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How Business Continuity Ordinary Capabilities Mediate the Relationship Between Dynamic Capabilities and Organizational Performance

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Abstract

This paper examines the role of Dynamic and Ordinary Capabilities in determining Organizational Performance (OP), with particular attention to how these capabilities interact and operate amid environmental uncertainty. Using survey data collected from 190 Colombian companies spanning multiple industries, the study applies Partial Least Squares Structural Equation Modeling (PLS-SEM) to assess performance through Return on Assets (ROA) and Operating Return on Assets (OROA). The analysis shows that Dynamic Capabilities related to sustainability and resilience enhance OP, whereas Ordinary Capabilities associated with business continuity are linked to weaker performance outcomes. The study further investigates whether Business Continuity Ordinary Capabilities act as a mediating mechanism between Dynamic Capabilities and OP. Results indicate a competitive mediation for Resilience Dynamic Capabilities, but no significant mediating influence for Sustainability Dynamic Capabilities. These findings emphasize the strategic importance of Dynamic Capabilities in maintaining and improving organizational success during periods of instability. The paper concludes with managerial recommendations for capability development and proposes avenues for future inquiry, such as cross-national comparisons, longitudinal frameworks, construct refinement, and sector-based assessments.

Keywords: Dynamic capabilities, Ordinary capabilities, Organizational resilience, Organizational sustainability, Business continuity, Organizational performance

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Introduction

In contemporary markets characterized by turbulence and unpredictability, organizations increasingly depend on developing context-sensitive Organizational Capabilities to remain competitive and sustainable [1]. Such capabilities are particularly important for achieving integrated outcomes across economic, environmental, and social dimensions [2-4], ensuring long-term viability and adaptability [5-7], and protecting value continuity during disruptions [8-10]. Despite their recognized importance, greater theoretical and empirical precision is still required to identify which types of Organizational Capabilities best enhance Organizational Performance (OP) in uncertain environments and how their interdependence operates [4, 5].

To adapt to these fluctuating conditions, firms increasingly embed dynamic processes in their operations, aiming to satisfy sustainability criteria and strengthen adaptability [2, 4, 11, 12]. Through Dynamic Capabilities, organizations can sense, seize, and transform opportunities, enabling both survival and expansion [5, 6, 13-15]. In contrast, Ordinary Capabilities equip firms to manage continuity and respond to immediate operational disturbances [9].

Theoretical perspectives such as the Resource-Based View (RBV) [16] and the Dynamic Capabilities framework [17] have been central in explaining the connection between capabilities and performance. Teece *et al.* [18] argue that Dynamic Capabilities—by integrating, building, and reconfiguring internal and external competences—allow firms to remain agile

amid environmental shifts. These capabilities, in turn, shape Ordinary Capabilities, which represent the organization's ability to effectively employ its resources to sustain operations [19, 20] and are themselves considered the operational manifestation of Dynamic Capability deployment [21].

Organizational Performance is broadly viewed as a firm's comparative advantage over its competitors [22, 23]. Financial indicators continue to serve as the dominant benchmarks for measuring performance, including Return on Assets (ROA) [24-26], Return on Equity (ROE), Return on Sales (ROS) [24], sales and margin growth, employee growth [25], and Operating Return on Assets (OROA) [27]. ROA is the most frequently applied indicator, as it reflects how efficiently firms transform assets into profit [28-30], while OROA offers more operational precision [27]. Still, empirical investigations continue to call for further validation of these metrics.

Existing research has frequently examined the influence of Dynamic Capabilities under conditions of uncertainty and their implications for OP. Among these, Organizational Sustainability is often framed as a Dynamic Capability that enables firms to monitor, capture, and reconfigure resources [4, 7, 12, 31-33], ultimately reinforcing long-term competitive advantage [4, 34, 35]. It encompasses environmental, social, and economic capacities, emphasizing adaptability and the strategic renewal of resources [31]. Accordingly, this research advances the Dynamic Capabilities paradigm by empirically testing Organizational Sustainability and Resilience Dynamic Capabilities and their joint effects on OP in uncertain contexts.

Organizational Resilience, likewise, represents a higher-order capability that equips firms to anticipate, absorb, and adapt to disruptions [6, 36, 37]. Through resilience, firms can sustain desired performance across a wide spectrum of disturbances [14, 15]. Despite its theoretical recognition, limited empirical evidence explains how Resilience interacts with other Dynamic Capabilities or how it affects OP. Scholars suggest that Resilience, in conjunction with Sustainability, could strengthen OP, particularly when Business Continuity acts as a mediating Ordinary Capability [5].

From an operational standpoint, Business Continuity—defined as the organization's ability to maintain acceptable service levels and productivity during a crisis [38]—is a crucial Ordinary Capability that underpins preparedness, recovery, and ongoing performance review [9, 10, 39, 40]. It supports competitive stability and growth in uncertain conditions [41]. While its underlying mechanisms remain insufficiently studied [9], Business Continuity appears to interact with Sustainability and Resilience Capabilities by facilitating strategic transformation, mitigating implementation risks, and ensuring adaptive responses to reputational or operational challenges [3, 42].

The synergy between Business Continuity and Resilience is thought to depend on resource mobilization and procedural discipline, both of which enhance a firm's capacity to minimize the effects of disruption [3]. However, the extent to which these capabilities jointly contribute to OP remains underexplored [4, 7]. In response, this study empirically investigates their interaction and contribution to performance, employing adapted constructs that can inform future inquiries.

Concerns surrounding performance under uncertainty persist across the literature [25, 43-45]. Scholars increasingly emphasize the importance of understanding how firms anticipate, respond to, and learn from unexpected events [6]. Moreover, current research encourages further exploration of how sustainability-oriented capabilities, management practices, and adaptive learning collectively influence resilience and performance outcomes [3, 5].

Given the significance of these topics, this study seeks to answer several essential questions: Which specific Dynamic and Ordinary Capabilities are linked to Organizational Performance (OP) amid uncertainty? What constructs define these capabilities? Do they significantly influence OP? And finally, does the effect of Dynamic Capabilities on OP occur indirectly through the mediation of Ordinary Capabilities?

To address these questions, the primary goal of this research is to identify the Dynamic and Ordinary Capabilities associated with OP under uncertain conditions, outline their constructs based on prior studies through adaptation or adoption, and assess whether the development of these capabilities contributes to ROA and OROA—two financial indicators proposed as proxies for OP. Furthermore, this study aims to determine whether Ordinary Capabilities serve as a mediating factor between Dynamic Capabilities and their overall effect on OP, employing the Partial Least Squares (PLS) Structural Equation Modelling (SEM) technique.

This investigation provides several contributions to academic literature. First, it extends the understanding of how Dynamic Capabilities influence OP by presenting an integrated and theoretically coherent framework based on well-defined capability constructs. Second, while recent studies have explored the interaction between Organizational Sustainability Dynamic Capabilities and Organizational Resilience Dynamic Capabilities, further inquiry is needed into how sustainability-oriented capabilities, managerial practices, and operational activities interrelate [3]. This research advances that understanding by incorporating Business Continuity—an Ordinary Capability recognized for enhancing Organizational Resilience [46]—as a critical mechanism that ensures ongoing product and service delivery during disruptions [38], drawing upon both theoretical and empirical foundations.

Additionally, although previous work has proposed a link between Organizational Resilience Dynamic Capabilities and Business Continuity Ordinary Capabilities [6], and even suggested a mediating role [5], the construct of Business Continuity Ordinary Capabilities itself has not been explicitly formalized, nor has its interaction with OP been tested within a Dynamic Capability framework. This study thus advances prior research by conceptualizing and empirically validating this relationship.

Lastly, the findings are expected to help firms strengthen their ability to withstand uncertainty by developing and coordinating these capabilities, thereby maintaining their value proposition, sustaining competitiveness, and achieving superior OP outcomes.

The empirical analysis draws from both primary and secondary data collected from 25,523 Colombian firms of varying sizes and industries that submitted annual financial statements to the Superintendence of Companies between 2017 and 2020. Based on a second-quartile analysis of reported ROA, 939 firms were selected for further study. Survey questionnaires were distributed to company representatives, resulting in 220 valid responses between November 1 and 30, 2020; after validation and consistency checks, 197 responses were retained. Once 2020 financial data were officially released in 2021, 190 firms remained for final analysis. The data were examined using variance-based PLS-SEM in SmartPLS 4.0, focusing on perceived capability development. The COVID-19 pandemic provided an external context that affected firms across all sectors and sizes. Findings confirm that both Dynamic and Ordinary Capabilities are significantly associated with OP. A competitive mediating relationship was found between Organizational Resilience Dynamic Capabilities and Business Continuity Ordinary Capabilities, while no mediating effect was observed for Organizational Sustainability Dynamic Capabilities.

Overall, this research contributes to the broader Dynamic Capabilities literature by combining theoretical reasoning and empirical analysis to define capability constructs, establish their connection to OP metrics, and clarify the mediating mechanisms that shape firm performance under uncertainty. To the authors' knowledge, this study represents one of the first attempts to integrate both Dynamic and Ordinary Capabilities within a unified framework to explain their joint impact on OP, emphasizing the mediating function of Business Continuity Ordinary Capabilities.

The paper is structured as follows: Section 1 presents the theoretical background; Section 2 outlines the conceptual model and hypotheses; Section 3 describes the research design, measures, and analytical procedures; Section 4 reports and interprets the empirical results; and Section 5 concludes with discussion, implications, limitations, and directions for future research.

Theoretical Framework

Organizational capabilities and firm performance under uncertainty

In the face of environmental uncertainty, Organizational Performance (OP) has been shown to depend on both Dynamic and Ordinary Capabilities [17, 47]. This interdependence remains relevant whether firms operate in highly dynamic or relatively stable contexts [48]. The relationship has been widely debated in organizational theory, touching upon areas such as coordination mechanisms [49], risk and lifecycle management [50], performance measurement systems [51], resilience determinants [52], and the influence of social capital [53].

Dynamic Capabilities associated with OP under uncertain conditions span a broad range of firm-level competences, including innovation [54, 55], Organizational Resilience [5, 6], inter-firm marketing collaboration [56], knowledge management [57, 58], exploitation and exploration [59], Organizational Sustainability [4], marketing adaptability [60], and Business Continuity [9, 10, 40]. However, achieving superior OP requires the interplay of both Dynamic and Ordinary Capabilities, as Dynamic Capabilities influence outcomes indirectly by shaping and enabling Ordinary Capabilities [19].

Despite extensive literature, several questions remain unresolved. It is still uncertain whether coordination between Dynamic and Ordinary Capabilities is a prerequisite for superior performance [49], how Organizational Sustainability Capabilities contribute to financial outcomes through accurate capability deployment [4], how resilience mechanisms operate when organizations encounter abrupt shocks [6], and whether sustainability practices consistently enhance competitive advantage based on objective financial evidence [7]. Furthermore, the extent to which interdisciplinary approaches are necessary to manage and recover from large-scale disruptions is not yet well established [10].

Building upon these gaps, this study explores whether the development of Organizational Capabilities enhances OP under uncertainty. It draws from prior empirical works linking Dynamic and Ordinary Capabilities to financial outcomes, using ROA to represent the sustainability–performance relationship [26] and OROA as a measure of firm performance unaffected by financing structures [27]. Although both metrics are widely used, they also have limitations. Since they rely on accounting-based asset values, they may not fully reflect market performance—particularly in firms rich in intangible assets such as intellectual property and brand equity [61]. This dependence can underestimate performance in knowledge-driven organizations. Moreover, ROA can be temporarily improved by reducing asset bases or delaying key investments, potentially jeopardizing long-term competitiveness [62]. Despite these shortcomings, these financial indicators remain valuable for analyzing how Dynamic and Ordinary Capabilities jointly affect OP in uncertain contexts, aligning with the goals of the present study.

Organizational sustainability dynamic capabilities: monitoring, seizing, and reconfiguration

Organizational Sustainability Dynamic Capabilities describe a firm's strategic ability to realign its internal functions and processes in response to shifting sustainability demands from diverse stakeholders. These capabilities enable firms to balance financial, environmental, and social objectives through continuous learning and adaptation [12]. In essence, they allow

organizations to innovate and evolve while preserving competitiveness within volatile and complex markets [4, 63]. Such adaptability is especially vital for firms that must remain both efficient and flexible to exploit emerging opportunities in uncertain environments [2].

Building on Teece's [64] dynamic capability framework and the conceptual developments proposed by Shang *et al.* [4], this study reinterprets Organizational Sustainability Dynamic Capabilities by outlining specific subdimensions that have yet to be empirically evaluated. Within this view, monitoring, seizing, and reconfiguration are identified as the three principal elements that together form the foundation of these capabilities. Each sub-capability represents a distinct yet interconnected mechanism through which firms can detect sustainability-related signals, mobilize resources to act upon them, and subsequently reshape structures or routines to improve Organizational Performance **(Table 1)**.

Table 1. Organizational sustainability dynamic specific capabilities

OS DC	Specific capability	Construct items abbreviations	Reference
Monitoring	Performer analytical activities that perceived, understood, and interpreted signals reflecting emerging changes in the environment.	OS1	Teece [64]
Seizing	Identify and implementing new opportunities for sustainable development that are critical to corporate sustainability.	OS2	Shang *et al.* [4]
	Develop innovative strategies to respond to changes in the environment.	OS3	Shang *et al.* [4]
Reconfiguration	Use of existing resources to ensure reliable and efficient business operations.	OS4	
	Learning and training activities.	OS5	Shang *et al.* [4]

Note. Organizational Sustainability Dynamic Capabilities are identified primally following the empirical results obtained by Shang *et al.* [4]

Monitoring Capabilities are defined as the firm's ability to systematically detect, interpret, and learn from emerging signals in its environment [64]. Classified under the sensing capabilities category [65], these capabilities enable organizations to process information effectively to support economic performance [12]. They involve scanning the external environment, learning from new developments, and interpreting opportunities [2], which can refine business models and heighten awareness of sustainability investments [4]. Monitoring capabilities also enhance knowledge related to stakeholder relationships and broader ecosystem interactions [7]. Nevertheless, converting sustainability challenges into tangible economic gains requires firms to strengthen their monitoring, capturing, and reconfiguration abilities [4].

Seizing Capabilities refer to the firm's capacity to deploy resources strategically in order to respond to identified needs and opportunities, thereby capturing value [66]. These capabilities enable firms to recognize and secure opportunities for sustainable development, including throughout the product life cycle [2, 12]. By facilitating knowledge-sharing and collaborative activities, seizing capabilities promote innovation in sustainability practices [4] and enhance Organizational Performance through sustainable value creation [7]. Despite their importance, empirical studies are still limited regarding the factors that drive effective deployment of seizing capabilities and their impact on competitive advantage [7].

Reconfiguration Capabilities involve restructuring and redeploying resources to meet evolving organizational needs and opportunities, ensuring the firm continues to create value even as environmental conditions shift [66]. These capabilities allow organizations to maintain reliability and operational efficiency while adapting existing competences to changing contexts [2, 12]. Reconfiguration supports continuous learning, training initiatives, and refinement of routines and practices [4], thereby reinforcing competitive positioning [7]. However, understanding how these capabilities interact and the mechanisms through which they influence performance remains limited, highlighting the need for further empirical investigation [4]. The relationships among Dynamic Capabilities clusters, micro-foundations, Organizational Sustainability Dynamic Capabilities, and their contributions to OP are summarized in Figure 1.

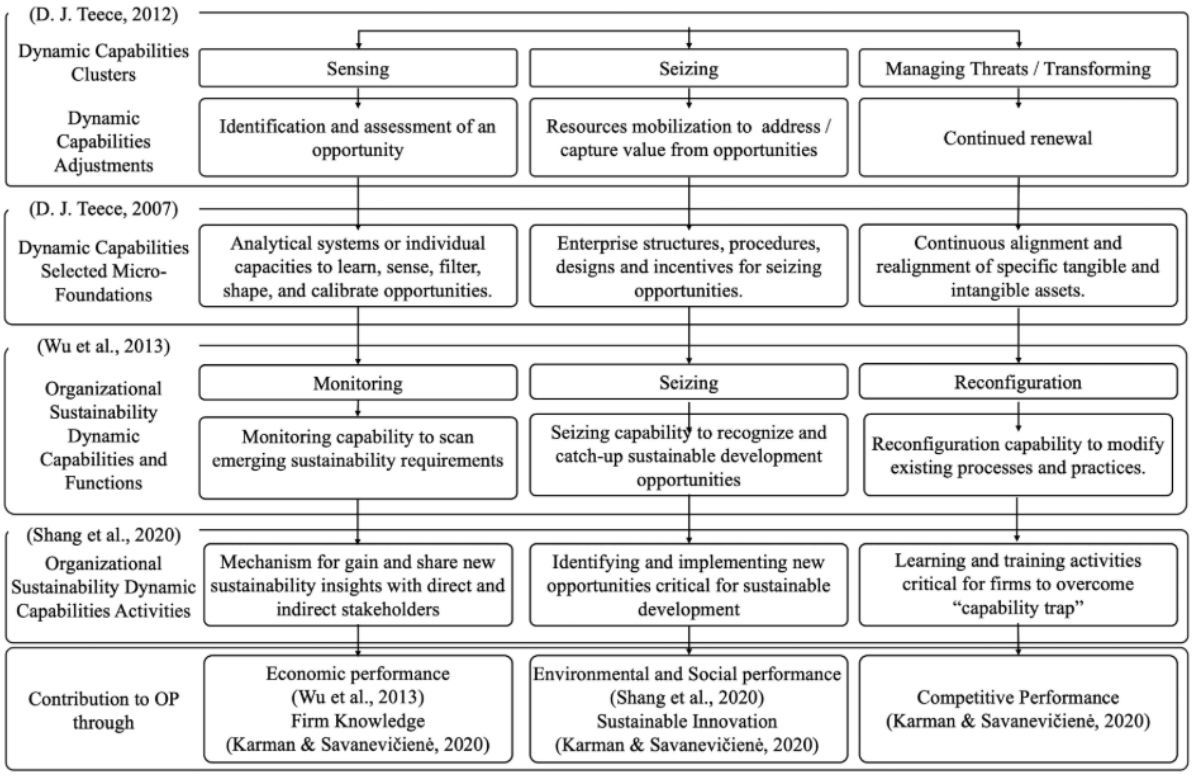

Figure 1. Dynamic Capabilities clusters, adjustments and micro-foundations relationship with Organizational Sustainability Dynamic Capabilities functions and activities and contribution to OP

Organizational resilience dynamic capabilities: anticipation, coping, and adaptation

Organizational Resilience Dynamic Capabilities are conceptualized as a firm's distinctive set of abilities to foresee, withstand, and thrive amidst unexpected disruptions and, more broadly, within highly volatile environments [5]. These capabilities allow organizations to continuously adjust and transform in response to unforeseen events, navigating a wide spectrum of turbulence while sustaining stable and effective operational states [14, 15]. By proactively identifying potential risks, firms can leverage resilience capabilities to maintain competitive advantage and achieve superior Organizational Performance [13].

Despite its importance, resilience is notoriously difficult to define, and pinpointing the specific features that constitute a firm's resilience remains a complex task [14]. For this study, Duchek's [6] framework of Organizational Resilience Dynamic Capabilities is adopted, which conceptualizes resilience as a meta-capability and provides a clear delineation of its constituent constructs. In line with this framework, the specific constructs of Organizational Resilience Dynamic Capabilities, along with their definitions and contributions to OP, are summarized in **Table 2**.

Table 2. Organizational resilience dynamic specific capabilities

OR DC	Specific capabilities	Construct items abbreviations
Anticipation	Ability to observe internal and external developments.	OR1
	Ability to identify critical developments.	OR2
	Ability to prepare for unexpected events.	OR3
Coping	Ability to accept a problem.	OR4
	Ability to develop and implement solutions.	OR5
Adaptation	Ability to be reflective.	OR6

Note. Organizational Resilience Dynamic Capabilities are identified primally following the theorical results obtained by Duchek [6].

Anticipation capabilities are defined as the firm's capacity to identify and interpret critical developments within the organization or its external environment, allowing proactive adjustments before issues become urgent [6, 67]. These capabilities enable firms to act ahead of potential disruptions, thereby mitigating negative impacts and preserving or even enhancing Organizational Performance during periods of uncertainty [68]. However, the way anticipation interacts with other Organizational Capabilities during disruptive events remains insufficiently explored [5].

Coping capabilities represent a firm's ability to respond effectively to unforeseen challenges in order to withstand adverse conditions, closely aligned with principles of crisis management [6]. They encompass the capacity of individuals, organizations, and systems to utilize available skills and resources to manage risks, threats, or disasters [69]. Coping capabilities are central to organizational resilience, enabling recovery to expected performance levels [37] while also

mitigating and adapting to risk [14]. Resilient firms that can cope effectively with emerging threats are better positioned to maintain high OP in highly turbulent environments, though further empirical investigation is warranted [5].

Adaptation capabilities refer to an organization's ability to transform its structures, processes, and culture in response to disruptive events, encompassing learning, reflection, and broader organizational change capacities [6, 30]. These capabilities support the firm's capacity to recover, grow, and evolve in the face of adversity [70] by absorbing external shocks and facilitating successful adaptation [13, 71]. Adaptation capabilities contribute to effective team adjustments and organizational transformation during disruptions. Nonetheless, understanding the mechanisms through which these capabilities operate and interact with other Dynamic Capabilities to influence OP requires additional research [5].

The interconnections between Dynamic Capabilities clusters, their micro-foundations, and the functions of Organizational Resilience Dynamic Capabilities in driving OP are illustrated in **Figure 2**.

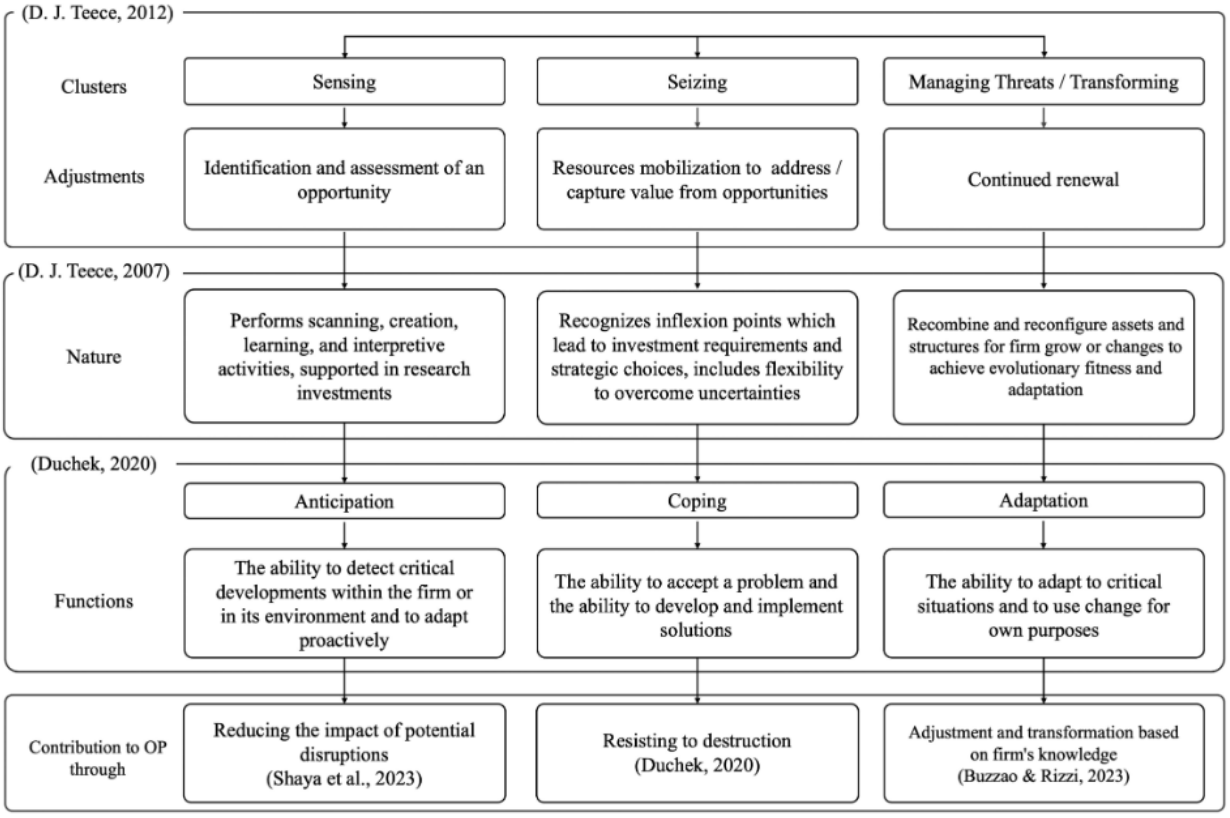

Figure 2. Dynamic Capabilities clusters, adjustments, nature and functions related with Organizational Resilience Dynamic Capabilities and contribution to OP

We propose that certain Dynamic Capabilities, specifically those supporting Organizational Sustainability and Organizational Resilience, play a pivotal role in shaping Organizational Performance (OP). This research advances knowledge in this area by employing an empirical approach [12], which also identifies additional variables and contextual factors that influence the linkage between capabilities and performance [4]. To capture the tangible effects of these capabilities, financial metrics were incorporated. Specifically, Return on Assets (ROA) extracted from company financial reports was used as an indicator of how capability development impacts performance [7], while survey data using Likert-scale measures provided insights into how the interaction among Dynamic Capabilities affects OP [7, 72].

From this foundation, the study advances the following hypotheses:

H1: Organizational Sustainability Dynamic Capabilities positively influence OP.

H2: Organizational Resilience Dynamic Capabilities positively influence OP.

Business continuity as an ordinary capability and its effect on performance

Business Continuity refers to an organization's capacity to sustain the delivery of products and services at pre-established levels and within acceptable timeframes, even when disruptions occur [38]. As an Ordinary Capability, it reflects a firm's ability to use existing resources effectively to maintain day-to-day operations, thereby providing distinctive problem-solving mechanisms [4, 20].). The practice of Business Continuity Management is intertwined with organizational agility and supports the cultivation of Dynamic Capabilities by allowing firms to anticipate and respond to potential disruptions with well-coordinated strategies [39].

Business Continuity is typically organized into three phases: pre-disruption (prevention and preparedness), during disruption (response), and post-disruption (recovery and evaluation). While these phases are widely recognized, there is a gap in the literature regarding systematic monitoring, assessment, and continuous improvement processes [9]. Firms must safeguard core value-generating operations and restore functionality efficiently after disruptions [73, 74]. On a broader scale, comprehensive disaster readiness requires preventive, protective, mitigative, responsive, and recovery measures to ensure resilience at organizational and national levels [75].

In this study, Business Continuity Ordinary Capabilities were operationalized into three core components: prevention and preparedness, response and recovery, and maintenance and review [8, 9, 76, 77]. These elements are treated as fundamental constructs of Business Continuity, with their definitions and contributions to OP summarized in **Table 3**.

Table 3. Business continuity specific ordinary capabilities

BC OC	Specific capability	Construct items abbreviations	Reference
Prevention and preparedness	Identify stakeholder's expectations.	BC1	[8, 9, 77]
	Define organizational guidelines associated with BC Management.	BC2	[8, 9, 77]
	Define a BC Management Leader.	BC3	[9, 77]
	Identify impacts associated with business interruption.	BC4	[8, 77]
	Identify business process recovery prioritization.	BC5	[8, 9, 77]
	Identify business tolerable time of disruption.	BC6	[9, 77]
	Implement strategies for business disruptions.	BC7	[8, 9, 77]
	Have a BC plan in place.	BC8	[8, 9, 77]
	Conduct BC management procedures exercises and drills.	BC9	[8, 9, 77]
Response and recovery	Implement incident and emergency response procedures.	BC10	[8, 9, 77]
	Activate BC strategies when disruptions occurred.	BC11	[8, 9, 77]
	Manage the recovery of business-critical functions.	BC12	[8, 9, 77]
Maintaining and reviewing	Implement adjustments from learning experience.	BC13	[8, 9, 76, 77]
	Learn from other experiences to face the crisis.	BC14	[73, 76]

Preparedness and prevention capabilities encompass proactive measures designed to ready organizations for potential disruptions. These capabilities complement reactive mechanisms for post-disruption recovery [78], allowing firms to manage unexpected interruptions and mitigate adverse consequences [79]. Specifically, preparedness capabilities include programs and systems established before an incident, aimed at supporting prevention, protection, mitigation, response, and recovery from emergencies or disasters [80, 81]. Prevention capabilities, on the other hand, consist of practices, processes, resources, and measures intended to avoid or minimize hazards and risks, implemented through mechanisms such as alternative operational sites, well-rehearsed contingency plans, and resource redundancies [8, 80]. Evidence suggests that robust preparedness and prevention strategies enhance Organizational Performance by enabling timely recovery, reducing operational downtime, and minimizing financial losses [82].

Response and recovery capabilities are central to crisis management and are typically operationalized through Business Continuity Plans [83, 84]. Response capabilities represent an organization's capacity to protect people, assets, operations, and critical resources immediately after a disruptive event [75, 80], thereby supporting resilience and contributing to competitiveness [41]. Recovery capabilities enable the organization to restore normal or new equilibrium conditions following a disaster [85], encompassing organizational culture adaptation and systemic revitalization [86]. At a national level, recovery capabilities involve infrastructure restoration, housing stabilization, and fostering a sustainable economy [75]. Rapid deployment of these capabilities can also help preserve organizational reputation while reducing downtime and financial impact. However, further research is needed to understand how response and recovery mechanisms interact during crisis planning to maintain operational continuity [82, 87].

Maintaining and reviewing capabilities ensure that an organization's Business Continuity Management (BCM) competence remains effective, current, and aligned with evolving standards [76]. Maintenance capabilities focus on keeping plans operationally fit-for-purpose, whereas review capabilities verify compliance with relevant laws, standards, strategies, and best practices [76]. These processes are essential for the BCM lifecycle, as outdated plans often fail during real crises [8, 10, 73]. By continuously maintaining and reviewing Business Continuity plans, firms can sustain operational efficiency and adaptability during disruptions, thereby supporting long-term Organizational Performance and resilience [87, 88].

The relationship between Business Continuity Ordinary Capabilities, Incident Management Stages, the BCM lifecycle, operational functions, and their contribution to OP is illustrated in **Figure 3**.

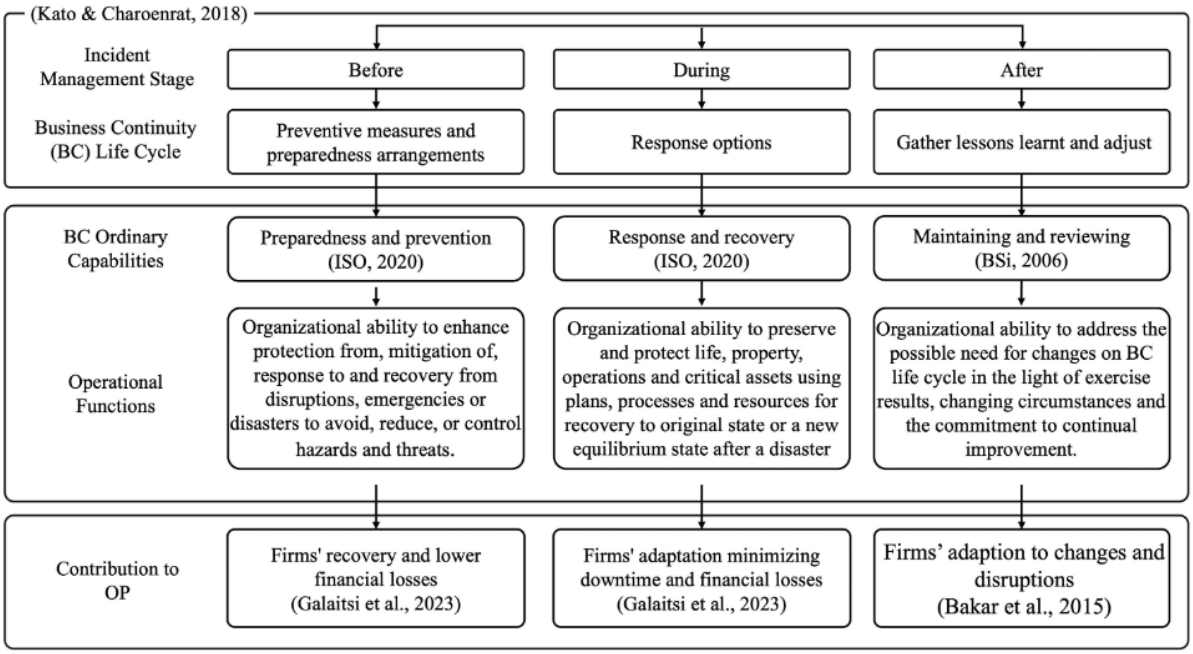

Figure 3. Relationship of Business Continuity (BC) Ordinary Capabilities with Incident Management Phases, BC lifecycle, operational processes, and contribution to OP

The influence of Ordinary Capabilities on Organizational Performance has frequently been examined using financial and economic metrics, including ROI, profit as a percentage of sales, net income before tax, revenue, profitability, cost savings, ROA, ROS, and ROE [89, 90]. Building on this foundation, the following hypothesis is proposed:

H3: Business Continuity Ordinary Capabilities are positively associated with OP.

Mediating role of business continuity ordinary capabilities between dynamic capabilities and OP

According to Helfat and Peteraf [19], Dynamic Capabilities indirectly influence firm outcomes through their effect on operational or Ordinary Capabilities. Ordinary Capabilities provide firms with the means to achieve operational outcomes, while Dynamic Capabilities serve to modify, integrate, and recombine these capabilities to generate value [48, 91]. Essentially, Dynamic Capabilities enhance firm performance indirectly by shaping operational capabilities rather than acting directly.

To evaluate whether Ordinary Capabilities mediate the link between Dynamic Capabilities and OP, this study relies on the Dynamic Capabilities theoretical framework, which posits that firms with valuable, rare, inimitable, and non-substitutable (VRIN) resources gain a competitive advantage [7].

From a theoretical standpoint, Organizational Sustainability Dynamic Capabilities are connected to Business Continuity performance by promoting resilience and equipping firms to respond effectively to threats, such as natural disasters or cybersecurity breaches [79, 87]. This relationship is reinforced through organizational learning, operational flexibility, and technology-enabled sensing and response mechanisms [3]. By applying reconfiguration capabilities to existing processes, organizations can mitigate negative sustainability impacts and adapt resources to seize opportunities and confront challenges [2, 12]. Additionally, as noted by ISO [38], a Business Continuity Management System strengthens a firm's ability to continue operations during disruptions, supporting strategic goals, maintaining competitive advantage, and protecting organizational reputation.

Similarly, Organizational Resilience Dynamic Capabilities—including anticipation, coping, and adaptation—serve as critical resources for enhancing Business Continuity practices [5, 6]. These capabilities improve operational resilience, supporting preparedness and crisis response, although they alone are insufficient to achieve full Organizational Resilience [79]. ISO [46] emphasizes that coordinating management disciplines, including Business Continuity practices, strengthens a firm's absorptive and adaptive capacities under uncertainty.

Nonetheless, the relationship between these capabilities and OP is complex. In certain contexts, linking strategic management to potential disruptions can act as an inhibitor by exposing operational vulnerabilities while simultaneously enhancing preparedness and recovery [6, 39]. Using ROA and OROA as financial proxies [27], the following hypotheses are formulated:

H4: Organizational Sustainability Dynamic Capabilities positively influence Business Continuity Ordinary Capabilities.

H5: Business Continuity Ordinary Capabilities mediate the effect of Organizational Sustainability Dynamic Capabilities on OP.

H6: Organizational Resilience Dynamic Capabilities positively influence Business Continuity Ordinary Capabilities.

H7: Business Continuity Ordinary Capabilities mediate the effect of Organizational Resilience Dynamic Capabilities on OP.

The overall conceptual model incorporating all proposed hypotheses is presented in **Figure 4**. These relationships will be empirically tested using methodologies established in prior research on Organizational Capabilities and firm performance.

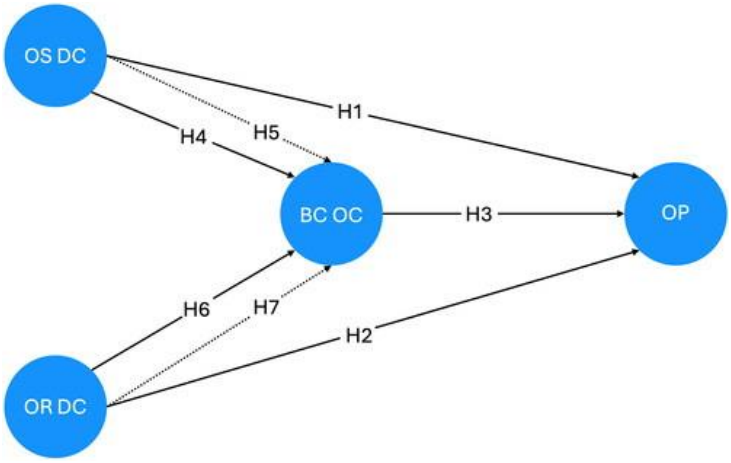

Figure 4. Hypothesis

Research Methodology

Research design

This study analyzed Return on Assets (ROA) data from 25,523 firms that submitted financial statements in 2021, as mandated by the Colombian Superintendence of Companies to guarantee data accuracy. Since the dependent variable required qualitative evaluation, a three-phase data collection approach was implemented to enhance reliability and trustworthiness, employing purposive sampling under a non-probability framework.

In the first phase, secondary data on ROA reported by firms between 2017 and 2021 to the Colombian Superintendence of Companies (Superintendence of Companies, 2023) were used. A second quartile analysis was conducted by firm size—large, medium, and micro-small—to establish ROA ranges: large (-18% to 25%), medium (-18% to 26%), and micro-small (-19% to 26%). This method avoided bias toward extreme performances and improved data conformity. Ultimately, the sample distribution was 30% large, 35% medium, and 35% small firms from a total of 939 firms.

The second phase addressed the need for in-depth understanding of Organizational Capabilities (OCs) and their effect on organizational performance (OP). Primary qualitative data were collected using a questionnaire created in Microsoft Office 365 Forms, grounded in literature on dynamic capabilities under uncertainty. A Likert scale (1 = strongly disagree to 5 = strongly agree) was applied to assess capability perceptions, following established approaches [5, 20, 29, 30, 92, 93]. Pilot testing with three academics and four Business Continuity Managers led to refinement in question clarity, sequence, and length. The finalized survey included 28 items: Organizational Sustainability Dynamic Capabilities (5 items), Organizational Resilience Dynamic Capabilities (9 items), and Business Continuity Ordinary Capabilities (14 items).

In the third phase, the questionnaire was emailed to official firm representatives registered with the Colombian Superintendence of Companies. The communication emphasized confidentiality, study objectives, instructions, and the relevance of OC development. Data collection took place from November 1 to 30, 2021. From 220 returned surveys, 197 were retained after consistency checks, yielding a 20.95% response rate, considered sufficient for generating reliable confidence intervals in survey-based research [94].

Following data collection, each procedural step was carefully reviewed to ensure data consistency and adequate confidence intervals. Non-probability sampling was justified because the study was exploratory, aiming to understand perceptions of OC development and its link to OP, noting that the Colombian Superintendence supervises only a subset of all companies.

Data analysis proceeded in two stages. First, firms that submitted financial statements in 2021 and met ROA thresholds in 2020 were matched, resulting in 190 firms. Second, the relationship between OCs and OP was analyzed using variance-based PLS-SEM via SmartPLS 4.0, suitable for models with multiple constructs and indicators [95]. G*Power analyses confirmed the adequacy of the sample size for both a priori and post-hoc evaluations, using three predictors (Organizational Sustainability and Resilience Dynamic Capabilities, and Business Continuity Ordinary Capabilities), minimum $R^2 = 0.15$, and 95% statistical power. The required minimum sample size was 119, and the 190 responses yielded post-hoc power of 0.99 [96].

To address potential Common Method Bias (CMB) from self-reported responses, both Harman's single-factor test and Confirmatory Factor Analysis (CFA) were conducted. Exploratory Factor Analysis (EFA) showed KMO = 0.92, Bartlett's test p = 0.00, three factors explaining 65.9% of variance, and only 48.8% accounted for by a single factor, suggesting minimal CMB impact. CFA indicated poor fit for Harman's model ($\chi^2/df = 58626.4$, CFI = 0.960, TLI = 0.957, RMSEA = 0.113, SRMR = 0.123), confirming that CMB effects were negligible [97].

Construct measures

Organizational Capabilities constructs were defined and validated using previous theoretical and empirical studies to assess their presence and explain their relationship with OP. Organizational Sustainability Dynamic Capabilities were adapted from Eikelenboom & De Jong [11], Shang *et al.* [4], and Teece [64], measured as a first-order hierarchical construct with five elements **(Table 1)**. Organizational Resilience Dynamic Capabilities, following Duchek [6], were modeled as a second-order hierarchical construct with three second-order capabilities and six first-order specific capabilities **(Table 2)**. Business Continuity Ordinary Capabilities were derived from BSi [76], Herbane [73], Herbane *et al.* [8], Kato & Charoenrat [9], and Niemimaa [77], measured through 14 first-order process actions **(Table 3)**.

To enhance the applicability of the findings for future studies, this research highlighted constructs that were either adapted or adopted from prior work. The constructs were operationalized according to the study's hypotheses. Specifically, the study examined how perceptions of Organizational Sustainability and Resilience Dynamic Capabilities influence organizational performance (OP) directly (H1 and H2), as well as their effects on Business Continuity Ordinary Capabilities (H4 and H6) and the mediating role of this capability (H5 and H7). Furthermore, the PLS-SEM methodology enabled the investigation of how perceptions of Business Continuity Ordinary Capabilities contribute to OP (H3) **(Figure 4)**. In line with previous research [43], OP was assessed using multiple profitability indicators: operational margin (P1), profit margin (P2), return on equity (ROE, P3), return on assets (ROA, P4), return on sales (ROS, P5), and operational ROA (OROA, P6).

Data analysis

The study employed variance-based PLS-SEM due to its suitability for several analytical requirements. First, it accommodates complex models involving multiple constructs with both formative and reflective measurements [98]. Second, it is appropriate for exploratory research or theoretical models with limited prior evidence [99]. Third, it provides a robust framework for constructing and evaluating theoretical models [98]. This approach aligns with the objectives of the current study.

Analysis followed a two-step procedure. The first step focused on evaluating the measurement model to confirm reliability and validity. The second step assessed the structural model to examine the relationships among constructs. SmartPLS 4.0 was used for both stages, following approaches from recent studies on Organizational Capabilities [4, 29, 92, 100, 101]. Measurement model assessment included checks for internal consistency, convergent validity, and discriminant validity. The structural model was evaluated in terms of path significance, explanatory power, and predictive relevance to test the proposed hypotheses.

Results

Assessment of the measurement model

Latent variables representing Dynamic and Ordinary Capabilities were conceptualized as reflective constructs. This choice is appropriate for theory-testing purposes, as reflective indicators are expected to correlate, and dropping an item does not change the underlying construct meaning, while measurement error is addressed at the item level [102]. Prior research on Organizational Sustainability Dynamic Capabilities has used similar reflective approaches [4, 100].

Internal consistency was evaluated using composite reliability, with thresholds above 0.70 considered acceptable and exploratory thresholds of 0.60–0.70 also deemed reasonable. To maintain content validity, items OR4 **(Table 2)**, BC9 **(Table 3)**, and OP measures P1, P2, P3, and P5 were excluded.

After refining the latent constructs, both reliability and validity were reassessed. Convergent validity was established via Average Variance Extracted (AVE) values exceeding 0.50. Discriminant validity was verified using the Fornell–Larcker criterion, ensuring that the square root of each construct's AVE surpassed its correlations with other constructs, and all indicators loaded higher on their respective constructs than on others. Cronbach's α values confirmed satisfactory internal consistency (>0.60), and all remaining outer loadings exceeded 0.50, consistent with exploratory research standards. **Table 4** presents Cronbach's α, composite reliability (>0.70), and AVE (>0.50). Discriminant validity results, including AVE square roots, inter-construct correlations, and the heterotrait–monotrait (HTMT) ratio, are shown in **Table 5** [103, 104].

Table 4. Estimation of the measurement model parameters

Construct Items	Cronbach's alpha	CR	AVE
OS DC	0,880	0,884	0,594
OR DC	0,844	0,858	0,522
BC OC	0,934	0,935	0,529
OP	0,749	0,853	0,658

Note. CR: Composite Reliabilities. AVE: Average Variance Extracted. Cronbach's alpha values >0.8 indicates item's reliability. CR values over 0.7 establishes constructor reliability. AVE >0.5 values exhibit construct validity through convergent validity.

Table 5. Discriminant validity coefficients

	BC OC	OR DC	OS DC	OP
BC OC	**0,727**	0,858	0,806	0,147
OR DC	0,878	**0,723**	0,878	0,170
OS DC	0,829	0,723	**0,770**	0,180
OP	0,137	0,169	0,180	**0,811**

Note. Diagonal elements (bold) correspond to square root of AVE [103]. Correlations are shown below the diagonal. Heterotrait–monotrait ratio (HTMT) testing is required as this is a multiple constructs model, results are above the diagonal elements, values are lower than 0.90 assessing construct validity through discriminant validity [104].

In addition, the structural model's quality was evaluated using the Variance Inflation Factor (VIF), while outer loading values are presented in **Table 6**. Collinearity among formative constructs was ruled out, as all VIF values were below the threshold of 5, and outer loadings exceeded 0.50, confirming construct validity [104]. **Figure 5** displays the path coefficients and associated p-values. The coefficient of determination (R^2) for endogenous latent variables was interpreted following conventional thresholds, with values of 0.75 or higher considered substantial. In this analysis, the R^2 value for Business Continuity Ordinary Capabilities was 0.790, indicating a strong explanatory power. The effect size (f^2) was also examined: the impact of Business Continuity Ordinary Capabilities on Organizational Sustainability Dynamic Capabilities was 0.090, representing a small effect (≥ 0.02), whereas the effect on Organizational Resilience Dynamic Capabilities was 0.496, classified as large (> 0.35) according to Cohen [96]. Statistical significance was assessed via bootstrapping with 5,000 subsamples to ensure robust estimation.

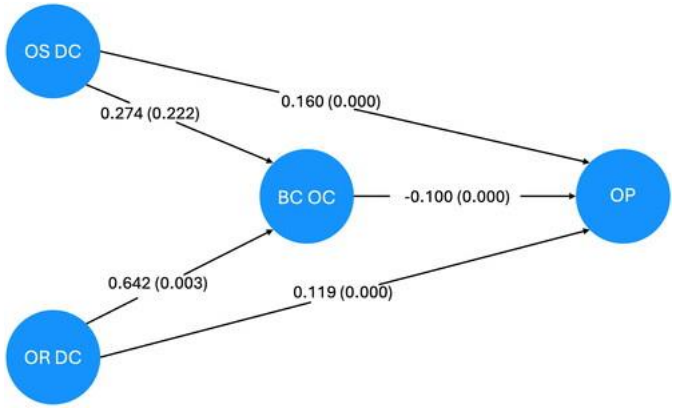

Figure 5. Model path coefficients and p values

Table 6. Formative construct items validation

Constructs items abbreviations	VIF	Outer factor loadings
OS1	2,248	0,824
OS2	2,396	0,823
OS3	2,005	0,817
OS4	2,198	0,667
OS5	2,494	0,708
OR1	4,106	0,688
OR2	4,536	0,720
OR3	1,805	0,878
OR5	1,582	0,747
OR6	1,663	0,538
BC1	1,602	0,694
BC2	4,383	0,649
BC3	3,897	0,603
BC4	3,259	0,709
BC5	3,598	0,710
BC6	3,076	0,595
BC7	4,050	0,683
BC8	2,703	0,683
BC10	1,925	0,782
BC11	2,234	0,837
BC12	3,627	0,826
BC13	3,181	0,890
BC14	1,602	0,694

P4	1,558	0,980
P6	1,558	0,611

Note: Details on how each construct item relates to specific Organizational Capabilities are provided in Tables 1, 2, and 3. The OP financial metrics ROA and OROA are represented by reflective indicators P4 and P6, respectively. The constructs are abbreviated as follows: OS (Organizational Sustainability), OR (Organizational Resilience), and BC (Business Continuity). Collinearity among the formative indicators was checked using the Variance Inflation Factor (VIF), with all values falling below 5, confirming no collinearity issues. Each item's mapping to its corresponding latent variable is indicated in the "Items / Constructs Abbreviations" column, while outer loadings exceeding 0.50 demonstrate adequate construct validity.

Structural model analysis

Once the measurement model was validated, the next step involved examining the structural relationships to test the research hypotheses. The PLS-SEM structural model results are summarized in **Table 7**. To ensure the stability of the estimated β coefficients, bootstrapping was performed with a 95% bias-corrected confidence interval. Given the clearly directional nature of the hypotheses, a one-tailed test was applied, following recommendations from similar research, which also helps to reduce Type II errors [29, 100]. The strength of each relationship was assessed through the β coefficient, while statistical significance was determined using p-values (<0.05) and t-values (1.28 for 90% confidence and 1.64 for 95% confidence). These analyses confirmed that both Dynamic and Ordinary Capabilities significantly influence organizational performance, supporting hypotheses H1, H2, and H3.

Furthermore, the predictive quality of the model for Business Continuity Ordinary Capabilities was evaluated. The Q^2 value of 0.656, along with RMSE = 0.594 and MAE = 0.455, indicates that the model provides robust predictive performance and is suitable when compared to alternative competing models.

Table 7. Hypotheses results

Hypotheses	Paths	Coeff (β)	T-values	p-Values	BCI LL	BCI UL	Results
H1	OS DC → Op	0,160	0,000	0,000	–	–	Supported
H2	OR DC → OP	0,119	0,000	0,000	–	–	Supported
H3	BC OC → OP	−0,100	0,000	0,000	–	–	Supported
H4	OS DC → BC OC	0,274	1,222	0,222	–	–	Not Supported
H5	OS DC → BC OC → OP	–	–	–	−0,213	0,594	Not Supported
H6	OR DC → BC OC	0,642	2,950	0,003	–	–	Supported
H7	OR DC → BC OC → OP	–	–	–	0,336	1,117	Partially Supported

Note. Coeff (β) values > 0,10 represent adequate weigh of impact. T-value > 1,69 and p-value < 0.05 represent significant relationship. Biased Corrected Interval Lower Limit (BCI LL) values should be around 0,25. Biased Corrected Interval Upper Limit (BCI UL) values should be around 0,95. Estimation significance levels were obtained through bootstrapping with 5,000 subsamples.

Mediation effects and interpretation

To examine whether Business Continuity Ordinary Capabilities mediate the link between Dynamic Capabilities and organizational performance (OP), bias-corrected confidence intervals (BCI LL and BCI UL) were calculated. The results indicate that Business Continuity capabilities do not mediate the effect of Organizational Sustainability Dynamic Capabilities on OP (H5), as the lower confidence bounds were negative and the upper bounds did not meet the 95% criterion **(Table 7)**. Conversely, a partial competitive mediation was observed for Organizational Resilience Dynamic Capabilities (H7). In this case, Organizational Resilience positively influenced Business Continuity capabilities, which subsequently affected OP, though the path from Business Continuity to OP had a negative β coefficient **(Figure 5)**. Overall, this highlights that Dynamic and Ordinary Capabilities jointly influence performance, while certain items (OR6: reflective capacity, BC9: conducting continuity drills) contributed minimally.

Discussion

Dynamic Capabilities theory asserts that organizational performance emerges from both dynamic and ordinary capabilities. This study focused on understanding OP under uncertainty by examining how Organizational Sustainability and Resilience (dynamic) and Business Continuity (ordinary) capabilities interact. Using ROA and OROA as performance indicators, the study assessed direct contributions as well as indirect effects via mediation.

The findings demonstrate that Dynamic Capabilities—particularly those related to Organizational Sustainability—play a central role in sustaining OP. Capabilities such as monitoring, seizing, and reconfiguring resources allow firms to respond effectively to shocks, contributing to survival and long-term growth [2, 4, 12, 31, 33, 105]. These results are consistent with prior evidence linking sustainability-oriented capabilities with financial performance measures such as ROA and OROA [24-27]. Among dynamic capabilities, Organizational Sustainability exhibited the strongest direct association with OP.

Dynamic Capabilities are theorized to enhance the effectiveness of Ordinary Capabilities, indirectly affecting OP [19, 79]. In line with this, Organizational Sustainability and Resilience positively influenced Business Continuity Ordinary Capabilities.

However, mediation was not observed for Organizational Sustainability, possibly because these capabilities target broad sustainability outcomes, while ordinary capabilities focus on maintaining ongoing operations.

Organizational Resilience Dynamic Capabilities also contributed to OP, confirming previous research [28, 106]. Interestingly, the reflective dimension (OR6) showed minimal impact, echoing findings by Buzzao and Rizzi [5] that reflective and learning capacities may not significantly improve business continuity practices. The mediating effect of Business Continuity capabilities was evident only in relation to resilience, reflecting a tension between the structured processes of Business Continuity and the flexible, adaptive approach of Organizational Resilience capabilities. This suggests that while formal procedures are essential for orchestrating resources during crises, adaptive capabilities allow firms to adjust strategies to contextual demands.

Validation of the adapted constructs for Business Continuity Ordinary Capabilities provides opportunities for future research. Prevention and preparedness elements (BC9: conducting continuity drills) had limited influence on OP, which contrasts with prior studies highlighting the value of planned testing for protecting organizational assets [9, 77]. These results suggest that Dynamic Capabilities, as reflected in ROA and OROA, are the primary drivers of OP under uncertain conditions [29, 43, 89, 105, 106]. Among the indicators tested, ROA most accurately reflects the linkages between Dynamic and Ordinary Capabilities and OP.

In conclusion, Dynamic Capabilities demonstrate a clear and positive effect on OP, while Ordinary Capabilities contribute under certain conditions, particularly in mediating the effect of resilience capabilities. The results underscore the need to consider multi-dimensional performance indicators when evaluating the impact of ordinary capabilities in turbulent environments. These findings extend prior literature on Dynamic and Ordinary Capabilities, offering guidance for both theory and managerial practice [4, 35].

Theoretical implications

This study advances theoretical understanding in several ways. First, it posits that both Dynamic and Ordinary Capabilities play a pivotal role in shaping organizational performance (OP) under conditions of uncertainty [17, 47]. By clearly defining and adapting capability constructs based on prior empirical and theoretical work, we map the micro-foundations, clusters, and adjustments of Dynamic Capabilities to the operational functions of Organizational Sustainability Dynamic Capabilities, emphasizing their connection to OP outcomes.

Second, our empirical findings demonstrate that Organizational Sustainability and Resilience Dynamic Capabilities contribute significantly to OP during disruptive events, exemplified here by the COVID-19 pandemic, which affected firms across all sizes and sectors. These results address Duchek's [6] call to explore how Organizational Resilience Dynamic Capabilities interact under unexpected crises, and respond to Karman and Savanevičienė's [7] suggestion to investigate the link between Organizational Sustainability practices and OP. Additionally, our analysis confirms that ROA and OROA are particularly suitable financial indicators for capturing these relationships.

Third, the research underscores the importance of interdisciplinary approaches. Since both Dynamic and Ordinary Capabilities influence OP, integrating efforts across organizational functions is critical to effectively prepare for and respond to major structural and operational changes. This approach, grounded in Organizational Sustainability and Resilience, supports the activation of Business Continuity Ordinary Capabilities and aligns with Niemimaa *et al.*'s [10] emphasis on interdisciplinary collaboration.

Fourth, we explored the mediating role of Ordinary Capabilities on the relationship between Dynamic Capabilities and OP [7, 19, 91]. Our findings reveal that Business Continuity Ordinary Capabilities do not mediate the impact of Organizational Sustainability Dynamic Capabilities on OP, but partial mediation is observed for Organizational Resilience Dynamic Capabilities [79]. These insights suggest that firms implementing both resilience and business continuity initiatives should strategically coordinate these capabilities to maximize performance under uncertainty, as modeled through our variance-based PLS-SEM analysis.

Fifth, the study links specific capability constructs with distinct OP financial metrics. Monitoring, seizing, and reconfiguration capabilities are confirmed to drive OP, consistent with Shang *et al.* [4] Similarly, our findings validate Duchek's [6] framework while providing deeper insight into coping capabilities: the ability to accept problems contributes less to OP than the ability to design and implement solutions, echoing observations by Buzzao and Rizzi [5]. Finally, the research extends Dynamic Capabilities theory by adapting Business Continuity Ordinary Capabilities constructs, reinforcing preparedness, preventive, and response measures [9], as well as recovery capabilities [73, 74], and maintenance and review processes [76]. Future research should test these constructs across different contexts, industries, and countries to further refine their applicability and generalizability.

Practical implications

The findings offer actionable guidance for firms seeking to enhance resilience and performance in uncertain environments. Organizational Capabilities should be developed in a coordinated manner to protect value propositions, ensure survival, and

preserve shared value. Integrating Organizational Sustainability and Resilience Dynamic Capabilities with Business Continuity Ordinary Capabilities can help firms maintain product and service delivery while safeguarding reputation and long-term sustainability.

For Organizational Sustainability Dynamic Capabilities, the following recommendations are proposed:

1. **Monitoring**: Track stakeholder sustainability requirements and identify opportunities to meet emerging needs, including ongoing monitoring and corrective actions.
2. **Seizing**: Establish criteria to evaluate the impact and likelihood of environmental changes, allowing timely business responses using existing controls or adjustments as necessary.
3. **Reconfiguration**: Identify avenues for business model innovation—spanning governance, processes, infrastructure, suppliers, and customer interactions—arising from disruptive events.

Practical implications

From the perspective of Organizational Resilience, firms can strengthen their ability to navigate uncertainty by fostering capabilities that anticipate, cope with, and adapt to disruptions. Anticipation involves systematically evaluating the significance of products and services, while considering external influences such as economic, regulatory, and environmental changes, to inform strategic adjustments to business models. Coping requires designing strategies that safeguard employee well-being, maintain operational capacity, and protect organizational reputation, while also identifying potential gaps to meet stakeholder expectations during crises. Adaptation emphasizes establishing limits for operational, reputational, and legal impacts and creating mechanisms that promote sustainable outcomes and stakeholder value.

Business Continuity capabilities complement these dynamic efforts by ensuring organizations are prepared, responsive, and continuously improving. Developing preventive and preparatory measures, such as comprehensive Business Continuity Plans, helps organizations align resources and recovery objectives with critical activities and ensures that communication channels and procedures are well defined and regularly updated. Response and recovery mechanisms allow organizations to coordinate effectively during incidents, monitor plan execution, and restore service levels efficiently. Finally, continuous review and improvement, informed by lessons learned from disruptions or simulated exercises, helps enhance the effectiveness and resilience of continuity practices.

The research underscores the importance of recognizing the interconnections between Organizational Sustainability, Organizational Resilience, and Business Continuity. Initiatives aimed at enhancing sustainability should focus on monitoring, sensing, and reconfiguring resources to maintain flexibility and support continuity efforts. Likewise, resilience initiatives should integrate anticipation, coping, and adaptation capabilities with continuity measures to strengthen operational performance. In practice, aligning these capabilities ensures that firms can not only survive disruptions but also recover quickly, protect value-generating activities, and reinforce overall organizational robustness.

Limitations and future research

While this study offers significant insights, it also has limitations that suggest avenues for future investigation. First, the research focuses exclusively on Colombian firms, limiting generalizability. Exploring other geographic and cultural contexts, particularly emerging markets, could provide broader evidence of the relationships observed. Second, the study relies on cross-sectional data, restricting the ability to examine causality. Longitudinal studies could reveal how capabilities evolve and influence performance over time. Third, the constructs used were developed by the authors based on existing theory and empirical evidence, which means they should be further refined and validated in different contexts. Fourth, the analysis did not differentiate firms by size or sector; more targeted studies could yield insights tailored to specific organizational categories and environments.

Future research could examine the longitudinal effects of Organizational Sustainability and Resilience Dynamic Capabilities on Business Continuity capabilities, exploring periods before, during, and after disruptions. Additional studies could investigate the interplay between Business Continuity Ordinary Capabilities and Business Continuity Management Dynamic Capabilities to understand their combined influence on performance. Another promising avenue is conceptualizing Organizational Resilience as a meta-capability that orchestrates both dynamic and ordinary capabilities. ISO 22316:2017 identifies twenty resilience-related disciplines, providing a structured framework for examining how these capabilities contribute to organizational performance [46].

Conclusion

Dynamic Capabilities have historically been difficult to measure empirically, but variance-based PLS-SEM offers a robust approach for modeling complex interactions among multiple constructs using ordinal data such as Likert scales [98, 99]. This study demonstrates that carefully adapted Dynamic and Ordinary Capabilities constructs can provide meaningful insights into their influence on organizational performance under uncertainty.

The findings show that organizations that intentionally develop both Dynamic and Ordinary Capabilities achieve higher performance, regardless of size or sector, especially during extreme disruptions like the COVID-19 pandemic. The study validates specific capability constructs and clarifies their interactions, helping managers prioritize which capabilities to develop to maximize performance. While Dynamic Capabilities directly influence performance, Ordinary Capabilities may act as mediators, enhancing the effectiveness of dynamic processes. Overall, the results highlight the value of coordinated capability development in building organizational resilience and improving performance in uncertain environments.

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