



UNIVERSIDADE CATÓLICA PORTUGUESA

Dynamic Capabilities in Practice: The Case of  
Wegho Navigating Market Needs in a VUCA  
Environment

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Environment

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# Resumo

O atual ambiente volátil, incerto, complexo e ambíguo (VUCA) influencia os negócios e exige a adaptação dos modelos de negócio para a sustentação das suas atividades. O presente estudo examina os desafios enfrentados pela empresa portuguesa de limpezas Wegho, bem como as suas estratégias para reconfigurar o modelo de negócio, mitigando riscos e capitalizando oportunidades ambientais por meio da mobilização das suas capacidades dinâmicas.

O principal objetivo desta dissertação consiste em analisar as estratégias adoptadas pela Wegho na adaptação do seu modelo de negócio, com vista à melhoria do desempenho da empresa num contexto VUCA. A base teórica do estudo assenta no enquadramento das capacidades dinâmicas, nomeadamente nas suas funções de deteção, aproveitamento de oportunidades e transformação de modelos de negócio. Esta investigação recorre a dados secundários sobre a empresa e a dados primários recolhidos através de entrevistas semiestruturadas, configurando assim um estudo de caso de natureza qualitativa.

Os resultados da investigação evidenciam as limitações encontradas pela empresa no segmento B2C e as estratégias implementadas no segmento B2B. O estudo valida empiricamente o papel mediador das capacidades dinâmicas no alinhamento das competências internas com as mudanças do ambiente externo e na melhoria do desempenho organizacional. As implicações de natureza gerencial salientam a importância de fomentar capacidades adaptativas e uma visão estratégica prospectiva para uma navegação eficaz em contextos VUCA.

Keywords: capacidades dinâmicas, , VUCA, desempenho firme, o modelo de negócio

# Abstract

The present volatile, uncertain, complex, and ambiguous (VUCA) environment influences businesses and require the adaptation of their business models to sustain its activities. The study examined the challenges encountered by the Portuguese cleaning company Wegho and its strategies to reconfigure its business model by mitigating risks and capitalising on environmental opportunities through the utilisation of its dynamic capabilities.

The main purpose of this thesis is to analyse the strategies employed by Wegho in adapting its business model to improve firm performance in a VUCA environment. The theoretical foundation of the study relies on the objectives of dynamic capabilities to sense, seize opportunities, and transform business models. This research is based on secondary data regarding the company and primary data obtained through semi-structured interviews, thereby creating a qualitative case study.

The research findings indicate the constraints encountered by the company in the B2C segment and the strategies that Wegho pursued in the B2B segment. The research empirically validates the mediating role of dynamic capabilities in aligning internal competencies with environmental changes and improving firm performance. Managerial implications underscore the necessity of fostering adaptive capabilities and strategic foresight to effectively navigate VUCA conditions.

Keywords: dynamic capabilities, VUCA environment, firm performance, business model adaptation

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# 1 Introduction

The scenario of an unstable environment is not novel in human history, the distinctive characteristics of today's instability can be traced back to various periods throughout history (Nandram & Bindlish, 2017). The sources of the unstable current environment are globalisation, digitalisation, technological and economic turbulence, unstable markets, geopolitical rivalry, war crises, and pandemics (Saleh & Watson, 2017; Baran & Woznyj, 2020; Millar et al., 2018). These significant changes create serious business obstacles and risks, while also encouraging innovation and creating opportunities. The recent case is Covid-19, most of businesses and industries were severely affected by the circumstances while simultaneously were able to accelerate digital evolution, revealing the influence of the dynamic environment to pose both challenges and opportunities (Linthorst & Waal, 2020).

Nowadays the companies face a challenge to maintain one business model due to the accelerated pace of changes and the unpredictable environment by nature (Johansen & Euchner, 2013). As the result, organisations are forced to reconfigure their traditional approaches and adapt their business models embracing innovative methods. Business models are dynamic, a mismatch between environment and business model increases the risk of failure of the firm. Despite the constantly presented environmental opportunities, companies have yet to identify them, allocate their resources effectively, and reshape their business models. The success of the company depends on aligning internal activities, company capabilities, and external environments to seize market opportunities; it becomes necessary to structure firms in such a way that will meet the challenges. Consequently, a firm's capabilities aid to capitalise on identified opportunities and enhance firm performance, by aligning their business model with the environment.

In recent academic literature, there has been extensive discussion around the mediator role of organizational dynamic capabilities as essential variables to identify the market opportunity and to present responses to the challenges posed by the environment. There is extensive research on business model adaptation and business model innovation that has drawn significant attention from academics and practitioners, due to the constant need for organizations to adapt to rapidly changing conditions. This study contributes to the theoretical insight by highlighting how dynamic capabilities mediate business model transformation and how these elements influenced by external environmental conditions. Furthermore, dynamic capabilities in the study, are highlighted as mediating variables in identifying opportunities that lead the organization to reconfigure the business model.

Based on the above discussion, the research question is: **“How does the company reconfigure its business model by leveraging dynamic capabilities in response to the challenges of a VUCA environment?”**

This thesis is structured into seven chapters. The first chapter introduces the research context, highlighting the influence of the VUCA framework, highlighting its relevance and outlining the research question. The second chapter provides a detailed literature review, exploring the theoretical foundations of VUCA, dynamic capabilities, business model dynamics and firm performance. These concepts form the conceptual lens through which the case study is examined. Chapter three presents the conceptual framework, illustrating the interrelation between the external environment, firm capabilities, and business model adaptation. The fourth chapter outlines the methodological approach, justifying the use of a qualitative case study and explaining the data collection and analysis methods. Chapter five presents the findings of the case study, offering an in depth study of Wegho’s strategic adaptation in response to environmental challenges, supported by insights from a secondary case, Vadeca.

Chapter six provides a critical discussion of the findings in relation to existing theory, addressing the role of dynamic capabilities and organizational responsiveness in navigating VUCA conditions. Finally, chapter seven concludes the study by summarizing the key contributions, outlining managerial implications, theoretical contribution, and acknowledging limitations, while also suggesting directions for future research.

## 2 Literature review

### 2.1 VUCA environment

Like many strategies, VUCA concept has originated from military science (Knights & Morgan, 1991; Johansen, 2007; Whiteman, 1998). The acronym VUCA that describes the unstable environment stands for volatility, uncertainty, complexity and ambiguity. Robert Johansen has paralleled the VUCA concept initially to the commercial segment in 2001, but the significant VUCA impact to the business world gained prominence highlighting the unstable business economy following the 2008 global financial crisis (Lawrence, 2013). Most studies demonstrate an overlap in defining VUCA elements, indicating that these elements are perceived with relevant consistency among authors (Bader et al., 2019; Bennett & Lemoine, 2014; Billiones, 2019; Raghuramapatruni & Kosuri, 2017; Saleh & Watson, 2017). In the academic literature, the VUCA environment is studied from the perspective of leadership, market orientation, innovation processes and organisation adaptiveness, which explains the broad concept of VUCA and the lack of precision due to the unexclusively to specific industries (Millar et al., 2018). According to Taşkan et al. (2022), this study analysed previous studies about VUCA, the academic importance of VUCA has been particularly studied between 2017 and 2021, with the increased number of studies during this period, specifically after the Covid-19 pandemic, increasing its relevance by the rise of unprecedented challenges that forced firms to adapt to the conditions.

Nowadays, due to the technological advancement, companies have shifted its focus to information technologies.. Disruptive technology influences the economy by affecting consumption patterns, driving the development of new products and services, stimulating economic growth and productivity, and

creating opportunities for entrepreneurship. In McKinsey 2023 report seen a significant spike in the adoption of artificial intelligence technologies among business to enable automation, data-driven decision-making, and an enhanced customer experience. These advancements are reshaping businesses and enabling new market entrants (McKinsey & Company & Yee, 2024). As the result of technology integration, VUCA environment is seem as an outcome of innovation and disruption as well as one of its drivers, meaning, it poses challenges and opportunities (Chadha & Sharma, 2021; Millar et al, 2018).

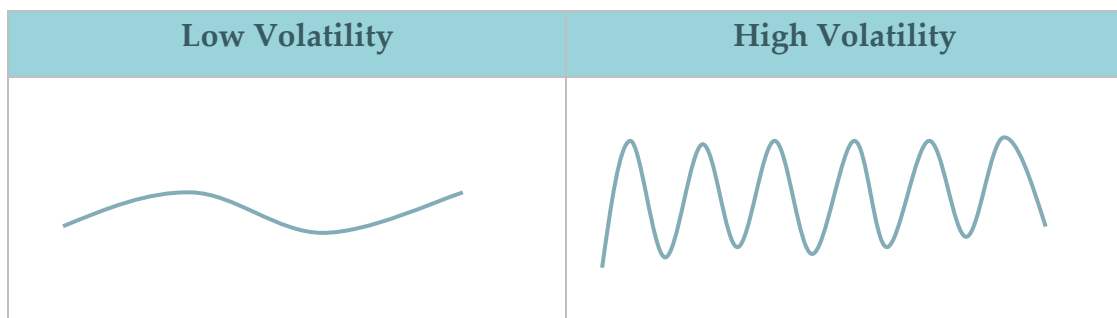
### 2.1.1 Challenges of VUCA elements

The term VUCA has been applied at the conceptual level to the contemporary business environment, capturing the essence of market conditions which create challenges for organisations (Johansen & Euchner, 2013). These challenges span across areas such as changing organisational structures, planning strategy, resource allocation, and adaptation of innovation (Millar et al, 2018). The challenges of the VUCA environment may arise from historical precedents and emerging factors. No matter what the precedent of the VUCA challenges, it has transformed business strategic planning. Nowadays, strategies opposite to traditional long term approaches that were effective in stable and predictable conditions. To attain the right strategy, the study of Yarger (2006) highlights that the corporate nature of the environment can highlight a company's possibilities and limitations, adapting its strategic objectives, capabilities and resources.

Understanding VUCA dimensions is crucial for firms aiming to navigate and thrive amid the complexities of the dynamic world. Each of these elements of VUCA indicates a different type of challenges that firms might encounter; in other studies, the elements are interpreted differently but overlapping in core

meaning (Bader et al., 2019; Bennett & Lemoine, 2014; Billiones, 2019; Drucker, 2012; Saleh & Watson, 2017;). To efficiently allocate resources and respond proactively to the VUCA environment, organizations should see each element individually since each of them has its own triggers (Bennett & Lemoine, 2014). The definitions of the four VUCA challenges by Bennett and Lemoine (2014) are highly recognized and most frequently referenced.

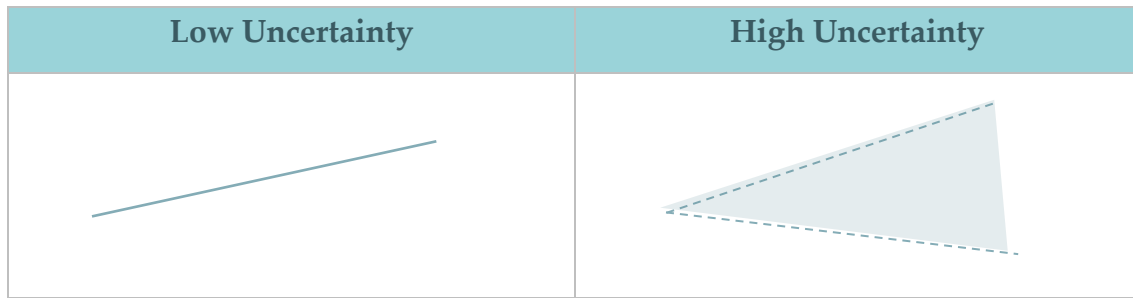
The first of the elements described by Bennet and Lemoine is volatility, which describes the high frequency and unpredictability of environmental changes. Volatility antecedents are political and economic shifts, sudden changes of pace in manufacturing and service, and current disruptive technology trends, resulting in a lack of predictable patterns that significantly impact an organization’s long-term planning (Bennett & Lemoine, 2014; Sinha & Sinha, 2020). Visual representation is seen in Figure 1, reflecting that the more volatile the environment, the more it correlates with the elasticity in demand and market dynamism.



**Figure 1:** Visual representation of Volatility.

Source: Adapted from “The four dimensions of VUCA” by Kraaijenbrink, J. (2018).

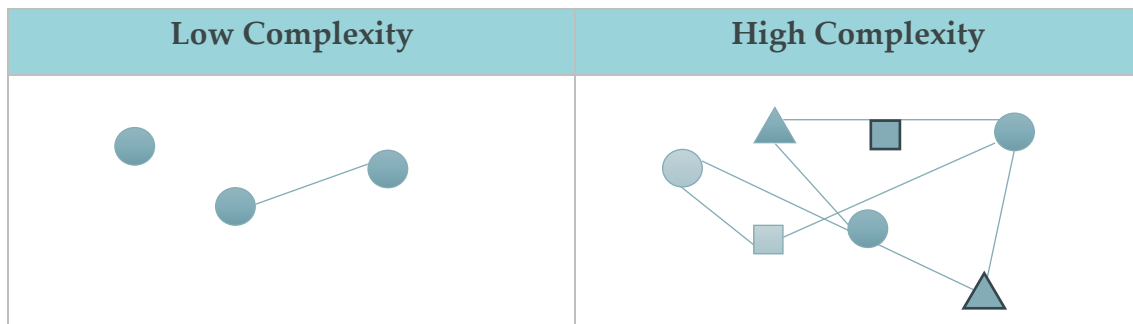
The second element of VUCA is uncertainty (Figure 2), which signifies a lack of sufficient information to determine the most effective course of action. Uncertainty is the condition of being unable to accurately predict whether an event will result in a significant change for the organization (Bennett and Lemoine, 2014). Some studies mention that the cause-and-effect relationship of an event is known which reduces the potential threat of the event (Bader et al., 2019; Bennett & Lemoine, 2014).



**Figure 2: Visual representation of Uncertainty.**

Source: Adapted from “The four dimensions of VUCA” by Kraaijenbrink, J. (2018).

The third element is complexity, refers to the numerous interconnected variables of the event (April & Chimenya, 2019; Bennett & Lemoine, 2014). This element is distinct from a volatile or an uncertain situation, complexity highlights the risks of not properly understanding and defining organization challenges, the most direct and straightforward way for an organization to address complexity is to simplify the situation, dividing the environment by variables and address eventually by restructure the operations or business model to align with the new environmental complexity. Complex environment may contribute to an information overload, resulting in a lack of clarity about the operating environment (Figure 3).

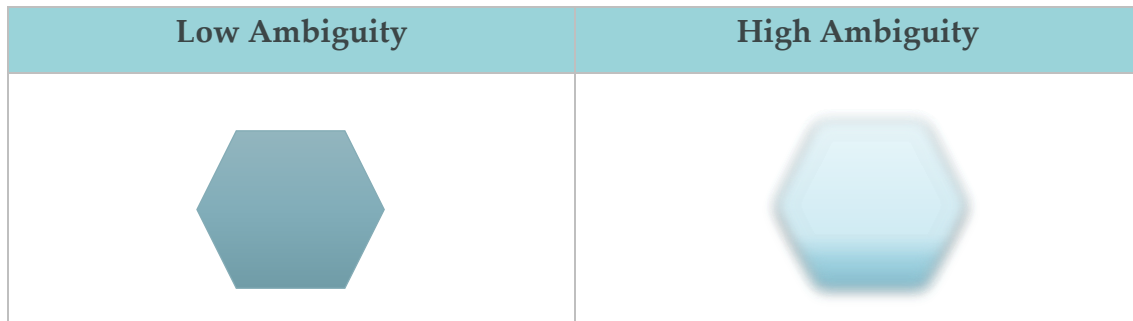


**Figure 3: Visual representation of Complexity.**

Source: Adapted from “The four dimensions of VUCA” by Kraaijenbrink, J. (2018).

Last of the elements is ambiguity, the condition of having insufficient or unclear information, which makes it challenging for an organization to make predictions or interpret circumstances (Bennett & Lemoine, 2014). Emergence of unknown trends, new market entries, or innovative products are antecsesents of ambiguity . There is a significant difference between ambiguity and uncertainty

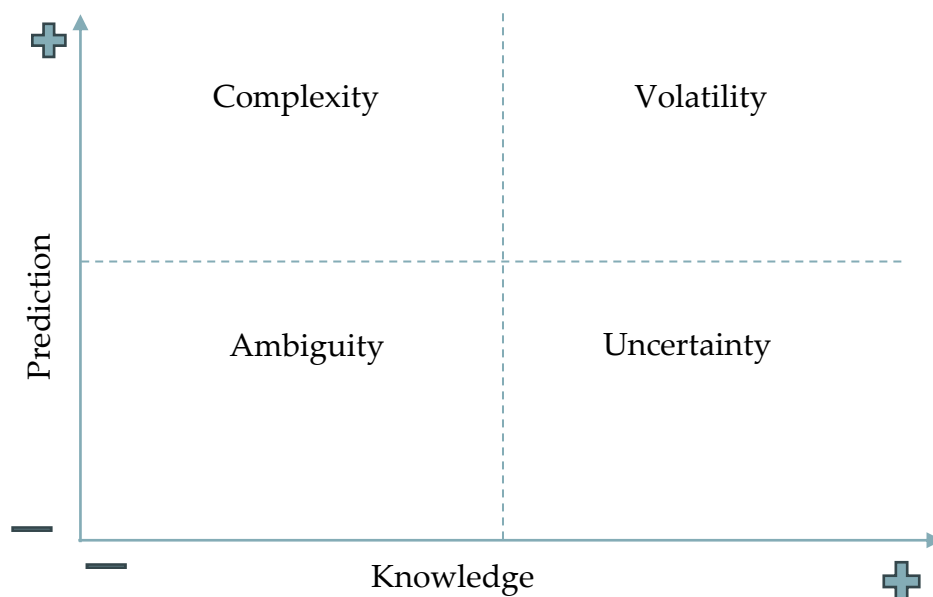
in that there is a limited historical precedent of similar events for predicting the outcomes of particular causes or courses of action, ambiguity is outstanding due to its novelty (Figure 4).



**Figure 4: Visual representation of Ambiguity.**

Source: Adapted from “The four dimensions of VUCA” by Kraaijenbrink, J. (2018).

Bennett and Lemoine (2014) applied oriented approach towards VUCA elements (Figure 5) with the two dimensions concerning the knowledge about the situation and the predictability of the results of possible interventions, therefore providing pragmatic advice to leaders of the further course of action.



**Figure 5: VUCA orientation.**

Source: Adapted from Bennett and Lemoine (2014).

### 2.1.2 VUCA Prime framework

According to Johansen study he paralleled to each VUCA element a qualities to response to the challenges and created framework VUCA Prime (2007) (Figure 6) in which the organizational capabilities may identify the opportunity. Vision is proposed as a quality of a leader to be prepared for the challenge in volatile environment, the organization required to have a clear vision of action for the future and therefore through defined vision it unables opportunity for innovative actions. According to Bennett and Lemoine (2014), the most effective approach to minimizing uncertainty is to consistently gather extensive information and Johansen (2007) proposed an understanding approach to the situation. While gathering information organisations can anticipate uncertainties and revise their resources as they gather new data throughout their experiments (Chesbourg, 2010). By developing a deeper understanding leaders learn how to resist and control an instinctive urge to react quickly, that might lead to a false assumptions and wrong action. Instead understanding of the situation leads to more strategic and affective decision-making. Some studies claim that uncertainty defines the present day, highlighting that past experiences are unreliable as indicators or predictors of the future. Complexity addressed by clarity (Johansen, 2007). The complex multitude of variables is frustrating, organising these factors in a manner that simplifies the understanding of this complex environment is necessary. Added to that, agility is the organisational quality appropriate to address ambiguous situations.

## 2.2 Dynamic capabilities

Bennet and Lemoine (2014) explains that when an organisation foresees unanticipated shifts in the external environment, the most efficient strategy to manage unplanned changes is to invest resources in improving organizational

agility. Tallon and Pinsonneault (2011) stresses that agile response is organization's capability to identify and react to opportunities and threats with adaptability, speed, and precision. According to Weber and Tarba (2014), strategic agility is the ability to frequently modify the strategic orientation of the company and remain flexible in response to environment. Huang et al. (2012) characterise operational agility as the capacity of a firm's business processes to attain speed, accuracy, and cost efficiency in leveraging opportunities for innovation and sustain concurrence. As defined by Rigby et al. (2018) agile response is a strategic approach that allows firms to fragment their strategy into manageable, short-term objectives. Consequently, a fragmented strategy can be effectively adjusted on a regular basis, thereby increasing the probability of resisting the volatile challenges of a VUCA world (Rialti et al., 2019). Strategic agility is referred to as the systematic implementation of dynamic capabilities to enable constant changes in the product, process, and service frameworks within the business model (Weber & Tarba, 2014). These perspectives collectively emphasise that enhancing strategic and operational agility is essential for adapting to a dynamic environment.

Robert Johansen, when first learned about VUCA from the military perspective simultaneously learned that despite the VUCA seen as the danger it should be approached by redirecting the threats into opportunities (2007). In a VUCA environment, the emphasis lies on the rapid identification of disruptions or opportunities and the organisation's swift ability to adapt to these changes (Doherty et al., 2012). According to Baron (2006) the word "opportunity" is perceived as a previously undiscovered means of creating economic value, that previously has not been leveraged or capitalised on by others. Opportunities in the business environment can be recognised in factors such as timing, consumer behaviours and trends, shifts in social and cultural norms, and changes in economic and demographic conditions. The study of Baron (2006) identifies and

interconnect the most important qualities in opportunity recognition, leaders can identify the opportunity by engaging in active search for opportunity, develop the capacity to be alert to identify the opportunity and engage with the prior knowledge of the market, industry and customer. Once these opportunities are identified, organisations need to enhance or develop new business models to capitalise on them (Teece, 2018).

Organisational culture plays a crucial role in adapting dynamic capabilities, guiding risk-taking, experimentation, learning, and failure tolerance (Chesbrough, 2010). The capacity to recognise and capitalise on opportunities depends on dynamic capabilities, which serve as intermediaries between disruptive forces and business performance by facilitating the adaptation and reconfiguration of the business model (Al Dhaheri et al., 2024; Bennett & Lemoine, 2014; Doherty et al., 2012; Teece, 2007; 2010; 2018). The dynamic capabilities of the organization are responsible to sense and seize the opportunity and therefore transform the business operations, the framework developed by Teece (2007). The term “dynamic” means the quality to revise competences to align with the unstable and rapidly changing business environment (Teece et al., 2016). The term “capabilities of the company” refer to the role of strategic management to adapt, integrate and reconfigure internal and external organizational skills, resources to match the dynamic environment. Dynamic capabilities are fundamentally associated with external changes and are heavily influenced by environmental uncertainty and volatility (Teece et al., 2016). As the result, with developed dynamic capabilities firms are better positioned to innovate and introduce new strategy (Teece, 1997). Moreover, the ability to use their capabilities to exploit opportunities and mitigate risks is linked directly to the superior performance of the firm (Teece, 1997). In proposed framework, sensing means exploring the possibilities and scanning the environment, studying the customer, identification and assessment of opportunity. Sensing

allows the firm have a better strategic foresight and enhanced awareness of the environment. To seize the opportunity means the firm's ability to deploy resources to create a value that after the opportunities identified. Transformation capabilities used when the threats and opportunities requires actions upon it, and also it helps to mitigate structural rigidity that emerge over time due to asset accumulation and the development of operations restricting the organizational resilience and continuous innovation.

### 2.2.1 Proactive and reactive dynamic capabilities

Robert Johansen (2012) suggests that the organisations in VUCA instead of perceiving negative VUCA term, they need to take serious and proactive steps to shape future for the firm. The ability to detect and react proactively to the environment depends on the leaders (Schoemaker et al., 2018). Thoren and Vendel (2019) emphasises that management has all responsibility for the further performance and faces significant challenges due to a lack of understanding and classification of new situations, coupled with insufficient information for rational decision-making and the pressure of limited time. As the result, these factors can lead leaders to make wrong decisions under increasingly challenging circumstances. Kaiser and DeVries (2000) explained that the need for leadership in any business environment remains the same even in times of innovation, rapidly changing technologies, high market competition, increasing demographic diversity. Shane (2000) proposed the entrepreneurs discover opportunities through recognition due to the prior knowledge or familiarity of the situation rather than search for new information, which some studies suggest that it restricts leaders with pre programmed way of thinking adapt innovative changes. As the result, leaders are more inclined to implement changes and take confident decisions when they have a greater knowledge. Theoretical approach of Holsapple and Oh (2014) in regards to the dynamic capabilities classified into

reactive and proactive types. Reactive capability refers to the firm's ability to acquire knowledge in an exploitative manner, specifically by gathering insights within market dynamics. In contrast, proactive dynamic capability refers to a firm's ability to acquire knowledge from outside its current market through exploratory processes. Teece (1998) emphasized that the organizational design of a firm plays a critical role in enabling effective interaction with external sources of knowledge, thereby enhancing its capacity to identify and exploit emerging opportunities. The firms who are pioneer in a market have proactive dynamic capabilities where its goals is to create a market disruption and have the first mover advantage. Whereas the reactive benefits from the insights of the market uncertainty, follows directions of free-ride effects and resolution of disruptions, therefore be in the follower position.

### 2.2.2 Pattern recognition framework

According to Baron (2006), he has developed the framework of "pattern recognition" to enhance the ability of entrepreneurs to recognize business opportunities influenced by the interplay of three elements: a deliberate effort to search for opportunities, a continuous alertness to detect opportunity when they arise, and a foundational understanding of the relevant market. These factors collectively form a pattern that facilitates more effective opportunity identification. According to Baron (2006) framework, an ongoing search of opportunities aids in establishing connections between seemingly unrelated variables, a strategy that accurately captures the complexity and dynamic nature of the modern business environment. Further noted the ability to recognize opportunities as they arise from various external changes, such as technological advancements, shifts in market conditions, evolving government policies, and competitive dynamics which mirrors the volatility of the current environment depends on entrepreneurial alertness. Therefore, prior knowledge aids to apply

relevant acquired experience and expertise in identification and development of innovative and feasible business opportunities. Consequently, all strategies indicate that dynamic capabilities are distinctive to each organisation; thus, a company may enhance its array of dynamic capabilities by incorporating expertise into its portfolio.

### 2.3 Business model dynamics

The concept of the business model is extensively utilised in academic study however, it is often studied without a universally agreed definition (Zott et al., 2011). The variation in definitions arises from different conceptualization, each highlighting distinct aspects of value creation (Zott et al., 2011). The most current definitions that emerge in academic literature align or consistent with Teece's (2010) perspective, which defines a business model as "the design or architecture of the value creation, delivery, and capture mechanisms that converts payments into received profits". The definition provided by Zott and Amitt describes business model as the link between an organization and external stakeholders, and how it engages in economic cycle with them to generate value for all exchange partners (2007). One of the widely used definition is from Osterwalder and Pigneur (2010) "a business model describes the rationale of how an organization creates, delivers, and captures value." This definition is widely used also because of the "business model canvas" framework with refined business model components which is used to analyse and design model, which are customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partners, and cost structure, which together define how a business creates, delivers, and captures value. Some studies on business models include strategy as part of the business model itself (Chesbrough & Rosenbloom, 2002). However, according to Teece (2010), while strategic analysis is inevitably linked to business model, it is an analytically

distinct and more detailed exercise. Business modeling tool defines the direction of change and strategy to implement it (Foss & Saebi, 2017). The literature defining business model overlaps on the components of it, which are: firm's value proposition, market segments, structure of the value chain, the mechanisms of value capture and "how these elements are linked together in an architecture" Saebi et al (2016). In a simplified meaning of Chesbrough (2007) business model serves two crucial roles: creating value and capturing value.

### 2.3.1 Business models in VUCA

As a result of dynamic environment, business must constantly reinvent their models to capitalize on emerging opportunities and effectively capture value (Zott & Amit, 2001, 2013; Millar, 2018). The process of identifying strategic gaps and leveraging market opportunities begins by evaluating a firm's proposed business model and its existing resources and capabilities to the environment it operates and aligning those with the environment.

Those who thrive in the VUCA environment often use innovation as their survival strategy (Abidi, 2017). As observed by Mansfield et al. (1977), the environment pressured by technological advancements force firms to embrace innovation. This perspective is widely supported in academic literature, emphasizing that the development of new business models and the adaptation of existing ones are closely linked to the emergence of technological opportunities (Afuah & Tucci, 2001; Timmers, 1998; Zott & Amit, 2001). However, incumbents are less likely to introduce new technology in their business, due to the fact that they might face with incompatibility of existing capabilities which was optimized for the previous technologies. Consequently, reconfiguring organizational culture, particularly with well-established values and leadership structures resistant to change, poses a significant challenge for these firms. As the

result the new market entrants and small and medium firm hold a competitive advantage, as they are more likely to adopt innovative technologies without the constraints of reconfiguration (Afuah & Tucci, 2001; McGrath, 2010).

### 2.3.2 Business model adaptation

Recent literature has shifted its focus from merely conceptualizing and defining the business model to exploring business model innovation and adaptation, reflecting the increasingly dynamic environment in which businesses operate (Saebi, 2017). According to Zott and Amit (2024), highlight that managers often have challenges to identify the most suitable business model, therefore emphasizing the necessity of active experimentation. This perspective is consistent with the view that strategy should be discovery-driven (Kinsinger & Walch, 2012). Similarly, Teece (2010) affirms that once a business model is established, it must be continuously reassessed in response to evolving market conditions and emerging opportunities. To address barriers of business model innovation Chesbrough and Rosenbloom (2010) advocates by experimentation approach and defined the framework an “business model innovation process” (Figure 7). A key component of this process is “open innovation”, where the firm should look outside of firm boundaries to external and internal sources of ideas to drive the development of new business models. Antecedents that drive business model reinvention can be categorized into two groups: external and internal factors (Foss & Saebi, 2016). External antecedents includes shift in competition, technological advancements, and evolving stakeholder demand, while internal, including dynamic capabilities and strategic shift. External events that necessitate an organizational response can be perceived either as threat, possessing the challenge or as an opportunity , offering potential growth (Saebi et al., 2016). When the firm faces external threat in the business environment is a strong predictor of business model adaptation (Saebi, 2017). The primary

motivation for business model adaptation is to achieve "alignment with the environment" (Foss & Saebi, 2015).

Business model adaptation process incremental and includes continuous search, selection, and improvement in value creation, value proposition, and value capture (Dopfer et al., 2017). In contrast, business model innovation is the approach to disrupt the market and by definition has to be innovative, requiring innovation in one or more components of the business model. As the result, these changes in business model tend to be more radical, fundamentally altering how value is created, delivered, or captured. The importance of business model is that even if there is a similar product or service on the market, the result is radically different performance (Björkdahln & Holmen, 2013). Innovative business models are difficult to copy, in contrast the services and product innovation can be replicated. Business model innovation is more complex mostly because in the discovery of the new business model depends of the "signature" set of the firm's dynamic capabilities, requires to fit a company's strategy, organizational culture and business core competencies (Bucherer et al., 2012).

## 2.4 Firm performance

Redefined strategic, operational and economics approaches allow organizations to capitalise on existing or new ideas, resources and products, through business model adaptation. The study of Teece (2008) emphasizes that the implementation of new business practices through business model innovation can improve efficiency, lower costs, and optimize production and distribution processes ultimately contributing to enhanced performance. However, the study of Aspara et al. (2010) argue that the adoption of new practices may lead to the significant costs and increased risks, potentially leading to adverse outcomes for the firm. Several studies emphasises the mediating role of

business model adaptation that leads to an improved business performance (Chesbrough, 2010; George & Bock, 2011; Palzelt et al., 2008; Heij et al, 2014).

To prevent the downfall of the newly adapted business model, the founders' managerial competences are crucial for identifying the appropriate opportunities and reallocating resources and capabilities. Developed dynamic capabilities while support routine activity, ensure resilience of the organization in crisis and enable to profitably align competences and the other assets (Pisano & Teece, 2007). Since business model innovation process involves exploiting emerging opportunities, the process is strongly linked to opportunity recognition, thus dependent on dynamic capabilities (Chesbrough, 2010). The capacity to identify opportunities plays a vital role in performance outcomes (Grant, 1991; Chandler & Jansen, 1992). The study of Teece (2007) refer that organisations ability to adjust to volatile circumstances by integrating and reconfiguring essential resources, hence attaining lasting competitive advantage and improved firm performance depends on dynamic capabilities of the firm. In particular, entrepreneurial competence moderates the relationship between opportunity availability and business performance (Chandler & Hanks, 1994). The study of Palzelt et al. (2008) further highlight that a firm's either a positive or negative effect on performance dependent on the capabilities of the leadership and managerial experience to define the right model. Therefore, by adopting new models the company can enter a new market, following the strategy of "blue oceans", where competitive pressures are relatively low, thus positively influencing firm performance (Kim & Mauborgne, 2005). Companies exhibiting high performance place twice the focus on business model innovation compared to their underperforming competitors, according to data from IBM worldwide Business Services (Pohle & Chapman, 2006), derived from interviews with 765 worldwide company leaders.

### 3 Conceptual framework

The proposed conceptual framework illustrates how dynamic capabilities enables organisation to adapt its business model in response to the VUCA environment, thereby enhancing firm performance. The framework relies on four theoretical perspectives: VUCA environment, business model adaptation, dynamic capabilities theory, and firm performance (Figure 8). Businesses in a VUCA environment confront persistent external disruptions, requiring them to adapt their business models to sustain competitive advantage while mitigating risks.

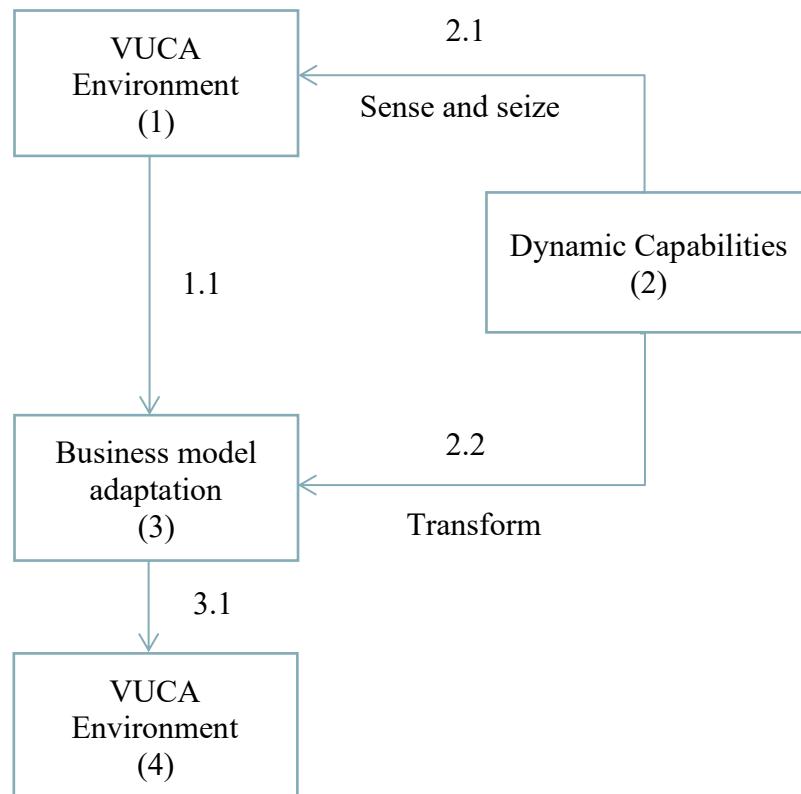


Figure 6. Conceptual framework  
Source: Elaborated by the author.

The **VUCA environments (1)** present the external pressure towards the business model (1.1), however the ability to resist the constraints posed by the environment depends on the firm's dynamic capabilities (2). Dynamic

capabilities, acts as a mediator, modify strategies that firms undertake to adjust to their environment. The literature suggests that dynamic capabilities allow firms to recognise opportunities, mitigate threats (2.1), and therefore modify their business models (2.2). These capabilities allow the firm to adapt and transform resources, maintaining resilience and sustained performance in a constantly shifting market. The degree to which firms gain firm performance, contingent upon the ability of dynamic capabilities to adapt their business model (3) which serve as an essential mediator for endurance against external challenges and consequently foster firm performance (3.1). Therefore, through aligned business model to the external environment the company more likely to have a better firm performance (4).

## 4 Methodology

### 4.1 Research strategy: Case Study

The qualitative case study investigates *“How does the company navigate its operations within the VUCA environment by utilising its dynamic capabilities to adapt business model?”*

The case study research method was selected for this thesis due to its advanced nature and appropriateness to strengthen understanding of real-time processes within individuals or organisations (Yin, 1984). Despite, case studies are often criticised for their generalisability and potential reliability concerns (Rolfe, 2006). The main advantage of case study research lie in its ability to provide in-depth insights into the nature and complexity of the phenomenon, thereby facilitating the exploration of "how" research questions (Meredith, 1998). This study analyses a real-life example of cleaning service Wegho that offer its service digitally. The case study method provides a comprehensive understanding of the strategic approaches employed by the firm in reaction to market conditions and illustrates a practical example of business model adaptation therefore suitable for this context. Particular, business model adaptation, thereby enhancing existing knowledge of organisational responses to dynamic external environments and potentially revealing areas for further research and theoretical advancement.

### 4.2 Case selection

The choice of Wegho as a case study was based on two main reasons. The first is a relevance due to its operation within a highly dynamic business environment. The firm undergo business model adaptation in response to environmental changes, providing specific examples for analysis. Secondly, for the availability of rich qualitative data will strengthen the feasibility of

conducting an evidence-based analysis of business model adaptation under uncertain market conditions. Respondents are expected to offer insights based on their function within the organisation, thereby enhancing the overall comprehension of the strategic approaches that are being implemented.

This research base on a comprehensive case study design with embedded units of analysis, as per Yin's (2003) classification. The study examines two companies within the same contextual environment, thereby enabling insights while maintaining contextual coherence. Due to Wegho operates with a relatively small team, one additional interview was conducted with a representative from Vadeca. The reason that Vadeca was chosen because a firm operating within the same sector on the Portuguese market.

### 4.3 Data collection

The data collection for the construction of the case study was based on primary and secondary data. Secondary data was obtained through the Wegho's official website, LinkedIn page, Instagram page , as well as TV and YouTube interviews. These resources provided a valuable background information about the firm and its activity. Primary data was collected through semi-structured interviews. The study of Giola et al. (2013), suggest that the semi-structured interview allow to obtain both retrospective and realtime accounts of the people involved in the decision making process and who observed the phenomenon of theoretical interest. The semi-structured interview was developed based on previously identified literature, thus the questions are related to the connection of variables of the conceptual framework and buildingblocks contribute to the systematic arrangement of the questions. The environmental context in which the organisation operates is the subject of questions 1-3. The dynamic capabilities employed by the firm are the subject of questions 4-6. The business adaptation is

the subject of questions 7-10. Additionally, the evaluation of firm performance is the subject of question 10.

1. What was the market like when you began your business?
2. Which market gaps or opportunities did you identify?
3. What was the impact of Covid-19 on Wegho's operations?
4. What is the impact of industry regulations or constraints on the company?
5. What is your organization's approach to recognising market trends or changes?
6. How do you determine whether and how to capitalise on an opportunity once you have identified it?
7. Have you ever been required to quickly reallocate resources?
8. What has been the company's trajectory since its inception?
9. In what ways did the organisation adjust during periods of crisis?
10. To which innovations did the organisation adapt?
11. How do you evaluate the extent to which the company's performance has been enhanced by recent strategic or structural changes?

For this research, it was selected four main stakeholders from Wegho to obtain primary data. The interviews selection began with the company's CEO, followed by referenced employees directly involved in strategic decision-making and the implementation of business model changes. These interviews aimed to gather rich, detailed insights into Wegho's experiences navigating the VUCA environment and adapting its business model.

The data was gathered via individual online interviews, which were recorded and subsequently transcribed. Several interviews were conducted in Portuguese and subsequently translated into English utilising online Google translation tool. Thereby, independent bilingual reviewer was consulted to verify the accuracy, to confirm consistency of the translated content. Consent form was secured to guarantee voluntary participation, and participants were given the opportunity to withdraw at any point without consequences. To ensure

participants' confidentiality and anonymity, the codes were attained to each interviewee (Table 1).

<b>Interviewee Code</b>	<b>Job Title</b>	<b>Company</b>
1	CEO	Wegho
2	Head of Marketing and Product	Wegho
3	Software development	B2F
4	Operation Supervisor	Wegho
5	Head of Operations	Vadeca

**Table 1:** Description of Interviewees.

#### 4.4 Methods of data analysis

A deductive approach was implemented with preconceived themes, which enables reflection based on existing knowledge. Consequently, the data was analysed using content analysis, which enables the summarisation and tabulation of the data (Cohen et.al, 2007). Consequently, the narrative approach was implemented to convert the experiences into a narrative format in order to organise the data that had been collected (Dibekulu, 2020). Additionally, the data analysis approach proposed by Gioia et al. (2013) was implemented subsequent to the interview, as novel theoretical concepts emerged since eventually. This method provides a framework for qualitative research, countering the notion that qualitative research lacks quantitative precision and cannot be structured. The framework allows the identification of recurring patterns in the analysis of collected data following a three-step approach. Initially, a variety of informant terms, codes, and categories emerged in the early stage of the analysis. These were then progressively defined into more abstract themes and aggregated dimensions. Further, after gathered data is analysed in relation to emergent patterns, themes and concepts are compared with existing literature to determine whether precedents existed or if new concepts had emerged (Gioia et al., 2013).

## 5 Case study

### 5.1 Company description Wegho

Wegho was founded in Portugal in 2017. The company pioneered the market by offering domestic and facility cleaning services through digital platforms. Wegho operates through the website and mobile app, where the consumers can instantly imitate the pricing for the service they want and book a service. Co-founder and CEO of Wegho, described the platform as a “one-stop-shop” where customers may choose the type of service and schedule for a convenient time (Interview). The intermediate job of Wegho is to simplify the booking of services to ensure the qualifications of the cleaning staff and secure the transaction. Wegho has four key individuals in the team, supported by supervisors and operational teams of 600 employees, operating on the national market, since the inception the company instead of expanding its organizational structure, Wegho keeps it intentionally lean. Wegho has a strong presence on social media platforms like LinkedIn and Instagram, has its own newsletter blog with updates, and has an online store with cleaning solutions. The company exhibited an annual growth rate of 117% in 2024, underscoring its growth. In acknowledgement of its innovative strategies, Wegho received an award from ISAM Magazine, identifying it as one of the fastest-growing companies in Portugal in the last five years.

### 5.2 Company description Vadeca

Vadeca is a Portuguese company that has operated in the national market for 30 years, specializing in cleaning services. The company has offered a variety of services since it launched, including gardening, domestic and facility cleaning, equipment supply, and distribution of professional cleaning solutions. Initially,

these services operated as independent business units under the name of Vadeca, each functioning as a separate entity with its own operational and commercial management. Nowadays, Vadeca employs nearly 3000 professionals with annual revenues exceeding €30 million. As a result, the company is recognized among the top five companies in Portugal's cleaning industry. It has faced multiple challenges, particularly regarding operational inefficiencies and organizational structure in response to the changing environment.

### 5.3 Data analysis

The collected data is presented in the table as open-ended responses to semi-structured interview questions. The codes of the participants appear in the first row, as shown in Table 1. The first column presents the questions posed, while the last column contains a summary of the responses provided by all participants regarding each question.

Questions	1	2	3	5	Repository
What was the market like when you began your business? (1)	"In Portugal, the informal market... it's huge in this area in cleaning services."	"Customers struggled to find professional and reliable service providers." "Many of our competitors operated traditionally"	"a market that was not used to booking these services online."	"..The market is saturated with manual booking and paper work to control operation and traditional in approaches to deliver the service"	The market was primarily informal, outdated, and dominated by traditional practices at the time of entry. The segment lacked of innovation, quality, and proper management.
What is the impact of industry regulations or constraints on the company?(1)	"The market is very tough... only when we are in the market that we saw..., that our idea has to be adjusted." "... the minimum wage impacts directly on us... when we raise the price, clients migrate to the informal market." "...labor regulation and manpower dependency, because we are an industry intensive in manpower, so all the regulation of the labor market has a great impact on all of what we do."	"One of the major challenges was pricing. As we moved into B2B, we had to compete with well-established companies."	"... we comply with all required regulations, especially those related to invoicing and legal compliance."	"with the entry of multinational companies... we lost market leadership." "During the financial crisis of 2012–2013... we had to restructure significantly." "The sector's collective labor agreement is tied to the national minimum wage."	Industry regulations and constraints had a significant impact on company operations. Labor regulations, particularly those related to minimum wage adjustments, directly affected pricing strategies in a manpower-intensive sector. Higher costs often led clients to opt for informal providers, increasing competitive pressure.
Which market gaps or opportunities did you identify?(2.1)	"B2B market was very poor in management, was very poor in innovation, was very poor in quality" "B2B, it's 99% the market is formal, when the minimum wage raises"	"We saw an opportunity to create an easy-to-use, tech-driven platform where people could book services with transparency." "as we scaled, we noticed ..which made the transition to B2B a natural step."		"Clients began to seek us out because we had structured cleaning plans and compliance with health regulations."	The main market gaps identified were the lack of innovation, poor management, and low service quality in the B2B cleaning sector. Despite being more regulated, the B2B market offered pricing flexibility through formal contracts
What was the crises moment?(1)	"Covid-19 was a turning point... we quickly launched an online store selling disinfection products..."	"We invested in high-end equipment and specialized training." "We had to quickly pivot our offerings and implement protocols."		"Some clients suspended contracts during Covid-19 ...which impacted our revenue." "... new clients approached us " "We also experienced a drastic increase in demand for occasional services ...which have much higher profit margins." "During the financial crisis of 2012–2013... we had to restructure significantly." "The sector's collective labor agreement is tied to the national minimum wage."	Covid-19 initially caused service disruptions and revenue losses due to suspended contracts. However, companies responded by rapidly adapting their offerings.
What is your organization's approach to recognising market trends or changes? (2.1)	"The market showed us, painfully, that we had no chances to grow much more in the B2C..." "Some (B2B) companies tried to contact us"	"We constantly analyze feedback and identify areas for improvement" "Our inspiration came from platforms like Uber and Airbnb—providing customers with a seamless, tech-driven experience."		"We observed the market., so we started investing in technology and digitalizing processes."	Continuous analysis of customer feedback plays a central role in identifying areas for improvement. Observing market prompted strategic investments in technology and digitalization to stay competitive and relevant.

How do you determine whether and how to capitalise on an opportunity once you have identified it?(2)	<p>"...we establish a partnership"</p> <p>"we studied the market, we analyzed the market and we concluded that... we were proactive, we hired the people that know the market and we designed tools and processes..."</p> <p>"we hire people with experience in the facility service"</p> <p>"Strategic decision in the company is usually short and medium term"</p>	"focus is on innovation and retention... We constantly analyze customer feedback and identify areas for improvement..."		<p>"We developed an app using QR codes to digitalize service tracking, which was highly appreciated by clients."</p> <p>"When prices are similar among competitors, the technology becomes a decisive factor in clients choosing us."</p>	Opportunities are assessed and capitalized upon through a combination of market analysis, strategic hiring, and technological innovation. Strategic decisions are typically made with a short- to medium-term focus, allowing for agility. Investments in customer-focused innovations.
Have you ever been required to quickly reallocate resources? (2.2)	"In 2018... we decided to hire some people with experience in the facility services market, they have to be open for innovation."		"We had to quickly modify the invoicing system because the company responsible was acquired..."	<p>"During the 2012 crisis, we restructured and merged different business units—gardening and cleaning—reducing management layers."</p> <p>"We also cut our vehicle fleet from over 100 to 60 vehicles and outsourced this service to optimize operations."</p>	The companies demonstrated the ability to rapidly reallocate resources in response to changing circumstances. This included reorganizing internal structures, adjusting operational systems, outsourcing non-core functions, and strategically recruiting experienced personnel.
What has been the company's trajectory since its inception? (3)	<p>"We started as a technology company, with a kind of innovation and a kind of quality without precedence in the industry."</p> <p>"B2B channel, that nowadays is 90% of our business."</p> <p>"Wegho's organizational structure is intentionally compact since the inception."</p>	"Our initial focus on innovation and retention maintains since the inception"	"Initially, we created only a website for users. Then, we realized the need for a back-office system... later, we developed an app for service providers..."	"We had to restructure, we created one unified company with multiple departments and vertical structures under shared management."	Since their inception, the companies have followed a trajectory marked by strategic transformation and digital evolution. Progressively integrated digital tools across operations. Organizational structures lean and adaptive, enabling flexibility.
In what ways did the organisation adjust? (3)	"We developed and adapted facility management software... All of our services are evaluated We generate real-time KPIs"	"We invested in high-end equipment."	"We had to modify the invoicing system."	<p>"We redefined the business model... and eliminated business lines that were not profitable."</p> <p>We launched a service monitoring system using QR codes... and a digital tool for supervisors to monitor operations in the field."</p>	The organizations adjusted through a combination of technological innovation, process optimization, and strategic restructuring.
To which innovations did the organisation adapt? (3)	"We developed and adapted facility management software... All of our services are evaluated like Uber. We generate real-time KPIs."	"We constantly analyze customer feedback and identify areas for improvement, whether through technological advancements or service quality."		"This technology has been a key differentiator when clients are choosing between providers."	The organization adapted to several key innovations, particularly in digitalization and performance management. It developed and implemented facility management software capable of generating real-time KPIs.
How do you evaluate the extent to which the company's performance has been enhanced by recent strategic or structural changes? (4)	"Now, we are in 2024 and we are growing in average 117% per year. Since the beginning, in average, we grew more than 100%."	"the ISAM magazine... distinguished us with one of the companies that has grown more in Portugal in the last five years."	"we realized the need for a back-office system... later, we developed an app for service providers..."	<p>"We now have over 3,000 employees and surpassed €30 million in annual revenue."</p> <p>Last year, we had about 20% growth in new clients."</p>	The organizations reported significant and sustained growth, marked by increased client acquisition, revenue expansion, and workforce development. Their evolution was driven by continuous digital innovation.

**Table 2 Semi-structured interview narrative data analysis**

Source: Elaborated by the author.

### 5.3.1 Cleaning service on Portuguese market

In 2017, the Portuguese cleaning service industry was characterised by a high degree of informality and lack of regulation, with unregistered providers dominating the market. The unregulated providers benefited by offering their services at lower costs and without complying to industry regulations. The CEO of Wegho highlighted an additional ethical and structural issue in his assessment of the market. In an interview, he emphasised that his focus includes not only consumer needs but also the welfare of service providers. The market has maintained its structure over an extended period, as indicated by the company Vadeca, which has been operating in this market since 1993. As the result, market consumers faced difficulties in accessing high-quality regulated services.

"In Portugal, the informal market (...) it's huge in this area in cleaning services."(R1)

Additionally, the sector was also saturated with outdated service operations, relying on conventional methods for manual booking and on-site rate establishment. The industry was lacking on innovation and technology and maintain its rigidity with the consumer base unaccustomed to book the service online.

"(...)The market is saturated with manual booking and paper work to control operation and traditional in approaches to deliver the service"(R5)

The market is characterised by established service providers facing intensified competition and disruption from new international entrants that have acquired smaller firms, thereby achieving a competitive advantage through expanded scale.

"with the entry of multinational companies(...)we lost market leadership."(R5)

The impetus for Wegho establishments was to address the market gap in the B2C segment by delivering services digitally, ensuring regulatory compliance, and maintaining high-quality service standards.

“We saw an opportunity to create an easy-to-use, tech-driven platform where people could book services with transparency.”R2

This strategic positioning aligned closely with evolving consumer expectations, for the regulated service.

"Clients began to seek us out because we had structured cleaning plans and compliance with health regulations."R5

### 5.3.2 Market constrains and misalignment

Cleaning services are highly dependent on the manpower availability and skills impact directly the quality of provided service.

“(….)labor regulation and manpower dependency, because we are an industry intensive in manpower, so has a great impact on all of what we do.”R5

Since the companies operate with the focus to provide regulated service they directly impacted by regulation constrains. One of the critical constraints of informal market identified early on was the industry's dependence on the labour force , which, in turn, is influenced by government minimum wage regulations. Higher cost of the service influenced.by regulations would influence price-sensitive clients would shift towards the informal market.

“the minimum wage impacts directly on us... when we raise the price, clients migrate to the informal market”.R1

However, although the companies recognized the B2C market gap of an insufficient unregulated market and addressed it with their regulated offer of cleaning services, it was not profitable to operate due to competition with the informal market and the company needed to make adjustments. As one of the

respondent emphasises, that only after the company entered the market they discovered the need to rethink their strategy

“ The market is very tough... only when we are in the market that we saw.., that our idea has to be adjusted.” R1

### 5.3.3 Strategic Transition from B2C to B2B

The limitations forced Wegho to recognise limitations in the B2C segment and to reassess its business model accordingly. In the past, Wegho experienced strong demand from the B2B sector due to its innovative approach to service offerings. Respondents described the B2B segment as more structured and governed, which appealed to Wegho. As a result, Wegho claims that the choice to change its business model was driven by acknowledged limitations in the B2C sector, potential opportunity to which the company can address through a creative operational strategy.

“B2B market was very poor in management, was very poor in innovation, was very poor in quality”R1

The B2B segment is well-defined and effectively regulated, thus not constrained by the increase in minimum wage, as it operates under specific clauses, which is potential opportunity.

“B2B segment, it's 99% the market is formal, when the minimum wage raises”R1

To pursue the B2B segment, Wegho did not approach it immediately, until the business model was aligned with the B2B sector by acquiring new firm capabilities.

“ we studied the market, we analyzed the market and we concluded... we were proactive, we hired the people that know the market and we designed tools and processes...” R1

“as we scaled, we noticed ..which made the transition to B2B a natural step.”R2

### 5.3.4 Digital Transformation and Technological Differentiation

Technology plays a big part in Wegho, since its inception, the company put a strong emphasis on technological advancement in operations. Vadeca after 17 years of operating with traditional practices implemented new technologies and improving the efficiency of its operations through advanced software innovations. Since the companies identified the market gap and addressed it, technology became a strategic pillar for differentiation.

“(...)technology has been a key differentiator when clients are choosing between providers.” R5

“When prices are similar among competitors, the technology becomes a decisive factor in clients choosing us.”R5

Consequently, despite the market shift, Wegho emphasised that innovation has been the company's foundational strategy since its establishment. To enhance technological development, companies establish strategic partnerships with software firms to acquire specific advancements and expertise.

“(...)we establish a partnership with a software company.”R1;R5

One of the respondents highlighted that over time, the company implemented more technology, which facilitates monitoring of the services. Also, in response to external changes, Wegho was required to adapt its operational systems, modifying its invoicing system due to the acquisition of the company providing the service, which required quick reaction and adjustment.

“Initially, we created only a website for users. Then, we realized the need for a back-office system(...) later, we developed an app for service providers(...)”R3

Given that technology serves as the competitive edge for both companies, they incorporated digital tools for monitoring operations and service management.

“We developed and adapted facility management software(...)”R1

“We launched a service monitoring system using QR codes... and a digital tool for supervisors to monitor operations in the field.”R5

### 5.3.5 Agility and Resilience in Crisis

The Covid-19 pandemic created a significant external disruption due to the temporary suspension of the contracts, therefore companies faced revenue loss.

"Some clients suspended contracts during Covid-19 (...)which impacted our revenue." R5

Thus, Vadeca during the pandemic, also had to pause the contract with the companies due to its inactivities, the company profited from attracting clients from less prepared competitors and profiting from the high margin offers. Since Vadeca as long established company, it had obtained all the necessary certifications prior the crisis and had the professional team prepared, it was able to continue its operations, as the result gaining a competitive advantage. However, Wegho was able to adapt to unforeseen situations through the launch of an online store selling disinfection products and obtaining certification to position itself as a professional in disinfection.

"Covid-19 was a turning point (...)we quickly launched an online store selling disinfection products..."R1

In the uncertain environment of the crisis, the company was able to introduce new digital transformations and new products to adapt to the market constraints.

"We invested in high-end equipment and specialized training."R2

Additionally, Vadeca company faced a financial crisis in 2012, which led to the redefining of the unsustainable structure of the company due to the high cost of operations. In response, the company had to merge all the companies operating under the name of Vadeca, which had their own administrative and operational teams. The company has evolved to a unified model, increasing its

operational efficiency, which allowed for a more straightforward implementation of the technologies to control the operations.

“During the financial crisis of 2012–2013(...) we had to restructure significantly.” R5

### 5.3.6 Growth, Recognition, and Organizational Evolution

To evaluate the performance of strategic decisions, company constantly evaluates through automated data analysis that shows the key performance indicators in real time.

“The company has implemented technology to monitor feedback and identify opportunities for ongoing enhancement in its quest for service quality.” R5

“All of our services are evaluated We generate real-time KPIs”R1

As a result of strategic adaptation, the company gained a positive performance in terms of revenue and market recognition. After adjusting its business model towards facility cleaning, it contributes to 90% of the revenue of the company.

“Now, we are in 2024 and we are growing in average 117% per year. Since the beginning, in average, we grew more than 100%.”R1

“ISAM magazine(...) distinguished us with one of the companies that has grown more in Portugal in the last five years.”R2

Ultimately, Vadeca highlights its firm performance by client acquisition, strengthened market position and sustained growth measured through the operational scale and annual revenue of €30 million.

“We now have over 3,000 employees and surpassed €30 million in annual revenue.”R5

Last year, we had about 20% growth in new clients.”R5

The organisational structure of Wegho has maintained a streamlined approach, concentrating on four primary decision-makers who prioritise short

and medium-term decisions. Consequently, Vadeca needed to reevaluate its business structure to better align with the prevailing market conditions.

### 5.3.7 Leadership and Strategic Resource Investment in dynamic environment

New concepts have emerged from data analysis conducted using the Gioia et al. (2013) method (Table 2). Respondents from Wegho and Vadeca assert that leadership was the pivotal factor in decision-making and risk-taking in strategic responses to environmental changes. Moreover, the identified concept relates to the investment and outsourcing of resources. Another identified constraint is that companies employ technology to detect limitations within the organisation via data collection and analysis.

**Table 3.** Analysis of interview questions by Gioia et al. (2013) method.  
Source: Elaborated by the author.



## 6 Discussion

The results of this study corresponded with previous research regarding business model adaptation using the company's dynamic capabilities in response to environmental constraints (Teece, 2007; Foss & Saebi, 2017; Saebi et al., 2017). The cases revealed the significance of strategic alignment and organisational flexibility that the organization undergo by applying different strategic approaches to external constraints. The principal finding of this study is the company's ability to adapt its business model in response to the external environment by exploiting and strengthening its dynamic capabilities.

In line with the VUCA framework **(1)** of Johansen (2001), the impact of the environment was evident in both cases. Both cases functioned within a primarily volatile market shaped by regulatory limitations of the labour market. Consequently, the uncertainty was manifested by market informality. Since the companies operated digitally, it posed complexities in their operations. Furthermore, the Covid-19 pandemic introduced an unprecedented and unpredictable environment. Operational constraints, strategic foresight, and adaptability of the companies are conditioned upon external pressures (Johansen, 2007). Therefore findings support the VUCA Prime framework of Johansen (2007), whereas the company benefits from applying strategic foresight through vision on gaining an insight of the potential opportunity, understanding of the market they operate in, clarity of the complex digital operations, and agility in responding proactively to constrains while operating in a highly dynamic environment.

The study underscores the improvement of effective execution of dynamic capabilities **(2)**, particularly depended on prior knowledge, alertness, and opportunity exploration, in alignment with Baron's (2006) "pattern recognition"

framework. Results indicates that companies has remained alert to external threats, meanwhile acquiring knowledge to mitigate risks (2.1), but also recognised the potential for business growth, thereby emphasising its capacity to identify opportunities facing threats, which aligns with Johansen's (2007) perspective on the VUCA context. A pattern was identified in both cases regarding the proactive approach to focus its activity mostly in B2B segment after acquiring its long term potential. By identifying market weaknesses the organisation leverages its dynamic capabilities to recognise opportunities. This corresponds with Teece's (2007, 2010) definition of dynamic capabilities as the organization's capacity to sense, seize, and transform in reaction to environmental shifts. Organisations acted proactively to align with the environment utilising their dynamic capabilities in acquiring prior knowledge before entering the market. Which aligns with the theoretical framework proposed by Holsapple and Oh (2014) that asserts a proactive strategy necessitates the acquisition of knowledge prior to seizing opportunities, enabling companies to gain insights that facilitate informed decisions regarding the reconfiguration of their business models.

The correlation between dynamic capabilities and performance outcomes aligns with Teece's (1997, 2016) assertion that firms adapt more rapidly aligning their competencies with market dynamics are more likely to innovate and attain competitive advantage, therefore enhancing its strategic agility. Which aligned with the research (Doz & Kosonen, 2010) indicates that organisational agility is essential for adapting its business model. The findings emphasise that the distinctive set of dynamic capabilities is contingent upon a company's strategic leadership, organisational design, and absorptive capacity, making it challenging for other companies to replicate, thereby giving a competitive advantage (Teece, 1998).

Based on Johansen and Euchner (2013), the companies were not confined to a singular business model to sustain their activities, therefore, they benefited from adaptability (3), which aligns with the experimentation approach of the "business model innovation process" as proposed by Chesbrough and Rosenbloom (2010) in relation to the environment. The impetus for business model adaptation was the misalignment between the external environment and firm objectives. The study's findings indicate that the adaptation of the business model was more incremental than radical, aligning with the framework of Saebi et al. (2017). The firm reconfigured its business model to adapt to the new segment while maintaining its core operational structure. Moreover, the cases benefit of acquiring an external resources to pursue the adaptation, underscoring the relevance resource based view.

This study confirms the correlation between business model adaptation and improved firm performance (3.1). The findings specifically Chandler and Hanks' (1994) claim that entrepreneurial competence moderates the relationship between opportunity availability and business performance. This indicates that companies with greater entrepreneurial capability are more inclined to convert recognised opportunities into enhanced performance results via efficient business model adaptation.

Ultimately, a case involving the two companies demonstrated that their age and size affected their strategies in adapting to the dynamic environment. Established, mature enterprises possess superior resources and expertise, thereby enhancing investment opportunities. Nonetheless, their outdated structures often limited their capacity to respond rapidly to the environment. In contrast, smaller and younger companies demonstrated enhanced adaptability and responsiveness, despite often facing resource limitations. The findings indicate that a firm's age influences both resource availability and allocation, as

well as the structural flexibility required for effective adaptation in volatile environments (Afuah & Tucci, 2001).

## 7 Conclusion

This case study examined how organizations have adapted their business model in a VUCA environment through activating their dynamic capabilities to enhance firm performance. The analysis is grounded in qualitative semi-structured interviews providing an in-depth overview of the Wegho activity, with a secondary case of Vadeca, operating in the exact market. The research provides insight into practices adapted by the organizations.

### 7.1 Theoretical contributions

This study offers valuable insights into the VUCA environment, its impact on business models, and the mediating role of dynamic capabilities in improving firm performance. The study primarily examines the organization's dynamic capabilities, consistent with Teece's theory that they are the impetus for improved firm performance. The study illustrates the methodologies employed by organizations to implement dynamic capabilities for sensing, seizing, and transforming in reaction to a dynamic environment coherent with the previous relevant literature. Wegho's and Vadeca's case demonstrated that dynamic capabilities serve as antecedents to exploiting opportunities and mitigating risks, however, they are distinctly associated to specific organizational characteristics and leadership qualities.

Furthermore, the research indicates that organizational agility is essential for adapting to dynamic capabilities. Three specific types of agility were identified: agile strategic reconfiguration, resource utilisation and redirection, and the redefinition of products or services in response to market conditions. This study demonstrates that Wegho's initial digital operations facilitated a rapid

reconfiguration of its business model and market segment, thereby Vadeca's complex organizational structure resulted in a less agile response.

Furthermore, the study reveals that firms employ their business model (Osterwalder & Pigneur, 2010; Zott & Amit, 2010) in continuous experimentation in response to the environment. Through either incremental or radical modifications, the adaptation of business models enables organisations to achieve benefits despite VUCA conditions.

This study exploits the concept of a VUCA environment and addresses the empirical gap in the theoretical understanding of environmental and organizational approaches. Consequently, it emphasize distinct organizational responses to each component of the VUCA framework.

## 7.2 Managerial implications

By examining a real-life example of business model adaptation, this study contributes to the existing body of knowledge on organizational responses to dynamic external environment. From the practical perspectives, various implications for management can be observed from these findings. The study presents an empirical example showing the significance of dynamic skills in adapting business models for superior company performance in a VUCA environment. The study underscores the necessity for the firm to foster dynamic capabilities that facilitate the reconfiguration of its operations, capabilities, and resources in accordance with market conditions. The dynamic capabilities aids the company to reduced cost of potential risk and profit from indetified opportunity. Secondly, the study emphasises the significance of proactively identifying unrecognised market demands. Constant awareness of the different aspects of the market may assist in fostering fostersight of potential threats. Thirdly, the organisation ought to be built to withstand modifications to

its structure or operations and remain flexible in altering its business model. Additionally, the empirical evidence of the companies' approaches must be coordinated according to each organization's size, age, resource availability, and structural complexity, while also aligning with environmental changes.

### 7.3 Limitations

This investigation provides important insights into the Wegho case, as well as the additional case of Vadeca. Nevertheless, the research uncovered specific limitations during its progression. The principal constraint of this study is its limited focus on particular theories, specifically VUCA theory, dynamic capabilities, and business model adaptation. This theoretical construct, though analytically consistent, may not capture other significant emergent dimensions. One of the constraints of this study is related to the interview analysis method proposed by Gioia (2013). This study is based on comprehensive engagement with relevant research prior to the data collection phase. The related research established a theoretical basis that resulted in the conceptual framework. The prior theoretical knowledge may have influenced the trajectory of the interviews and initial analysis, obstructing the organic emergence of insights. Gioia et al. (2013) assert that excessive immersion in established theory prior to empirical research may lead to confirmation bias and hinder the emergence of novel theoretical viewpoints. Permitting the theory to develop organically may facilitate the identification of unique insights that may guide future research.

Therefore, the research is based on one case, a company operating within the Portuguese cleaning services industry. As a result, the conclusions drawn do not apply to companies with other organizational characteristics, industries, or geographical contexts. At last, the conclusions are developed on the specific market dynamics with certain events that may not be applicable in the future.

The study is based on company representative interviews, which, although detailed, might not fully capture stakeholder interpretations or alternative points of view, potentially introducing bias.

#### 7.4 Future research implications

Since this research is focused on the strategies and approaches firm implicated through its dynamic capabilities. Further research could evaluate the outcome of the strategies implemented, which is firm performance to better identify which processes lead to the enhanced firm performance. Firm performance could be evaluated through qualitative and quantitative data, such as innovation rates, customer retention or market position.

From the theoretical perspective, the future research may look at emerging concepts from the Gioia analysis, potential directions for future inquiry include examining other firms' leadership in relation to dynamic capabilities and their implications. Consequently, as the study has highlighted the influence of firm characteristics, future investigations could examine companies with comparable characteristics operating within the same market and encountering identical constraints, as well as their varied strategies to withstand these challenges. Consequently, future research could explore and analyse the relationship between risk mitigation and opportunity pursuit, alongside the corresponding impacts on firm performance.

## 8 Reference list

During the preparation of my written thesis “Dynamic Capabilities in Practice: The Case of Wegho Navigating Market Needs in a VUCA Environment”, Grammarly and ChatGPT was used for the following tasks: grammar spelling, data analysis, references correcting according with APA style, with the prompts used listed at the end of the document in the Prompts List section. After using these tools, I reviewed and edited the content as necessary, and I take full responsibility for the content of the work presented.

I also declare that I am aware of and respect the Artificial Intelligence Rules of Conduct of Católica Porto Business School.

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