


Article

Forging Innovative Leadership: The Power of Agility, Diversity, and Risk-Taking Configurations

Fernanda Bethlem Tigre 

ADVANCE/CSG, Instituto Superior de Economia e Gestão (ISEG), Universidade de Lisboa, Rua Miguel Lupi 20, 1200-725 Lisbon, Portugal; ftigre@iseg.ulisboa.pt

Abstract: Innovation is crucial for achieving and maintaining a competitive edge, especially evident in the digital business landscape, where the fourth and fifth industrial revolutions are occurring concurrently. Leadership behavior significantly influences the direction of organizations toward innovation. This study investigated whether a propensity for risk taking, along with a commitment to diversity and agility, promotes or impedes leaders' innovative behavior. Fuzzy-set qualitative comparative analysis was employed to assess the data gathered from an online survey of 119 global leaders. The results exposed four distinct routes to fostering innovative behavior and three paths leading to noninnovative behavior that should be evaded. All conditions play a vital role in triggering innovative behavior. Conversely, the lack of these conditions can result in noninnovative leadership. This study's novelty rests on the empirical evidence it provides about the paths guiding leaders toward innovative behavior and avoiding the danger of noninnovative leadership. These findings can assist managers and HR departments in pursuing certain paths for hiring and training managers to boost innovative behavior and preclude paths leading to noninnovative conduct.

Keywords: leadership; innovation; agility; diversity; risk taking; fsQCA



Citation: Tigre, F.B. Forging Innovative Leadership: The Power of Agility, Diversity, and Risk-Taking Configurations. *Merits* **2024**, *4*, 224–237. <https://doi.org/10.3390/merits4030016>

Received: 23 May 2024

Revised: 26 June 2024

Accepted: 5 July 2024

Published: 9 July 2024



Copyright: © 2024 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

Digital transformation has introduced new challenges to organizations worldwide [1]. The coronavirus disease 2019 (COVID-19) pandemic has accelerated this digital transformation, changing how individuals work, think, and interact [2,3]. Two industrial revolutions are concurrently unfolding [4]. The fourth industrial revolution (Industry 4.0) involves artificial intelligence, machine learning, the Internet of Things, and big data [5]. Simultaneously, the fifth industrial revolution (Industry 5.0) concerns the synergy between humans and autonomous machines, such as robots [6]. As a result, the digital era has dramatically altered the nature of work, rendering leadership more crucial than ever [7]. Leadership practices need to adapt to this new setting to ensure long-term success [3].

The effects of digital transformation have accelerated organizations' perspectives on the importance of innovation as a source of productivity, efficiency, and sustainability [8]. The organization's capacity to innovate has become an even more crucial factor for securing and maintaining a competitive advantage than ever before [9]. Consequently, innovation is a major focus for business leaders worldwide [10]. The significance of the human element in this process cannot be overstated [8]. Given the essential role of human agency within organizations [11], leadership behavior emerges as a fundamental determinant of an organization's innovation potential [12]. Organizations are guided toward innovation through the behaviors and actions of their leaders [13].

Numerous studies have explored various aspects of innovative behavior, examining elements such as green innovation [14], leader–member exchange methods [15], predicted performance [16], and inclusive reviews [17]. Despite these theoretical advancements, leading innovation emerges as one of the most significant challenges for today's leaders [18]. As innovation is a primary driver of organizational growth, understanding its causes is

crucial [19]. Leadership, being one of the most vital components in innovation, raises the question of which specific leadership behaviors best contribute to fostering innovation [20]. Accordingly, a critical challenge for today's organizations is promoting leadership behavior that encourages innovation [21]. The significance of what leaders do and how they do it is grounded in their behaviors [22]. Thus, there is a gap in addressing commitment to diversity, agility, and risk taking as potential influences on innovative leadership (IL) behaviors, which remains an unexplored territory.

While previous research has empirically examined how agility contributes to innovative behavior (e.g., [23]), as well as risk-taking propensity (e.g., [24,25]) and commitment to diversity (e.g., [26]), these aspects provide a limited view when not considered collectively. To date, integrative research has not been undertaken to understand the comprehensive behavior that leads to or hinders leaders' innovative behavior. This study addresses this issue and aims to fill this gap by proposing a dual approach based on the presence or absence of leaders' innovative behavior.

This study examines how a leader's commitment to diversity, agility, and risk taking can influence their innovative behavior as either promoters or impediments, as these constructs stem from the prior literature on the generation of innovative behavior (e.g., [27,28]). This research aims to address the following question: What configurations promote or obstruct a leader's innovative behavior? The uniqueness of this study rests in the empirical evidence it offers regarding the pathways that guide leaders toward innovative behavior, how to dodge the pitfalls of noninnovative leadership (~IL), and its theoretical and managerial implications.

Leadership agility is another critical component in innovation, as prior studies have highlighted (e.g., [29]). Moreover, the human aspect of agility is particularly pertinent in fast-evolving and complex digital times, given the limited knowledge of how leadership agility aids in managing innovation [30]. Finally, an organization's ability to adapt to challenges and opportunities hinges on the agility of its leaders [31].

While innovation is a complex process reliant on various behaviors [21], much of the existing research treats innovation as a linear process with uniformly established directive antecedents [32]. This study applied fuzzy-set qualitative comparative analysis (fsQCA), an asymmetric case configurational method that captures the elements identifying cases of IL behavior. FsQCA facilitates the analysis of conditions, leading to both the presence and absence of results, which traditional statistical methods cannot achieve [33]. A configurational approach is optimal for investigating the intricate relationships influencing leaders' innovative and noninnovative behavior outcomes [34]. An empirical survey of 119 online questionnaires served as the data source. Ultimately, this paper presents a fresh perspective on theory and empirical analysis in the context of the interconnected, nonlinear digital world by scrutinizing causal complexity through the lens of set theory [34].

2. Theoretical Background

2.1. Innovative Leadership

Innovation is fundamental for organizations to achieve and sustain a competitive advantage [9]. Nowadays, innovation has become an unavoidable topic in organizational settings for enhancing performance, supporting growth, and ensuring survival [19]. It aids organizations in coping with a perpetually changing external environment, enabling quicker and more effective responses to challenges than noninnovative organizations [35]. While some authors posited that innovation can be generated by adopting and adapting other's ideas [36], it is typically defined as the successful implementation of new ideas [35,37,38].

Innovative leaders are defined as change agents who create an environment where new ideas flourish, and they oversee the implementation process [39,40]. Leaders who exhibit behaviors related to innovation inspire individuals to present creative solutions to problems and adapt to a changing external environment [41].

Though innovation is a complex occurrence, a significant portion of the literature has approached it as a linear process, seeking causal relationships and analyzing each antecedent separately [32]. Consistent with the view in [42], this study proposes that distinctive configurations can either enable or hinder leaders' innovations independent of a single causal construct. Hence, this study examined how the presence or lack of diversity, agility, and risk taking stimulates IL and ~IL through varying configurations. However, it is worth noting that innovation is both expensive and risky, with potential negative effects such as heightened market risk, mounting costs, employee discontent, and unwarranted changes [35].

2.2. Leadership Commitment to Diversity

Workplace diversity is a crucial element of effective organizations [43]. Diversity can be understood as the differences between individuals on any common attribute, leading to the perception that one is different from the other [44,45]. Diversity includes any characteristic used to distinguish one person from another [46]. These can range from obvious demographic factors (e.g., gender, ethnicity, and age) to more subtle traits, skills, and attitudes (e.g., sexual orientation, educational background, and religion) [47]. Furthermore, diversity serves as a knowledge-based resource for innovation [48].

However, organizations often grapple with accepting and managing diversity among employees [49]. For a commitment to diversity to become ingrained in corporate culture, consistent and visible support from leadership is required [50]. Leaders are responsible for establishing and advancing organizational policies that encourage diverse members to join and actively contribute in the workplace [51]. Furthermore, they are tasked with promoting innovation and, notably, enabling minorities to take part in the innovation process [26].

A commitment to diversity is seen as an intangible asset that aids in securing and maintaining a competitive advantage, representing a company's human capital [50]. Leaders committed to diversity have access to diverse task-relevant information, which provides them with additional resources for innovation [27]. Moreover, a leader's commitment to diversity necessitates long-term effort, and certain advantages, such as innovation, may not be immediately manifested [52]. Despite this, this study proposes that a leader's commitment to diversity leads to being an innovative leader.

Nonetheless, a comprehensive review of the literature revealed that diversity can generate both positive and negative impacts [53]. The positive impacts, referred to as the information/decision-making perspective, focus on tasks related to group processes [44]. Diverse perspectives on work-related matters enhance problem analyses, leading to varied solutions and resulting in a positive influence on innovation [54]. On the other hand, the negative impacts, known as the social categorization perspective, concentrate on relational aspects [44]. Regrettably, diversity can lead to the development of stereotypes, subgroup formation, and intergroup biases, thus generating a negative response to dissimilar individuals [55].

2.3. Risk-Taking Propensity

Another significant influence on successful innovation is a manager's willingness to take risks [28]. Leaders must make swift decisions, with reasonable risk taking being critical for successful leadership [56]. Risk-taking propensity refers to the readiness to endure business uncertainty and errors to explore new demands lacking clear solutions, hoping for substantial benefits [57].

The propensity to take risks is a leadership attribute associated with innovation, and this varies from one leader to another [19]. The risk-taking propensity of leaders can exert a positive influence on employees, as this tendency cascades down the organizational hierarchy [19]. As such, leaders should take risks to foster innovative behaviors among employees [58]. Therefore, this study posits that a leader's propensity for risk-taking contributes to a willingness to innovate [59].

In contrast, the prospect of uncertainty and potential failure often discourages leaders from taking risks and pursuing innovative behaviors [19]. Additionally, an agency problem may manifest, given that shareholders often demonstrate a greater willingness to embrace risk for the sake of organizational growth, while leaders—kept in check by the difficulty of job transition should complications arise—tend to shy away from risk exposure [28]. Nevertheless, the potential for high returns can motivate leaders to opt for riskier solutions, focusing on the possible benefits of innovation rather than potential losses [60].

2.4. Leadership Agility

In order to excel in the rapidly evolving digital landscape, a growing number of organizations are advocating for agility—a concept widely regarded in the IT sector—as a *modus operandi* [30]. Agility serves as a crucial element of success, especially due to the imminent possibility of digital disruption [31]. The Agile Manifesto, which underpins agile software development, underscores the human side of agility, favoring “individuals and interactions over processes and tools” [61]. The ‘agile mindset’ has gained increasing prominence as a critical determinant of success as the notion of ‘agility’ has matured [62]. This mindset, embodied by an individual, can potentially shape an organization’s strategic agility and enhance its performance [30].

For an organization to be agile, it must have agile leaders [29,63]. Leadership agility is defined as a leader’s ability to manage unstable, rapidly changing, and complex environmental conditions by taking effective action [29,64]. Agile leaders act promptly and foster innovation through flexible, results-driven teams. However, leadership often struggles with implementing agility, frequently due to a lack of an agile mindset [65]. Finally, in the post-COVID-19 scenario, agility goes beyond just processes: it includes the behaviors that leaders must adapt and embrace to drive innovation in the organization [65].

Figure 1 shows the conceptual framework between leadership agility, risk-taking propensity, commitment to diversity, and innovative leadership.

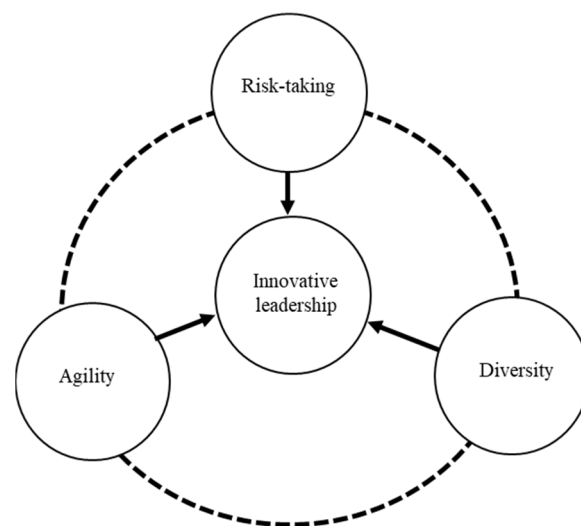


Figure 1. Conceptual framework.

3. Methods

FsQCA is based on fuzzy-set theory, which acknowledges multiple interdependent elements simultaneously [66] and proposes that various combinations of conditions can yield the same outcome [67]. Consequently, this technique is suitable for the complex real-life phenomena observed in social science studies [68]. It evaluates the contribution of independent conditions’ combinations to the outcome rather than the singular contribution of each condition [69]. fsQCA is a data analysis approach applicable to exploratory studies, unveiling alternative theoretical explanations grounded in causal complexity [70].

It aids with both inductive and deductive reasoning, facilitating theory elaboration and testing [69]. This study adopted an inductive approach with fsQCA to investigate the numerous pathways leading to IL and \sim IL behaviors.

Furthermore, fsQCA is suitable for various scientific studies [66,68,71] for analyzing asymmetric characteristics effects and distinguishing them from the traditional bivariate interaction effects used in conventional statistical techniques [72]. It differs from traditional methods in that the presence of an outcome is not the logical inverse of the outcome's absence (asymmetric causality): the same conditions produce different outcomes (multifinality), and multiple pathways can lead to the same result (equifinality) [33,73].

FsQCA considers necessary conditions (i.e., a condition that must always be present for the outcome to occur) and/or sufficient conditions (i.e., a condition that, although present, does not guarantee the occurrence of the outcome) [73,74]. The conditions of the configurations can be classified as either core or peripheral. However, core conditions demonstrate a stronger connection to the outcome than peripheral ones [73]. In addition, the coverage score indicates the number of cases that result in the outcome, and consistency reveals the extent to which the cases that exhibit a combination of conditions lead to the outcome [33,73].

3.1. Data Collection and Measures

This study evaluated the conditions (diversity, risk taking, agility) related to an innovative or noninnovative leader's behavioral outcome (denoted using the \sim symbol before the condition or outcome designation). A convenience sample was used to garner 119 valid responses from an online survey disseminated globally. Data were collected by circulating the survey link through social media platforms, including LinkedIn, Instagram, and WhatsApp, amongst others. The survey introduction clarified that the data were solely to be used for academic purposes and would be processed conjunctively, and participant confidentiality would be upheld as the information could not be traced back to the respondent. We emphasized honest responses, assuring participants that there were no 'correct' or 'incorrect' answers. The fsQCA method has been employed in both small- and large-N value studies [73,75]. Participants were then required to confirm that they held a leadership position; negative responses led to survey termination. In terms of demographics, the sample included 63.0% men, 64.7% aged between 41 and 50 years, and 75.6% postgraduates, and 52.1% were involved in the services sector. Table 1 provides detailed demographic data of the respondents.

Table 1. Sample characteristics (N = 119).

Measure	Characteristics	Frequency	Percent (%)
Gender	Female	44	37.0
	Male	75	63.0
Age (years)	21–30	2	1.7
	31–40	10	8.4
	41–50	77	64.7
	>50	30	25.2
	Undergraduate	8	6.7
Level of study	Graduate	21	17.6
	Postgraduate	90	75.6
Professional profile	Service	62	52.1
	Industry	20	16.8
	Financial	16	13.4
	Government	13	10.9
	Other	8	6.7

FsQCA acknowledges the use of nonprobabilistic convenience samples but considers it a satisfactory initial approximation of the studied phenomena [76]. The online responses were collected via Qualtrics® (version June 2022), which was accompanied by a link that

detailed this study’s objectives and estimated response time, which was shared with the leaders. To temper the common method variance bias, the anonymity of respondents was ensured, and the questions were counterbalanced [77]. Furthermore, Harman’s single-factor test demonstrated that all items loaded on one nonrotated factor accounted for 22.6% of the variance. Thus, the combined procedures and results do not suggest that common method bias was a significant concern in this context [77].

This study formulated a conceptual model and empirically scrutinized various causal recipes for leadership innovation. Owing to the COVID-19 pandemic, organizations needed quicken their pace of digital transformation, thereby altering leadership behaviors [2]. The measurement instrument for the digital leader was derived from the existing literature. All items were gauged using a five-point Likert scale, ranging from 1 = entirely disagree to 5 = entirely agree, in response to the statement, “A digital leader must. . .”. IL (outcome) used an eight-item scale with items such as “propose new approaches to problems” and “encourage the team to try new solutions to a problem”. The measures for the conditions were as follows: diversity used a six-item scale, with items such as “encourage team diversity” and “work productively with individuals from a wide range of backgrounds”; risk taking used a six-item scale with items such as “take calculated risks” and “have a contingency plan for the tasks”; and agility used a five-item scale with items such as “respond quickly to changes in the business environment”.

In the exploratory analysis, the data were deemed suitable for factoring (KMO = 0.906, and the significance level of Bartlett’s test of sphericity > 0.001). Four factors accounted for 58.8% of the variance [78]. All factor loadings surpassed 0.5, and item-to-total correlation coefficients exceeded 0.3 [79]. The range of Cronbach’s alphas was between 0.67 and 0.83, an acceptable range for exploratory studies in the social sciences [80]. Consequently, these constructs were regarded as reliable and satisfactory. The byproduct data for ~IL were generated by the set-negated function of the calibrated data in fsQCA[®] software (Version 3.0), representing the lack of IL. As a result, a reliability measurement is not reported.

3.2. Data Calibration

fsQCA analysis begins with data calibration. It is necessary to calibrate the data before using fsQCA to ensure that each observation belongs to a specific set or does not [81]. To convert Likert scores into fuzzy membership values—which vary from zero to one—conditions are calibrated based on their degree of membership in sets of cases [33]. Three different anchors were identified to calibrate survey data into fuzzy-set values according to degree of membership: 0.95 for full membership, 0.50 for maximum membership ambiguity, and 0.05 as the threshold for full nonmembership [82]. Table 2 presents the descriptive statistics for the conditions and outcomes, along with the cutoff points used for the calibration of causal conditions. FsQCA identifies both the logically possible and empirically existing configurations [83].

Table 2. Calibration cutoffs and descriptives.

Outcome and Conditions	Calibration Cutoffs			Descriptives			
	Fully in 0.95	Maximum Ambiguity 0.5	Fully out 0.05	Average	Stand Dev	Min	Max
Innovative leadership (IL)	4.75	4.0	2.99	3.99	0.51	2.5	5.0
Diversity (D)	4.85	4.33	3.65	4.29	0.43	2.83	5.0
Risk taking (R)	4.67	4.0	2.67	3.89	0.64	2.0	5.0
Agility (A)	4.62	4.0	3.18	3.9	0.5	2.4	5.0

3.3. Data Analysis Procedure

3.3.1. Analysis of Necessary Conditions

The second step in fsQCA involves analyzing the necessary conditions to ascertain whether the presence or absence of any causal conditions (D, R, A) is required for the outcome to occur (IL or \sim IL). A necessary condition appears in all cases and leads to the outcome [33]. Table 3 presents the results of the necessity analysis. These findings suggested that none of the individual conditions were necessary to determine IL or \sim IL independently, based upon a consistency threshold of 0.9 [84]. In other words, neither diversity, risk taking, nor agility alone was a necessary condition to produce IL or \sim IL.

Table 3. Overview of necessary conditions.

Conditions	Outcome: IL		Outcome: \sim IL	
	Consistency	Coverage	Consistency	Coverage
R	0.777	0.804	0.698	0.665
\sim R	0.676	0.708	0.794	0.767
D	0.643	0.649	0.566	0.527
\sim D	0.531	0.571	0.623	0.617
A	0.760	0.856	0.700	0.727
\sim A	0.757	0.733	0.861	0.768

3.3.2. Analysis of Sufficient Conditions

A truth table was generated, taking into account all possible outcome configurations. The truth table includes 2^k configurations or rows, with 'k' representing the number of conditions (for example, $2^3 = 8$) [84].

However, sample cases do not necessarily represent all configurations, and some rows have zero instances (i.e., logical remainders) [82]. Subsequently, the truth table is reduced to significant configurations based on the frequency of empirical observations for each possible combination [85]. The recommended minimum frequency threshold for the inclusion of configurations in this sample size for causal analyses was one [86,87]. Furthermore, configurations exceeding a consistency value of 0.80 were coded 1 (signifying larger consistency gaps), whereas those falling below this value were coded 0 [81]. Appendix A contains the truth tables for IL and \sim IL. FsQCA offers three different solutions for handling logical remainders: a complex solution, a parsimonious solution, and an intermediate solution [84]. This study adhered to best practices, usually favoring intermediate solutions over other methods [81,84]. For more information on complex, parsimonious, and intermediate solutions, refer to [73,81].

4. Results

The results of the analysis indicated no necessary conditions that led to either IL or its absence, referred to as \sim IL. Every condition for the result existed as a core condition in both models, appearing in both parsimonious and intermediate solutions [73]. The models that led to IL and \sim IL are displayed in Tables 4 and 5, respectively. Black circles (●) indicate the presence of a condition, while white circles (○) denote its absence. If a condition did not contribute to the configuration, the space remains blank.

Table 4. Causal configurations of innovative leadership (IL).

Model: IL = f (D, A, R)						
Configurations	Causal Conditions			Coverage		Consistency
	D	R	A	Raw	Unique	
1	○	●	○	0.388	0.070	0.895
2	●	○	○	0.388	0.072	0.855
3	○	○	●	0.357	0.057	0.865
4	●	●	●	0.473	0.165	0.909

Solution coverage: 0.864; solution consistency: 0.865. Note: IL = innovative leadership; D = diversity; R = risk taking; A = agility.

Table 5. Causal configurations of noninnovative leadership (~IL).

Model: ~IL = f (D, A, R)						
Configurations	Causal Conditions			Coverage		Consistency
	D	R	A	Raw	Unique	
1	○		○	0.566	0.070	0.830
2		○	○	0.730	0.234	0.834
3	○	○		0.530	0.034	0.805

Solution coverage: 0.834; solution consistency: 0.773. Note: ~IL = noninnovative leadership; D = diversity; R = risk taking; A = agility.

The solution consistency was 0.865 for IL and 0.773 for ~IL, indicating a good fit for both models as they were above the cutoff of 0.75 in explaining their outcomes [81,88]. Both models also fell within the acceptable coverage range of 0.25–0.90 [81,88], with values of 0.864 for IL and 0.834 for ~IL. This suggested that the identified configurations could explain a substantial portion of the outcome [89]. Thus, in terms of consistency and coverage, both models were deemed informative [81,90]. Two more measures of fit for each configuration are raw consistency and raw coverage. Raw consistency represents the fraction of cases that are compatible with the outcome (i.e., the number of cases that display a given set of conditions along with the outcome, divided by the number of cases with the same set of conditions but without the outcome) [73]. Raw coverage specifies the proportion of instances of the outcome that show a particular causal combination [91]. All configurations had a raw consistency above 0.80 and a raw coverage above 0.35. Moreover, the results confirmed the fsQCA assumptions of asymmetric causality, multifinality, and equifinality [33,92].

Table 4 presents the asymmetric causal configuration of the innovative leader, consisting of four multicondition configurations. Each condition is represented in the IL model and contributes to the configurations. Configurations 1, 2, and 3 illustrate that, to be an innovative leader, only one of the conditions (agility, diversity, or risk taking) needs to be present. The results demonstrate that even in the absence of two conditions, the presence of the third condition yields an outcome. For example, configuration 1 in Table 4 shows the IL resulting from the lack of diversity and agility when risk taking is present. Configuration 2 conveys that if a leader shows commitment to diversity, IL occurs, even with the absence of agility and risk taking. Configuration 3 asserts that if agile attributes are present, IL occurs, even without diversity and risk taking. Finally, configuration 4 indicates that IL occurs when all conditions are present (e.g., [71,93]). This configuration necessitates a combination of diversity, agility, and risk taking to yield IL. The selection of causal conditions is deemed suitable as all conditions are represented (either present or absent) within the configurations, highlighting their relevance to the outcome. Lastly, the concept of ~IL was explored, considering the absence of IL. Three configurations outlined in Table 5 show ~IL behavior. The results support that all configurations can occur in the absence of two conditions. Therefore, when two causal conditions of the model are missing (i.e., diversity, risk taking, agility), ~IL occurs.

Robustness Checks

The selection of frequency and consistency thresholds, which determine the cases included in the fsQCA analysis and impact the results, makes robustness checks crucial to conduct [94]. In line with recommendations from the previous literature (e.g., [86,94]), the inherent robustness factors in fsQCA pertain to alterations in the calibration of conditions, the frequency cutoff, and the consistency cutoff. As such, various anchors were utilized to recalibrate survey data into fuzzy-set values: 0.90 (full membership), 0.50 (maximum ambiguity), and 0.10 (full nonmembership). The results demonstrated that the outcomes for IL and \sim IL remained the same. Regarding the frequency cutoff, the threshold was adjusted to two, revealing a subset of the original findings (configuration 1, 2, and 4 for IL and configuration 1 and 2 for \sim IL) once more. The consistency threshold was altered to 0.89 for IL and 0.87 for \sim IL, again yielding a subset of the original findings (configurations 1 and 4 for IL and configuration 3 for \sim IL). More stringent thresholds can generate subsets of the original findings related to robustness checks [86]. If slightly different choices yield broadly similar results, the findings are deemed robust [84]. Consequently, this study's results seem robust.

5. Discussion

The findings revealed various causal configurations, which include specific conditions, that are necessary to encourage leaders' innovative behavior and prevent noninnovative behavior. The selection of conditions was deemed appropriate as they are core conditions that appeared in both model configurations. The overall consistency in both models surpassed the threshold of 0.75, thus meeting the standards to be considered informative [92]. Furthermore, all varying configurations in IL and \sim IL demonstrated levels of consistency above the threshold.

When investigating IL, four paths were generated. The findings indicate that the causal conditions selected in this study all hold equal importance; each condition appears in one of the configurations, even when the others are absent. This evidence suggests that, even in the absence of two causal conditions, the condition that is present within the configuration guides the outcome (i.e., IL). This underscores the strength of each selected condition that fosters innovation, confirming previously published research (e.g., [95]).

In this digital age, the value of agility in navigating innovative change has become increasingly apparent [31]. While agility is often studied within the context of organizations, the role of individual agility in promoting innovation is equally important, aligning with the existing literature [23]. Consistent with [96], the findings demonstrate that leadership agility plays a crucial role in stimulating innovation.

Risk-taking propensity also varies among leaders but is another key attribute in driving innovation, as [19] confirmed. Therefore, innovation emerges when leaders take risks and encourage risk taking among their employees [24].

Finally, the benefits of commitment to diversity were confirmed, revealing that such commitment contributes to innovation by offering leaders broader and more diverse perspectives on innovative action, as suggested by prior studies (e.g., [26,27]). Reaping the rewards from diversity, such as creativity and innovation, requires continuous effort. Hence, the commitment of leaders is vital for sustained organizational success [97]. In conclusion, the conditions selected in this research reaffirm the existing literature on the key factors that propel leaders toward innovation.

The results regarding \sim IL behavior corroborate those of the study by [19], suggesting that leaders who evade risk taking tend to exhibit noninnovative behavior. Additionally, a lack of commitment to diversity appears to foster \sim IL, as innovation is not commonly found in homogeneous teams—a concept supported by [50]. Lastly, in rapidly changing environments, the scarcity of leadership agility contributes to \sim IL, reinforcing the findings of the study by [96].

6. Conclusions

The COVID-19 pandemic has accelerated the need for organizations to innovate to achieve and sustain a competitive advantage [9] in an era where two industrial revolutions are happening concurrently, both based on digital technologies [4]. The fsQCA method provides insight into various factors relevant to generating a desirable outcome [73] while also clarifying the complementarities and substitutes in configurations [87].

6.1. Theoretical Implications

This paper enhances the existing literature by elucidating the causal conditions contributing to both the innovative and noninnovative behaviors of leaders. The complexities of IL were explored through several alternative paths of conditions for both models. By examining different configurations, this study demonstrates how multiple conditions can lead to the same outcome in terms of either IL or \sim IL. Therefore, this study adds to the literature by illustrating how various combinations of conditions can result in the same outcome. Furthermore, while the application of agility has broadened in practice, scholarly research into the agile mindset remains limited [30]. This study, thus, contributes to this area.

Moreover, distinct paths augment the research on IL, which has primarily been examined using conventional statistical confirmatory methods (e.g., [98,99]). By employing fsQCA, this study reveals the causal combinations leading to the absence of the outcome (i.e., noninnovative leadership), thereby presenting a new approach in research that explores conditions leading to the absence of an outcome. Additionally, this study uniquely contributes to the literature by broadening our understanding of the commitment of leaders to diversity, risk taking, and agility in innovation delivery.

6.2. Practical Implications

This study provides empirical results for practitioners, outlining how leadership behaviors can either promote or hinder innovation. Therefore, managers should leverage their leadership qualities to foster an organization-biased climate, encouraging employees to adopt behaviors that facilitate innovation [41]. Employers can encourage leaders, including cross-functional leaders, to collaborate in promoting a diversity of perspectives and innovative solutions. Moreover, companies could enable leaders to share innovation success stories through storytelling using the different configurations identified in this study. This could highlight the processes, challenges, and outcomes involved, inspiring and motivating employees. The differing trajectories identified in the results can facilitate the cultivation of behaviors necessary to appoint innovation ambassadors within various departments. These ambassadors would be responsible for championing innovation and encouraging colleagues to promote it across the organization.

Furthermore, these findings can aid organizations in managing manager turnover. By developing objective paths for IL, the HR department can train or hire managers to improve their innovative behaviors, promoting the conditions analyzed in this study. Consequently, if an innovative manager leaves the firm, the resultant impact on innovation is likely to be unfavorable [19]. Lastly, leaders and the HR department should steer clear of the path leading to a lack of IL. This is because having the organizational capacity to pursue innovation is essential for gaining and maintaining a competitive advantage [9].

6.3. Limitations and Future Research

Nonetheless, this study has its limitations. The results cannot be generalized due to their qualitative nature. Additionally, no data on respondents' nationalities were collected to examine cultural influences. Future research can explore the influence of leaders on innovative employee behavior. Moreover, subsequent studies could examine, at the organizational level, how corporate culture encourages or suppresses innovative employee behavior.

Funding: This research was funded by Fundação para a Ciência e a Tecnologia (FCT), grant number UIDB/04521/2020.

Institutional Review Board Statement: This research was conducted in accordance with the Code of Conduct and Good Practice of the University of Lisbon (https://www.iseg.ulisboa.pt/aquila/getFile.do?fileId=1040075&method=getFile&_request_chec-sum_=1d20d5eb184672e05ad9630eca4ac57a49152de4, accessed on 22 May 2024). The participants of the survey were informed of the aim of this study and were asked to participate but also informed that they had no obligation to participate. The results were not traceable to individuals or companies after the surveys were complete, and no information on the participants was stored.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The original contributions presented in the study are included in the article, further inquiries can be directed to the corresponding author.

Conflicts of Interest: The author declares no conflicts of interest.

Appendix A

Table A1. Truth table for innovative leadership.

R	D	A	Number of Cases	IL	Raw Consist.	PRI Consist.	SYM Consist.
1	1	1	6	1	0.909063	0.777017	0.777016
1	0	0	2	1	0.894933	0.543689	0.622222
0	0	1	1	1	0.864791	0.454259	0.454259
0	1	0	2	1	0.854804	0.477593	0.538239
0	0	0	8	0	0.784701	0.292089	0.334107
1	1	0	0	0			
1	0	1	0	0			
0	1	1	0	0			

Note: 0 represents nonmembership in the set; 1 represents full membership in the set. R = risk taking; D = diversity; A = agility; IL = innovative leadership.

Table A2. Truth table for noninnovative leadership.

R	D	A	Number of Cases	~IL	Raw Consist.	PRI Consist.	SYM Consist.
0	0	1	1	1	0.887456	0.545742	0.545741
0	0	0	8	1	0.872918	0.582151	0.665893
1	0	0	2	1	0.845753	0.330098	0.377778
0	1	0	2	1	0.835943	0.409732	0.461761
1	1	1	6	0	0.683116	0.222984	0.222984
1	1	0	0	0			
1	0	1	0	0			
0	1	1	0	0			

Note: 0 represents nonmembership in the set; 1 represents full membership in the set. R = risk taking; D = diversity; A = agility; ~IL = noninnovative leadership.

References

- Kane, G.C.; Phillips, A.N.; Copulsky, J.; Andrus, G. How Digital Leadership Is(n't) Different. *MIT Sloan Manag. Rev.* **2019**, *60*, 34–39.
- Tigre, F.B.; Curado, C.; Henriques, P.L. Digital Leadership: A Bibliometric Analysis. *J. Leadersh. Organ. Stud.* **2023**, *30*, 40–70. [[CrossRef](#)]
- Contreras, F.; Baykal, E.; Abid, G. E-Leadership and Teleworking in Times of COVID-19 and beyond: What We Know and Where Do We Go. *Front. Psychol.* **2020**, *11*, 590271. [[CrossRef](#)] [[PubMed](#)]
- Zizic, M.C.; Mladineo, M.; Gjeldum, N.; Celent, L. From Industry 4.0 towards Industry 5.0: A Review and Analysis of Paradigm Shift for the People, Organization and Technology. *Energies* **2022**, *15*, 5221. [[CrossRef](#)]
- Vogt, J. Where Is the Human Got to Go? Artificial Intelligence, Machine Learning, Big Data, Digitalisation, and Human–Robot Interaction in Industry 4.0 and 5.0. *AI&Society* **2021**, *36*, 1083–1087. [[CrossRef](#)]
- Nahavandi, S. Industry 5.0—A Human-Centric Solution. *Sustainability* **2019**, *11*, 4371. [[CrossRef](#)]

7. Larson, L.; DeChurch, L.A. Leading Teams in the Digital Age: Four Perspectives on Technology and What They Mean for Leading Teams. *Leadersh. Q.* **2020**, *31*, 101377. [[CrossRef](#)]
8. Jin, S.; Li, Y.; Xiao, S. What Drives Employees' Innovative Behaviors in Emerging-Market Multinationals? An Integrated Approach. *Front. Psychol.* **2022**, *12*, 803681. [[CrossRef](#)]
9. Ferreira, J.; Coelho, A.; Moutinho, L. Dynamic Capabilities, Creativity and Innovation Capability and Their Impact on Competitive Advantage and Firm Performance: The Moderating Role of Entrepreneurial Orientation. *Technovation* **2020**, *92–93*, 102061. [[CrossRef](#)]
10. Watts, L.L.; Steele, L.M.; Den Hartog, D.N. Uncertainty Avoidance Moderates the Relationship between Transformational Leadership and Innovation: A Meta-Analysis. *J. Int. Bus. Stud.* **2020**, *51*, 138–145. [[CrossRef](#)]
11. Birkinshaw, J.; Hamel, G.; Mol, M.J. Management Innovation. *Acad. Manag. Rev.* **2008**, *33*, 825–845. [[CrossRef](#)]
12. Zheng, X.; Liu, Z. Why Does Leader Attention Scope Matter for Innovation Ambidexterity? The Mediating Role of Transformational Leadership. *Leadersh. Organ. Dev. J.* **2016**, *37*, 912–935. [[CrossRef](#)]
13. Mokhber, M.; Khairuzzaman, W.; Vakilbashi, A. Leadership and Innovation: The Moderator Role of Organization Support for Innovative Behaviors. *J. Manag. Organ.* **2018**, *24*, 108–128. [[CrossRef](#)]
14. Xu, B.; Gao, X.; Cai, W.; Jiang, L. How Environmental Leadership Boosts Employees' Green Innovation Behavior? A Moderated Mediation Model. *Front. Psychol.* **2022**, *12*, 689671. [[CrossRef](#)] [[PubMed](#)]
15. Schermuly, C.C.; Meyer, B.; Dämmer, L. Leader-Member Exchange and Innovative Behavior: The Mediating Role of Psychological Empowerment. *J. Pers. Psychol.* **2013**, *12*, 132–142. [[CrossRef](#)]
16. Yuan, F.; Woodman, R.W. Innovative Behavior in the Workplace: The Role of Performance and Image Outcome Expectations. *Acad. Manag. J.* **2010**, *53*, 323–342. [[CrossRef](#)]
17. Kwon, K.; Kim, T. An Integrative Literature Review of Employee Engagement and Innovative Behavior: Revisiting the JD-R Model. *Hum. Resour. Manag. Rev.* **2020**, *30*, 100704. [[CrossRef](#)]
18. Oke, A.; Munshi, N.; Walumbwa, F.O. The Influence of Leadership on Innovation Processes and Activities. *Organ. Dyn.* **2009**, *38*, 64–72. [[CrossRef](#)]
19. García-Granero, A.; Llopis, Ó.; Fernández-Mesa, A.; Alegre, J. Unraveling the Link between Managerial Risk-Taking and Innovation: The Mediating Role of a Risk-Taking Climate. *J. Bus. Res.* **2015**, *68*, 1094–1104. [[CrossRef](#)]
20. Zacher, H.; Rosing, K. Ambidextrous Leadership and Team Innovation. *Leadersh. Organ. Dev. J.* **2015**, *36*, 54–68. [[CrossRef](#)]
21. Franco, C.; Landini, F. Organizational Drivers of Innovation: The Role of Workforce Agility. *Res. Policy* **2022**, *51*, 104423. [[CrossRef](#)]
22. Cheese, P. Managing Risk and Building Resilient Organisations in a Riskier World. *J. Organ. Eff. People Perform.* **2016**, *3*, 323–331. [[CrossRef](#)]
23. Dabić, M.; Stojčić, N.; Simić, M.; Potocan, V.; Slavković, M.; Nedelko, Z. Intellectual Agility and Innovation in Micro and Small Businesses: The Mediating Role of Entrepreneurial Leadership. *J. Bus. Res.* **2021**, *123*, 683–695. [[CrossRef](#)]
24. Borgelt, K.; Falk, I. The Leadership/Management Conundrum: Innovation or Risk Management? *Leadersh. Organ. Dev. J.* **2007**, *28*, 122–136. [[CrossRef](#)]
25. Crenshaw, J.T.; Yoder-Wise, P.S. Creating an Environment for Innovation: The Risk-Taking Leadership Competency. *Nurse Lead.* **2013**, *11*, 24–27. [[CrossRef](#)]
26. Leung, M.A. Diversity and Inclusion through Leadership during Challenging Times. *Comput. Sci. Eng.* **2020**, *22*, 92–96. [[CrossRef](#)]
27. Abiew, G.E.; Okyere-Kwakye, E.; Ellis, F.Y.A. Examining the Effect of Functional Diversity on Organizational Team Innovation. *Int. J. Innov. Sci.* **2022**, *14*, 193–212. [[CrossRef](#)]
28. Wu, H.L. When Does Internal Governance Make Firms Innovative? *J. Bus. Res.* **2008**, *61*, 141–153. [[CrossRef](#)]
29. Muafi; Uyun, Q. Leadership Agility, the Influence on the Organizational Learning and Organizational Innovation and How to Reduce Imitation Orientation. *Int. J. Qual. Res.* **2019**, *13*, 467–484. [[CrossRef](#)]
30. Eilers, K.; Peters, C.; Leimeister, J.M. Why the Agile Mindset Matters. *Technol. Forecast. Soc. Change* **2022**, *179*, 121650. [[CrossRef](#)]
31. Chen, X.; Tee, K.; Chang, V. Accelerating Innovation Efficiency through Agile Leadership: The CEO Network Effects in China. *Technol. Forecast. Soc. Change* **2022**, *179*, 121602. [[CrossRef](#)]
32. Rosing, K.; Frese, M.; Bausch, A. Explaining the Heterogeneity of the Leadership-Innovation Relationship: Ambidextrous Leadership. *Leadersh. Q.* **2011**, *22*, 956–974. [[CrossRef](#)]
33. Rihoux, B.; Ragin, C.C. *Configurational Comparative Methods: Qualitative Comparative Analysis (QCA) and Related Techniques*; Sage Publications: Los Angeles, CA, USA, 2008.
34. Park, Y.; El Sawy, O.A.; Fiss, P.C. The Role of Business Intelligence and Communication Technologies in Organizational Agility: A Configurational Approach. *J. Assoc. Inf. Syst.* **2017**, *18*, 648–686. [[CrossRef](#)]
35. Jiménez-Jiménez, D.; Sanz-Valle, R. Innovation, Organizational Learning, and Performance. *J. Bus. Res.* **2011**, *64*, 408–417. [[CrossRef](#)]
36. Hughes, D.J.; Lee, A.; Tian, A.W.; Newman, A.; Legood, A. Leadership, Creativity, and Innovation: A Critical Review and Practical Recommendations. *Leadersh. Q.* **2018**, *29*, 549–569. [[CrossRef](#)]
37. Van de Ven, A.H. The Innovation Journey: You Can't Control It, but You Can Learn to Maneuver It. *Innovation* **2017**, *19*, 39–42. [[CrossRef](#)]
38. Chang, Y.-Y.; Hodgkinson, I.; Hughes, P.; Chang, C.-Y. The Mediation between Participative Leadership and Employee Exploratory Innovation: Examining Intermediate Knowledge Mechanisms. *Leadersh. Organ. Dev. J.* **2019**, *40*, 334–355. [[CrossRef](#)]

39. Kremer, H.; Villamor, I.; Aguinis, H. Innovation Leadership: Best-Practice Recommendations for Promoting Employee Creativity, Voice, and Knowledge Sharing. *Bus. Horiz.* **2019**, *62*, 65–74. [[CrossRef](#)]
40. Basadur, M. Leading Others to Think Innovatively Together: Creative Leadership. *Leadersh. Q.* **2004**, *15*, 103–121. [[CrossRef](#)]
41. Carmeli, A.; Reiter-Palmon, R.; Ziv, E. Inclusive Leadership and Employee Involvement in Creative Tasks in the Workplace: The Mediating Role of Psychological Safety. *Creat. Res. J.* **2010**, *22*, 250–260. [[CrossRef](#)]
42. Ordanini, A.; Parasuraman, A.; Rubera, G. When the Recipe Is More Important than the Ingredients: A Qualitative Comparative Analysis (QCA) of Service Innovation Configurations. *J. Serv. Res.* **2014**, *17*, 134–149. [[CrossRef](#)]
43. Rahman, U.H.F.B. Diversity Management and the Role of Leader. *Open Econ.* **2019**, *2*, 30–39. [[CrossRef](#)]
44. Van Knippenberg, D.; De Dreu, C.K.W.; Homan, A.C. Work Group Diversity and Group Performance: An Integrative Model and Research Agenda. *J. Appl. Psychol.* **2004**, *89*, 1008–1022. [[CrossRef](#)] [[PubMed](#)]
45. Kearney, E.; Gebert, D.; Voelpel, S. When and How Diversity Benefits Teams: The Importance of Team Members' Need for Cognition. *Acad. Manag. J.* **2009**, *52*, 581–598. [[CrossRef](#)]
46. Joplin, J.R.W.; Daus, C.S. Challenges of Leading a Diverse Workforce. *Acad. Manag. Exec.* **1997**, *11*, 32–47. [[CrossRef](#)]
47. Homan, A.C. Dealing with Diversity in Workgroups: Preventing Problems and Promoting Potential. *Soc. Personal. Psychol. Compass* **2019**, *13*, e12465. [[CrossRef](#)]
48. Tsai, F.-S. Knowing What We Know Differently: Knowledge Heterogeneity and Dynamically Ambidextrous Innovation. *J. Organ. Change Manag.* **2016**, *29*, 1162–1188. [[CrossRef](#)]
49. Harrison, D.A.; Klein, K.J. What's the Difference? Diversity Constructs as Separation, Variety, or Disparity in Organizations. *Acad. Manag. Rev.* **2007**, *32*, 1199–1228. [[CrossRef](#)]
50. Slater, S.F.; Weigand, R.A.; Zwirlein, T.J. The Business Case for Commitment to Diversity. *Bus. Horiz.* **2008**, *51*, 201–209. [[CrossRef](#)]
51. Hayes, T.L.; Oltman, K.A.; Kaylor, L.E.; Belgudri, A. How Leaders Can Become More Committed to Diversity Management. *Consult. Psychol. J.* **2020**, *72*, 247–262. [[CrossRef](#)]
52. Ng, E.S.W. Why Organizations Choose to Manage Diversity? Toward a Leadership-Based Theoretical Framework. *Hum. Resour. Dev. Rev.* **2008**, *7*, 58–78. [[CrossRef](#)]
53. Williams, K.Y.; O'Reilly, C.A., III. Demography and Diversity in Organizations: A Review of 40 Years of Research. *Res. Organ. Behav.* **1998**, *20*, 77–140. [[CrossRef](#)]
54. Camelo-Ordaz, C.; Hernández-Lara, A.B.; Valle-Cabrera, R. The Relationship between Top Management Teams and Innovative Capacity in Companies. *J. Manag. Dev.* **2005**, *24*, 683–705. [[CrossRef](#)]
55. Van Knippenberg, D.; Schippers, M.C. Work Group Diversity. *Annu. Rev. Psychol.* **2007**, *58*, 515–541. [[CrossRef](#)] [[PubMed](#)]
56. Cangemi, J.P.; Burga, B.; Lazarus, H.; Miller, R.L.; Fitzgerald, J. The Real Work of the Leader: A Focus on the Human Side of the Equation. *J. Manag. Dev.* **2008**, *27*, 1026–1036. [[CrossRef](#)]
57. Neves, P.; Eisenberger, R. Perceived Organizational Support and Risk Taking. *J. Manag. Psychol.* **2014**, *29*, 187–205. [[CrossRef](#)]
58. Baucus, M.S.; Norton, W.I.; Baucus, D.A.; Human, S.E. Fostering Creativity and Innovation without Encouraging Unethical Behavior. *J. Bus. Ethics* **2008**, *81*, 97–115. [[CrossRef](#)]
59. Mittone, L.; Morreale, A.; Vu, T.-T.-T. What Drives Innovative Behavior?—An Experimental Analysis on Risk Attitudes, Creativity and Performance. *J. Behav. Exp. Econ.* **2022**, *98*, 101868. [[CrossRef](#)]
60. Ling, Y.; Simsek, Z.; Lubatkin, M.H.; Veiga, J.F. Transformational Leadership's Role in Promoting Corporate Entrepreneurship: Examining the CEO-TMT Interface. *Acad. Manag. J.* **2008**, *51*, 557–576. [[CrossRef](#)]
61. Beck, K.; Beedle, M.; Van Bennekum, A.; Cockburn, A.; Cunningham, W.; Fowler, M.; Grenning, J.; Highsmith, J.; Hunt, A.; Jeffries, R.; et al. Manifesto for Agile Software Development. Available online: <http://agilemanifesto.org/iso/en/manifesto.html> (accessed on 15 August 2022).
62. Denning, S. How Major Corporations Are Making Sense of Agile. *Strateg. Leadersh.* **2018**, *46*, 3–9. [[CrossRef](#)]
63. Holbeche, L.S. Organisational Effectiveness and Agility. *J. Organ. Eff. People Perform.* **2018**, *5*, 302–313. [[CrossRef](#)]
64. Joiner, B.; Josephs, S. Developing Agile Leaders. *Ind. Commer. Train.* **2007**, *39*, 35–42. [[CrossRef](#)]
65. Bellis, P.; Cunial, M.; Trabucchi, D. Mastering Hybrid Worlds through Digital Leadership: The Role of Agility in Fostering Innovation. *Bus. Horiz.* **2024**, *67*, 369–380. [[CrossRef](#)]
66. Henriques, P.L.; Curado, C.; Oliveira, M.; Maçada, A.C.G. Publishing? You Can Count on Knowledge, Experience, and Expectations. *Qual. Quant.* **2019**, *53*, 1301–1324. [[CrossRef](#)]
67. Ragin, C.C. *The Comparative Method: Moving beyond Qualitative and Quantitative Strategies*; University of California Press: Oakland, CA, USA, 1987.
68. Roig-Tierno, N.; Gonzalez-Cruz, T.F.; Llopis-Martinez, J. An Overview of Qualitative Comparative Analysis: A Bibliometric Analysis. *J. Innov. Knowl.* **2017**, *2*, 15–23. [[CrossRef](#)]
69. Pappas, I.O.; Woodside, A.G. Fuzzy-Set Qualitative Comparative Analysis (FsQCA): Guidelines for Research Practice in Information Systems and Marketing. *Int. J. Inf. Manag.* **2021**, *58*, 102310. [[CrossRef](#)]
70. Florea, D.L.; Nieto-Saucedo, M.E.R.; Reyes-Mercado, P. Unveiling Professional Service Providers' Willingness to Educate: A Configurational Approach. *Ind. Mark. Manag.* **2022**, *107*, 222–237. [[CrossRef](#)]
71. Tigre, F.B.; Henriques, P.L.; Curado, C. Building Trustworthiness: Leadership Self-Portraits. *Qual. Quant.* **2022**, *56*, 3971–3991. [[CrossRef](#)]

72. Curado, C. Human Resource Management Contribution to Innovation in Small and Medium-Sized Enterprises: A Mixed Methods Approach. *Creat. Innov. Manag.* **2018**, *27*, 79–90. [[CrossRef](#)]
73. Fiss, P.C. Building Better Causal Theories: A Fuzzy Set Approach to Typologies in Organization Research. *Acad. Manag. J.* **2011**, *54*, 393–420. [[CrossRef](#)]
74. Wagemann, C.; Schneider, C.Q. Standards of Good Practice in Qualitative Comparative Analysis (QCA) and Fuzzy-Sets. *Comp. Sociol.* **2010**, *9*, 397–418.
75. Chu, Y.; Chi, M.; Wang, W.; Luo, B. The Impact of Information Technology Capabilities of Manufacturing Enterprises on Innovation Performance: Evidences from SEM and FsQCA. *Sustainability* **2019**, *11*, 5946. [[CrossRef](#)]
76. Santos, S.; Gonçalves, H.M. Multichannel Consumer Behaviors in the Mobile Environment: Using FsQCA and Discriminant Analysis to Understand Webrooming Motivations. *J. Bus. Res.* **2019**, *101*, 757–766. [[CrossRef](#)]
77. Podsakoff, P.M.; MacKenzie, S.B.; Lee, J.Y.; Podsakoff, N.P. Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *J. Appl. Psychol.* **2003**, *88*, 879–903. [[CrossRef](#)] [[PubMed](#)]
78. Tabacknick, B.G.; Fidell, L.S. *Using Multivariate Statistics*, 6th ed.; Pearson Education: Boston, MA, USA, 2013; ISBN 9780205890811.
79. Pett, M.A.; Lackey, N.R.; Sullivan, J.J. *Making Sense of Factor Analysis*; Sage Publications: Thousand Oaks, CA, USA, 2003; ISBN 076191949X.
80. Hair, J.F.; Risher, J.J.; Sarstedt, M.; Ringle, C.M. When to Use and How to Report the Results of PLS-SEM. *Eur. Bus. Rev.* **2019**, *31*, 2–24. [[CrossRef](#)]
81. Ragin, C.C. *Redesigning Social Inquiry: Fuzzy Sets and Beyond*; Chicago University Press: Chicago, IL, USA, 2008; ISBN 9789896540821.
82. Ragin, C.C. *From Fuzzy Sets to Crisp Truth Tables*; Working paper; University of Arizona: Tucson, AZ, USA, 2005; Available online: <http://compass.org/wpseries/Ragin2004.pdf> (accessed on 15 August 2022).
83. Greckhamer, T.; Furnari, S.; Fiss, P.C.; Aguilera, R.V. Studying Configurations with Qualitative Comparative Analysis: Best Practices in Strategy and Organization Research. *Strateg. Organ.* **2018**, *16*, 482–495. [[CrossRef](#)]
84. Schneider, C.Q.; Wagemann, C. *Set-Theoretic Methods for the Social Sciences: A Guide to Qualitative Comparative Analysis*; Cambridge University Press: New York, NY, USA, 2012.
85. Tóth, Z.; Thiesbrummel, C.; Henneberg, S.C.; Naudé, P. Understanding Configurations of Relational Attractiveness of the Customer Firm Using Fuzzy Set QCA. *J. Bus. Res.* **2015**, *68*, 723–734. [[CrossRef](#)]
86. Skaaning, S.-E. Assessing the Robustness of Crisp-Set and Fuzzy-Set QCA Results. *Sociol. Methods Res.* **2011**, *40*, 391–408. [[CrossRef](#)]
87. Cheng, C.F.; Chang, M.L.; Li, C.S. Configurational Paths to Successful Product Innovation. *J. Bus. Res.* **2013**, *66*, 2561–2573. [[CrossRef](#)]
88. da Silva, F.P.; Jerónimo, H.M.; Vieira, P.R. Leadership Competencies Revisited: A Causal Configuration Analysis of Success in the Requirements Phase of Information Systems Projects. *J. Bus. Res.* **2019**, *101*, 688–696. [[CrossRef](#)]
89. Huang, S.; Huang, Q.; Soetanto, D. Entrepreneurial Orientation Dimensions and the Performance of High-Tech and Low-Tech Firms: A Configurational Approach. *Eur. Manag. J.* **2023**, *41*, 375–384. [[CrossRef](#)]
90. de Crescenzo, V.; Baratta, R.; Simeoni, F. Citizens’ Engagement in Funding Renewable and Energy Efficiency Projects: A Fuzzy Set Analysis. *J. Clean. Prod.* **2020**, *277*, 124060. [[CrossRef](#)]
91. Fiss, P.C. A Set-Theoretic Approach to Organizational Configurations. *Acad. Manag. Rev.* **2007**, *32*, 1190–1198. [[CrossRef](#)]
92. Jerónimo, H.M.; Henriques, P.L.; de Lacerda, T.C.; da Silva, F.P.; Vieira, P.R. Going Green and Sustainable: The Influence of Green HR Practices on the Organizational Rationale for Sustainability. *J. Bus. Res.* **2020**, *112*, 413–421. [[CrossRef](#)]
93. Ricciardi, F.; Zardini, A.; Czakon, W.; Rossignoli, C.; Kraus, S. Revisiting the Cooperation–Competition Paradox: A Configurational Approach to Short- and Long-Term Cooperation Performance in Business Networks. *Eur. Manag. J.* **2022**, *40*, 320–331. [[CrossRef](#)]
94. Meuer, J.; Ruppert, C. A Review of Integrated QCA and Statistical Analyses. *Qual. Quant.* **2017**, *51*, 2063–2083. [[CrossRef](#)]
95. Gharama, A.N.A.; Khalifa, G.S.A.; Al-Shibami, A.H. Measuring the Mediating Effect of Cultural Diversity: An Investigation of Strategic Leadership’s Role on Innovation. *Int. J. Psychosoc. Rehabil.* **2020**, *24*, 1914–1929. [[CrossRef](#)]
96. Wan, H.L.; Tan, N.N. Agile Leadership and Bootlegging Behavior: Does Leadership Coping Dynamics Matter? In *Agile Coping in the Digital Workplace: Emerging Issues for Research and Practice*; Ferreira, N., Potgieter, I.L., Melinde, C., Eds.; Springer Nature: Cham, Switzerland, 2021; pp. 187–204. ISBN 9783030702274.
97. Ng, E.S.W.; Wyrick, C.R. Motivational Bases for Managing Diversity: A Model of Leadership Commitment. *Hum. Resour. Manag. Rev.* **2011**, *21*, 368–376. [[CrossRef](#)]
98. Novitasari, D.; Supriatna, H.; Asbari, M.; Nugroho, Y.A.; Nadeak, M. Exploring the Impact of Trust in Leader and Knowledge Sharing on Employee Innovation. *Int. J. Soc. Manag. Stud.* **2021**, *2*, 47–62.
99. Ye, P.; Liu, L.; Tan, J. Creative Leadership, Innovation Climate and Innovation Behaviour: The Moderating Role of Knowledge Sharing in Management. *Eur. J. Innov. Manag.* **2022**, *25*, 1092–1114. [[CrossRef](#)]

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.