethical Considerations: Explore the ethical implications of agile governance, particularly concerning privacy, data security, and responsible use of emerging technologies. Investigate how agile governance frameworks can integrate ethical considerations and ensure responsible decision-making, particularly considering the use of sensitive data and the most recent international legislation for protecting personal data.

2.5 Agile Governance and Organizational Learning: Investigate the impact of agile governance on organizational learning and knowledge-sharing. Analyze the influence of agile governance on knowledge acquisition, dissemination, and utilization. Examine how agile governance practices can foster a culture of continuous learning, experimentation, and adaptation within organizations.

By presenting these twelve research topics and a research framework to organize them, we intend to provide valuable insights to researchers and professionals, encouraging them to contemplate the vast potential of Agile Governance (AG) research. We aim to foster a critical perspective that enables the identification of untapped opportunities for both research and practical applications in this field.

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A discerning reader may raise the point that many of these research topics encompass both instrumental and behavioral aspects, and it may not be fair to exclusively categorize a topic under one line or the other as proposed by the framework. We acknowledge that this is a valid argument, and we agree that depending on the study's purpose and design, research motivated by the same topics could predominantly align with either the instrumental or behavioral line. Therefore, although we have grouped the topics based on the inherent characteristics of each research line in the framework, we deliberately refrain from presenting a new figure depicting these 12 topics. Our intention is to encourage each researcher and practitioner to develop their own design, drawing from the illustrative design presented in Fig. 3, and considering the specific characteristics of their research.

Through these explorations, we aspire to foster and stimulate the knowledge production that aids organizations in responding and adapting swiftly to the evolving dynamics of their environment. The collective efforts in research and practice can empower organizations to outpace the speed of change, ensuring they remain agile and resilient in the face of uncertainty.

5. CONCLUSION

The *contribution* of this paper lies in providing a comprehensive and up-to-date review of the *Foundations for an Agile Governance Manifesto* (AGM), considering the advancements in Agile Governance (AG) research and practice since its initial publication. In addition, we delve into the critical role of the Governance Office (GO) and explore its implications for the successful implementation of the AGM. Furthermore, we present an outlined structure for developing an Agile Governance Research Framework (AGRF), in which we evaluate positioning our past and ongoing research endeavors. As a result, we put forth a research agenda encompassing 12 distinct research topics, each focusing on various aspects of the AG domain, aiming to foster further exploration and development in the field.

This manifesto remains current, serving as a valuable resource for teams engaged in governance projects and finding applications in various daily management scenarios. The meta-principles and values outlined in this manifesto offer a behavioral compass, enabling teams to strive for optimal outcomes. By embracing these principles, it is reasonable to imply that teams can navigate their efforts with innate intuition, productivity, equilibrium, and prosperity, fostering a human-centric approach that enhances overall performance.

Regarding *study limitations*, it is important to acknowledge the scarcity of scientific literature on the description and analysis of agile governance phenomena. This gap restricts the scope of exploration in this field. Similarly, the existing studies predominantly focus on practical applications or were purely propositional, which limits the potential of the findings obtained thus far. These constraints highlight the need for further research and empirical studies to deepen our understanding of agile governance and uncover its broader implications.

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We propose an engaging research agenda encompassing 12 intriguing research lines for *future endeavors*. These topics of inquiry can be categorized into two main research lines: instrumental and behavioral research. Within this broad investigation horizon, we suggest delving into captivating subjects such as digital transformation, distributed teamwork, artificial intelligence, digital health, people engagement, complex and competitive environments, organizational culture, ethical issues, and organizational learning. These research topics offer abundant opportunities for exploration and hold immense potential for advancing our understanding of agile governance and its implications in various domains. By pursuing these research topics, researchers and practitioners can contribute to the continuous growth and development of the field, fostering innovation and enhancing the knowledge base on agile governance.

SIGNATORIES

You can find the Agile Governance Manifesto and its signatories on the official website (AgileGovernance.Org, 2009), a platform for individuals to endorse and support the manifesto. If you are interested in contributing to this movement, you are welcome to sign up and join the community. Your participation and insights will be valuable in shaping the future of agile governance research and practice. Feel free to visit the website and add your name to the growing list of supporters.

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[3] FREVO—Fostering Research on managEment and InnoVatiOn is a concrete example of a self-organized multidisciplinary research team, and I am very proud and pleased to be part of this brotherhood. See more at: http://www.frevo.org.

[4] AGRLab channel for disseminating progress and research results: https://www.instagram.com/agilegovernancelab/

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