

## Article

# The Influence of Intellectual Humility in External Successor CEOs on Corporate Strategic Change

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**Abstract:** Research shows that strategic change can reshape a company's competitive advantage and significantly impact organizational performance. This study examines the role of Intellectual Humility (IH) in driving strategic change, particularly in the context of external successor CEOs. The overall aim of the study is to explore how external successor CEOs' IH influences strategic change, and to uncover the underlying mechanisms at play. Based on the Upper Echelons Theory, the paper proposes a moderated mediation model to explore how strategic change occurs during external succession. It highlights the mediating role of strategic execution between IH and strategic change, and the moderating effect of organizational learning (OL). Data from 391 valid responses to electronic questionnaires from CEOs of companies established for over two years were analyzed. The results show that external successor CEOs' IH positively influences strategic change, with strategic execution mediating this effect. However, organizational learning was found to have no significant moderating effect on this relationship. Our study fills a gap in the literature by highlighting IH as a key factor in external CEO succession. It challenges traditional views on succession and demonstrates how IH can enhance strategic execution and innovation. The findings suggest that IH should be a critical criterion in CEO selection, especially during leadership transitions, to optimize strategic change and improve long-term organizational success.

**Keywords:** external succession CEOs; intellectual humility; strategic execution; strategic change; organizational learning



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## 1. Introduction

Strategic change is the process by which enterprises adjust and transform their strategies in response to changes in the external environment or internal business needs, aiming to achieve organizational goals and enhance competitiveness [1]. It enables companies to adapt to market dynamics by making changes in strategic direction, organizational structure, culture, technology, and business models [2–4]. These changes help enterprises adapt to environmental shifts, seize new market opportunities, adjust business models and product portfolios, and strengthen their market position, thereby enhancing the competitiveness of their products and services [5–7]. Strategic change is widely recognized as crucial to a company's long-term performance and survival [8], and studies suggest that approximately 75% of companies experience performance declines due to strategic issues.

Strategic change is influenced by factors operating at three levels: individual, group, and organizational. At the individual level, factors such as positive employee attitudes, engagement, skills are crucial [9,10]; at the group-level, team communication and collaboration would influence organizational behavior [11]; and at the organizational level, resource

allocation, competitive advantages and culture are important, where alignment between culture and new strategy is essential to avoid resistance and conflict [5,12,13]. The role of management is critical, particularly in making strategic decisions. The Upper Echelons Theory posits that managerial traits significantly influence strategic decisions, which in turn affect the growth and overall performance of the enterprise [14].

Although previous studies have explored the impact of managerial personality traits, such as CEO general humility (GH) and narcissism, on strategic change [15,16], the mechanisms underlying strategic change from the perspective of CEO intellectual humility (IH) remain unexplored. Intellectual humility, a subdomain of general humility, involves recognizing the limits of one's knowledge and being open to new ideas. This trait is particularly relevant in the context of strategic change, where openness to new perspectives and the ability to engage with alternative viewpoints are crucial [17,18].

Intellectual humility is a cognitive virtue that pertains to an individual's understanding and approach to their own knowledge and beliefs [19,20]. It involves the awareness that one's beliefs may be flawed, appropriately recognizing the limitations of the evidence base for those beliefs, and acknowledging the challenges in acquiring and evaluating relevant information. While various definitions of intellectual humility exist across disciplines, our study follows Leary's (2017) [21] definition, which characterizes intellectual humility as an awareness that one's beliefs may be flawed, while also recognizing the limitations in acquiring and evaluating relevant information. This definition encapsulates the essence of intellectual humility as a cognitive virtue that helps individuals navigate complex information environments more effectively. Scholars generally consider intellectual humility to be an intellectual virtue that promotes effective knowledge acquisition and evaluation [20,22]. By fostering an environment where leaders remain open to new ideas and critical feedback, intellectual humility is crucial for successful strategic change, enabling organizations to adapt more effectively in dynamic and complex environments [23].

However, despite the recognized value of intellectual humility in various fields, its specific impact on strategic change, particularly in the context of external successor CEOs, remains underexplored. External CEO succession, as a key aspect of strategic change, requires successor CEOs not only to have outstanding leadership abilities but also to possess the capacity for strategy execution that aligns with the organization's current strategic phase. Without effective strategy execution, strategic goals will remain elusive [24]. Therefore, this study proposes the idea that strategy execution plays a mediating role between intellectual humility and strategic change. By revealing this mediation process, we aim to deepen our understanding of the relationships between variables influencing strategic change after CEO succession, providing more precise guidance for theory development and practical intervention.

To fill this research gap, this study aims to answer the following three key questions:

RQ1: Based on the Upper Echelons Theory, how does the intellectual humility of external successor CEOs influence corporate strategic change, and what are the underlying mechanisms?

RQ2: Does strategic execution mediate the relationship between CEO intellectual humility and strategic change, and under what conditions?

RQ3: How does the organizational learning context influence the relationship between CEO intellectual humility and strategic change, particularly in the context of external CEO succession?

The structure of this paper is as follows: Section 2 reviews the relevant literature, discussing the research progress on intellectual humility, CEO succession, and strategic change, and proposes hypotheses accordingly; Section 3 tests the hypotheses and constructs the model based on survey data from external successor CEOs; finally, Section 4 discusses

the theoretical and practical implications of the research findings and suggests directions for future research.

## 2. Literature Review and Hypotheses Development

### 2.1. Intellectual Humility in External and Internal Successor CEOs

Scholars often define IH (intellectual humility) as a subdomain of GH (general humility) that pertains to humility regarding one's knowledge and intellectual influence. Their conceptualization suggests two complementary rationales for understanding when IH should better predict GH [17,18]. GH has been defined as (a) having an accurate view of one's strengths and weaknesses, including acknowledging limitations, and (b) adopting an interpersonal stance that is other-oriented rather than self-focused, characterized by the ability to restrain egotism, such as self-oriented emotions like pride or shame [19]. However, despite these frameworks, there is ongoing debate among scholars regarding the interpersonal behaviors essential to, versus those correlated with, humility [18]. This has led to the development of various subtypes of humility such as clinical, cultural, professional, and intellectual humility, with the latter gaining particular focus in recent years.

Research has primarily focused on how organizations respond to external environmental factors, with less attention given to how successor CEOs' personality traits, particularly intellectual humility, influence strategic change and performance. CEO transitions mark significant leadership shifts and pose critical challenges for corporate development. Starbuck suggests that replacing a CEO provides an opportunity to introduce new knowledge and perspectives, fostering strategic transformation and enhancing performance. As such, appointing a new CEO often serves as the first step in driving fresh ideas and initiating strategic changes.

Considering the origin of successor CEOs, CEO succession is influenced by both internal and external factors, which often interact to shape the decision-making process. Internal factors include corporate governance (such as board independence and ownership structure), company performance (such as financial results and the success or failure of strategies), corporate culture (such as succession planning and talent reserve), CEO personal characteristics (such as age, health, and leadership style), and power dynamics within the executive team [25–30]. External factors include the industry environment (such as competition intensity and technological changes), economic conditions, regulatory policies, capital market pressures, and public opinion. Ultimately, CEO succession is shaped by a combination of internal organizational dynamics and external market forces, aligned with the company's strategic goals [31]. But none of these studies have considered the psychological and cognitive traits, such as intellectual humility, that might influence decision-making, strategic adaptability, and overall company performance. In light of the increasing awareness of the significance of intellectual humility in fostering open-mindedness, adaptability, and collaboration—qualities that are of vital importance in the contemporary, rapidly evolving business milieu—a deeper investigation of intellectual humility is needed.

Yu and Zhu (2015) [32] proposed the theory of intellectual management, central to which is the idea that sustained competitive advantage in companies stems from heterogeneous intangible resources, chiefly knowledge capital and personality traits. Therefore, corporate strategic management essentially involves dual governance over knowledge capital and organizational character. Intellectual humility encompasses four interrelated aspects: intellectual and self-independence, openness to revising views, respect for others' views, and absence of intellectual overconfidence [33]. External successor CEOs, particularly those from new industries, often need time to adapt to the company's culture and operations. Their limited initial understanding can promote intellectual humility, openness

to learning, and receptiveness to input. Companies usually choose external successors with significant leadership experience, which fosters a rational and mature approach to power [34].

In contrast, internal successors, being more acquainted with the company's internal dynamics, may exhibit overconfidence [35]. This overconfidence can lead to subjective problem-solving and decision-making, impacting strategic change initiatives. Moreover, internal successors, influenced by the company's culture, might struggle to embrace new ideas and approaches [36], potentially hindering organizational adaptability and sensitivity to change. However, Krumrei's research relates to intellectual humility with higher levels of empathy, gratitude, altruism, benevolence, and universalism, and lower levels of power-seeking. Thus, it is reasonable to infer that external successors exhibit higher levels of intellectual humility.

The role of intellectual humility in successor CEOs, particularly in internal versus external appointments, remains underexplored. Limited research has examined its impact on strategic adaptability, organizational culture, and long-term performance. This study addresses these gaps by investigating how intellectual humility influences strategic change in different types of successor CEOs. It contributes to understanding the psychological factors shaping leadership effectiveness during transitions and offers insights into how intellectual humility can help CEOs navigate complex environments, enhance strategies, and improve outcomes. Based on this, this paper proposes Hypothesis 1 (H1):

**H1.** *External successor CEOs exhibit higher levels of intellectual humility than internal successor CEOs.*

## 2.2. *The Influence of External Successor CEOs' Intellectual Humility on Strategic Change*

Amid shifting market dynamics and intensifying competition, companies must adapt their strategies to remain competitive. External successor CEOs with intellectual humility are well-suited to lead such changes [37]. While previous studies have explored various forms of competitive advantage—absolute, comparative, technological, dynamic, and others [38–44]—most focus on tangible assets, often overlooking the critical role of intangible assets.

Intangible assets like brand value, intellectual property, and human capital are vital for long-term competitiveness and innovation. Leadership changes, particularly at the CEO level, often signal strategic shifts aimed at correcting past mistakes and implementing new management philosophies [45]. From an agency theory perspective, boards may task new CEOs with driving strategic change [26], making leadership succession a catalyst for transformation. External successors are often chosen when significant change is needed, as they bring fresh perspectives and knowledge. Building on Shafiee's (2022) findings [46], this paper highlights how intellectual humility in external successor CEOs enhances intellectual capital, fostering innovation and competitive advantage. External successions, as noted by Chung and Luo (2012) [47], can lead to significant organizational changes and improved performance. Historically, internal CEO successions in U.S. firms were procedural rather than performance-driven, often perpetuating entrenched ideas and limiting innovation [48–50]. Internal successors may struggle with habitual thinking, resistance, and a focus on internal affairs, making bold strategic shifts challenging. In contrast, external successors, especially in emerging markets with intense competition, offer “change-oriented” knowledge essential for driving strategic innovation.

Research on intellectual humility leadership has largely focused on religious leaders, with limited exploration in organizational contexts, particularly its impact on strategic change. Hutzschenreuter (2012) [51] found that among the Big Five traits, extraversion,

agreeableness, emotional stability, and openness positively influence post-succession strategic change, while conscientiousness negatively correlates due to a preference for structure and control. Davis (2016) [18] further linked intellectual humility to agreeableness and openness, traits that promote adaptability and inclusivity in leadership. In corporate settings, CEOs with high intellectual humility are open to feedback, responsive to change, and capable of fostering an innovative and inclusive culture. Recognizing their knowledge limits, they value interdisciplinary expertise, as seen in Inamori Kazuo's leadership at Japan Airlines, where his humble approach helped the company achieve profitability post-bankruptcy through team recognition and respect for employee contributions [52].

External successor CEOs with intellectual humility are well-suited to drive organizational transformations, as their openness to diverse ideas and perspectives is critical for sustaining competitive advantage. However, they may encounter conflicts with existing management teams when implementing new strategies. Our paper hypothesizes that internal successor CEOs generally exhibit higher levels of intellectual humility than external ones. High intellectual humility fosters inclusiveness, adaptability, and positive social relationships within organizations, reducing conflicts and enhancing strategy execution. Leaders with this trait embrace diverse viewpoints and promote cognitive diversity, integrating varied perspectives into decision-making to create an inclusive workplace. Gómez et al. (2023) [53] demonstrated that fostering intellectual humility encourages diversity and fairness, while McElroy (2014) [17] likened it to a “lubricant” in interpersonal relationships, facilitating harmony and openness to differing viewpoints. Such leaders broaden perspectives and cultivate environments conducive to collaboration and innovation [54,55]. Based on these arguments, this paper proposes Hypothesis 2 (H2):

**H2.** *The intellectual humility of external successor CEOs positively influences strategic change.*

### 2.3. The Mediating Role of Strategy Execution

Strategic change is the transition of a company from its current state to a desired future state, encompassing complex shifts. Strategy execution is critical in ensuring that strategies are not just theoretical but translate into tangible actions and measures. This capability spans strategic formulation, resource allocation, goal decomposition, plan development, and strategic actions, demonstrating the company's proficiency in converting strategies into real-world actions [56]. Despite the well-established importance of strategy execution, existing literature has often failed to address how the traits of leadership, particularly those of successor CEOs, affect this capability. This represents a significant gap, as strategic change is not solely dependent on the theoretical soundness of a strategy but also on how effectively leaders guide its execution.

Companies often encounter an “innovation-execution gap” during strategic changes or new business model implementations due to challenges in turning innovative ideas into tangible business outcomes. This gap in strategy execution can hinder organizational transformation [57]. Hassert (2018) [58] identified strategic planning weaknesses, the resolution of which aids in achieving strategic change. Kumar and Sushil's (2014) [59] research highlighted that when an organization becomes dynamic and flexible, it can effectively utilize a strategy execution framework to accomplish strategic change. While previous studies have explored the factors that contribute to strategy execution, few have directly examined the role of a CEO's intellectual humility in fostering such a capability, particularly in the context of strategic change. This omission is critical given the increasing recognition of leadership traits as key drivers of effective strategy execution. Consequently, we suggest that high strategy execution positively influences strategic change, while low capability negatively affects it. Hence, we propose Hypotheses 3a and 3b.

**H3a.** *High strategy execution has a positive impact on strategic change.*

**H3b.** *Low strategy execution has a negative impact on strategic change.*

Successful strategy often results from effective execution. Strategic change arises from trade-offs and choices made to maximize company value, guided by strategic planning. This planning can occur through various approaches: top-down leadership formulation, bottom-up formulation, internal department planning, third-party delegation, or collaboration between the company and a third party [58,60,61]. Despite the diverse mechanisms through which strategy can be formulated and executed, the role of the CEO's intellectual traits—particularly intellectual humility—remains underexplored. Studies frequently overlook how specific leadership qualities impact the ability to execute strategy effectively and achieve strategic change. Research suggests that outstanding strategic performance relies on execution quality and the leader's capabilities [62], with Rosabeth (2017) [63] argued that leaders should prioritize execution over strategy. However, these studies have not specifically addressed the role of intellectual humility in this process, leaving a gap in understanding how this key leadership trait impacts strategy execution and strategic change.

This gap is particularly significant when considering external successor CEOs, whose intellectual humility may foster a follower-centric leadership style that enhances execution capability. Intellectual humility in external successor CEOs fosters follower-centric leadership. Traits related to intellectual humility may positively influence decision-making, adaptive leadership abilities, and organizational adaptability [64]. Research on novice community leaders shows that those who develop intellectual humility in new leadership roles adopt follower perspectives more effectively, demonstrate empathy, and engage in service-oriented leadership [65]. As a leadership trait, intellectual humility, characterized by a willingness to listen, learn, and be humble, is believed to play a crucial role in corporate strategic change.

However, existing studies have not sufficiently explored how intellectual humility affects the specific organizational mechanisms required for strategic change, such as strategy execution. This gap is critical, as strategy execution serves as the bridge between leadership traits and tangible business outcomes. Our study aims to address this gap by exploring the mediating role of strategy execution in the relationship between intellectual humility and strategic change. Strategy execution, as a mediating variable, is pivotal in this study. Leaders with intellectual humility may solicit broader employee opinions, understand the internal environment better, and collaborate closely with the team, enhancing strategy execution and translating strategic change ideas into practical measures. Therefore, we propose Hypothesis 4:

**H4.** *High intellectual humility of an external successor CEO positively impacts strategy execution.*

Based on Hypotheses 3a and 4, we derive Hypothesis 5:

**H5.** *Strategy execution mediates the relationship between the high intellectual humility of an external successor CEO and strategic change.*

#### *2.4. The Moderating Effect of Organizational Learning*

Organizational learning (abbreviated as OL) refers to an organization's ongoing change and renewal capabilities [66]. May and Kettelhurt (1996) [67] noted that common mentalities generated during the organizational learning process facilitate organizational change. Understanding key change processes can minimize resistance among organizational mem-

bers. When learning activities yield expected benefits, they motivate further continuous learning and change. Liu's [27] research found a significant positive impact of organizational learning on strategic change.

Barnard (1986) [68] argued that managerial work should focus on adapting organizations to their environments, with OL being crucial in strategy execution. Feng (2010) [69] demonstrated that OL positively influences strategic consensus, coordination, and control, all of which are key elements of effective execution. However, while the importance of OL for organizational adaptability is well-recognized, existing research primarily explores how OL facilitates general strategic execution without examining its potential moderating effect on leadership traits—such as intellectual humility (IH)—in driving execution. This represents a significant gap in the literature.

Previous studies have highlighted the positive correlation between leadership styles, such as transformational and humble leadership, and OL [70–74]. However, these studies primarily treat OL as a dependent variable and overlook its moderating role in shaping the relationship between leadership traits and strategy execution. More specifically, few studies have explored how OL moderates the relationship between a CEO's IH and the organization's strategy execution, particularly in the context of external CEO succession.

The existing literature has not sufficiently explored how organizational learning (OL) interacts with leadership traits like intellectual humility (IH) in the context of external CEO succession. While studies show that employees with strong OL capabilities and greater autonomy tend to perform better [75,76], they have not addressed how OL influences the effectiveness of leadership traits, such as IH, in strategy execution. This gap is particularly important when considering external CEOs, who, unlike internally promoted leaders, may face different perceptions and expectations from employees and other stakeholders. Understanding how IH interacts with OL in this context is crucial for explaining how external CEOs can successfully lead strategic change.

In organizations with strong OL capabilities, IH may not always be viewed as a critical trait. High core self-evaluation or narcissism in external successor CEOs may be more valued in such contexts [77], as these organizations already possess strong change implementation capabilities [78]. In high-learning environments, IH's openness could be perceived as indecisiveness, potentially diminishing its impact on strategy execution.

Supporting this, Porter [79] noted that in highly institutionalized organizations, standardized processes can overshadow individual leadership traits. Similarly, Eisenhardt [80] observed that organizations with high learning capabilities rely more on systematic decision-making than individual judgment, which can reduce the impact of leadership traits like IH. This highlights the complex interplay between leadership traits and organizational context in driving strategic change. In line with these observations, recent studies in strategic management have increasingly adopted moderated mediation models to explore complex interactions. For example, Helfat and Peteraf [81] showed how environmental turbulence moderates the mediating effect of “manager cognition -- resource reconfiguration -- strategic change” in their dynamic capabilities framework. These studies support the use of moderated mediation models, highlighting their effectiveness in revealing multi-level drivers of strategic change. Our study contributes to this body of research by demonstrating how IH, through its influence on strategy execution, drives strategic change. Moreover, we show how organizational learning moderates this process, further extending the contingency perspective in leadership research. Therefore, we propose Hypothesis 6:

**H6.** *Organizational learning negatively moderates the relationship between the intellectual humility of an external successor CEO and strategy execution.*

Figure 1 illustrates the research framework of our study, outlining the relationships between the hypotheses proposed in this paper.

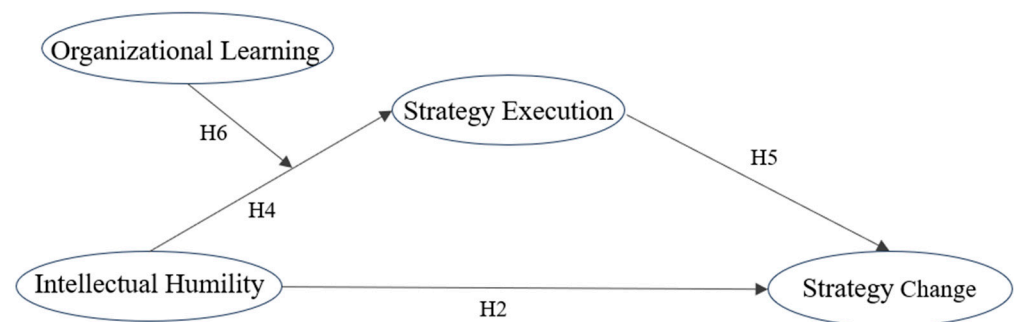


**Figure 1.** Research framework of this paper.

### 3. Research Design

#### 3.1. Methods

##### 3.1.1. Data Collection

The data collection for this study took place from March to June 2024, targeting companies established for more than two years. Questionnaires were administered electronically to CEOs. To ensure the diversity and reach of responses, the surveys were distributed through multiple channels, including direct emails via personal contacts and through pre-sampling frames at university MBA (EMBA) centers and Executive Development Program (EDP) centers.

This project was approved by the Science and Technology Ethics Committee of [University Name] (No. DHUEC-NSFC-2024-54). Participants were informed about the study's purpose and procedures, and consent was obtained through an online consent form before they completed the questionnaire. The data collection was anonymous and confidential, with no negative consequences for non-participation.

To focus specifically on external CEO successions, a filter question was included: "How long have you worked for this company"? [82] Only CEOs with two years or less of tenure in the role were included in the sample. The questionnaire design was translated between Chinese and English, and no significant semantic differences were found. A pre-survey was conducted with 50 participants, and revisions were made based on feedback.

To mitigate common method bias and endogeneity, the data collection was split into two separate surveys. The first survey, conducted in March and April 2024, collected responses for moderator, dependent, and control variables from 10 participants. The second survey, conducted from April to May 2024, collected responses from 20 participants, with 10 answering independent variables and 10 answering mediator variables. Control variables were assessed in both surveys. The use of a lagged design between independent and mediator variables reduced endogeneity risks.

##### 3.1.2. Measurement of Variables

- (1) Intellectual Humility of External Successor CEO (IH): We use Leary's [21] IH scale for CEOs, the items include "I question my own views, positions, and opinions because they may be wrong", "when presented with new evidence, I reconsider my views" and six others.
- (2) Strategy Execution Scale (SES): Based on Xu et al.'s (2008) [62] framework, this variable is assessed through three dimensions and ten factors, focusing on aspects like clarity on internal human resources. It consists of "Clarity on the status of internal human resources", totaling 32 items.

- (3) Strategic Change (SC): Measurement was based on Feng's (2010) [83] work, with 20 items like "The target market of the enterprise has changed".
- (4) Organizational Learning (OL): The essence of organizational change is cultural transformation William (2004) [84]. Therefore, our study uses a measure of organizational learning that is closely related to organizational culture. The scale, derived from Denison's (1996) [85] organizational culture scale, includes items such as "We view failure as an opportunity for learning and improvement". This approach emphasizes how organizational learning, embedded in company culture, influences strategic change and execution.

### 3.1.3. Control Variables

In assessing the impact of different CEOs on corporate strategic change, it is crucial to account for various demographic factors that could influence the outcome. The following control variables are included in the analysis:

Gender is controlled to account for potential differences in strategic change tendencies based on gender [86,87]. Age is controlled because older executives may offer experience and wisdom, while younger executives bring energy and motivation. However, age diversity can sometimes lead to reduced strategic change [88,89]. The educational level of the CEO is included as a control variable to account for differences in strategic change that may be influenced by the CEO's educational background. Service Year (SY): Seniority is controlled by including the number of years the CEO has been with the company, which can impact their influence on strategic decisions [90–92].

These control variables ensure that the analysis of the successor CEO's intellectual humility and its impact on strategic change is not confounded by these demographic factors.

### 3.1.4. Sample Distribution

The sample for this study comprised 391 respondents, providing a diverse demographic profile. Gender distribution was nearly balanced, with 48.08% male and 51.92% female participants. Age-wise, 23.52% were under 25 years old, 25.83% were between 26 and 35 years, 33.50% were aged 36 to 45, and 17.14% were over 45 years. In terms of educational background, 21.23% had a high school education or less, 66.75% held an undergraduate or associate degree, and 12.02% had a master's degree or higher. Regarding work experience, 66.75% had less than one year of experience, and 33.25% had between one and two years. The industry distribution was as follows: Manufacturing (9.21%), Construction (6.14%), Logistics and Transportation (5.37%), Education and Training (8.69%), Internet and Technology (11.02%), Finance and Real Estate (7.16%), Healthcare and Social Services (10.74%), and Other (41.63%). This comprehensive demographic breakdown provides context for the study's findings and supports the evaluation of their generalizability.

The data collection process began by distributing 2000 questionnaires, of which 657 were returned, resulting in an effective response rate of 32.85%. A total of 391 of the questionnaires were deemed valid, while 266 were not a valid for the purposes of questionnaire in our study. Invalid questionnaires were excluded if they had inconsistent answers, significant omissions, unusual response patterns, like straight-lining or if respondents did not meet eligibility criteria (e.g., not external successor CEOs).

## 3.2. Data Analysis and Results

### 3.2.1. Reliability and Confirmative Factor Analysis

In order to compare the level of intellectual humility of internal or external successor CEOs, we took all the questionnaires collected (including CEOs who chose to be external successors when answering the questionnaires) and divided them into two groups. These questionnaires included 391 CEOs who were external successor CEOs and 162 CEOs who

were internal successor CEOs, and their responses to the intellectual humility questions were analyzed with a t-test for the independent variable. We used SPSS 26.0 to finish the test. As shown in Table 1, external succession CEOs had a higher average score in intellectual humility ( $3.813 > 2.980$ ,  $p < 0.01$ ), supporting Hypothesis 1. Externally succeeding CEOs are more intellectually humble than internally succeeding CEOs.

**Table 1.** T-test of independent variables.

| Groups                  | Mean  | T      | Sig. (p-Value) |
|-------------------------|-------|--------|----------------|
| 1 (External succession) | 3.813 | 69.251 | 0.000 **       |
| 2 (Internal succession) | 2.980 | 49.862 | 0.000 **       |

Note: \*\* denote  $p < 0.01$ .

Data processing utilized SPSS 26.0 and AMOS 28.0. To check for common method bias, the Harman single-factor test was conducted showing the first principal component's variance contribution rate at 44.67% of the variance, well below the recommended threshold of 50%.

As shown in Table 2, all Cronbach's  $\alpha$  coefficients were above 0.92, exceeding the commonly accepted threshold of 0.7. Reflective measurement models were used to evaluate these types of validity. Each item's factor loading exceeded 0.8, indicating strong item correlations with their respective constructs. Additionally, the composite reliability (CR) for each variable was above 0.96, and the average variance extracted (AVE) for each exceeded 0.7. Both CR and AVE values meet the recommended thresholds (CR above 0.7 and AVE above 0.5), confirming high convergent validity. To further mitigate the risk of multicollinearity impact, data standardization was performed during analysis.

**Table 2.** Question items and reliability tests for variables.

| Variables                                           | Measurement Items | Payloads |
|-----------------------------------------------------|-------------------|----------|
| IH<br>( $\alpha = 0.935$ , AVE = 0.707, CR = 0.935) | IH1               | 0.839    |
|                                                     | IH2               | 0.848    |
|                                                     | IH3               | 0.842    |
|                                                     | IH4               | 0.863    |
|                                                     | IH5               | 0.857    |
|                                                     | IH6               | 0.819    |
| SE<br>( $\alpha = 0.987$ , AVE = 0.704, CR = 0.987) | SE1               | 0.838    |
|                                                     | SE2               | 0.852    |
|                                                     | SE3               | 0.826    |
|                                                     | SE4               | 0.851    |
|                                                     | SE5               | 0.854    |
|                                                     | SE6               | 0.826    |
|                                                     | SE7               | 0.830    |
|                                                     | SE8               | 0.843    |
|                                                     | SE9               | 0.858    |
|                                                     | SE10              | 0.851    |
|                                                     | SE11              | 0.834    |
|                                                     | SE12              | 0.851    |
|                                                     | SE13              | 0.846    |
|                                                     | SE14              | 0.847    |
|                                                     | SE15              | 0.832    |
|                                                     | SE16              | 0.841    |
|                                                     | SE17              | 0.835    |
|                                                     | SE18              | 0.832    |

Table 2. Cont.

| Variables                                           | Measurement Items | Payloads |
|-----------------------------------------------------|-------------------|----------|
| SE<br>( $\alpha = 0.987$ , AVE = 0.704, CR = 0.987) | SE19              | 0.852    |
|                                                     | SE20              | 0.828    |
|                                                     | SE21              | 0.856    |
|                                                     | SE22              | 0.830    |
|                                                     | SE23              | 0.849    |
|                                                     | SE24              | 0.847    |
|                                                     | SE25              | 0.839    |
|                                                     | SE26              | 0.830    |
|                                                     | SE27              | 0.852    |
|                                                     | SE28              | 0.838    |
|                                                     | SE29              | 0.851    |
|                                                     | SE30              | 0.835    |
|                                                     | SE31              | 0.825    |
|                                                     | SE32              | 0.844    |
| SC<br>( $\alpha = 0.979$ , AVE = 0.702 CR = 0.979)  | SC1               | 0.829    |
|                                                     | SC2               | 0.848    |
|                                                     | SC3               | 0.845    |
|                                                     | SC4               | 0.860    |
|                                                     | SC5               | 0.843    |
|                                                     | SC6               | 0.852    |
|                                                     | SC7               | 0.837    |
|                                                     | SC8               | 0.842    |
|                                                     | SC9               | 0.828    |
|                                                     | SC10              | 0.857    |
|                                                     | SC11              | 0.839    |
|                                                     | SC12              | 0.831    |
|                                                     | SC13              | 0.854    |
|                                                     | SC14              | 0.844    |
|                                                     | SC15              | 0.844    |
|                                                     | SC16              | 0.827    |
|                                                     | SC17              | 0.830    |
|                                                     | SC18              | 0.833    |
|                                                     | SC19              | 0.825    |
|                                                     | SC20              | 0.849    |
| OL<br>( $\alpha = 0.929$ , AVE = 0.723 CR = 0.929)  | OL1               | 0.838    |
|                                                     | OL2               | 0.856    |
|                                                     | OL3               | 0.863    |
|                                                     | OL4               | 0.854    |
|                                                     | OL5               | 0.835    |

Note: The abbreviations in the table are IH (intellectual humility); SE (strategy execution); SC (strategic change); OL (organizational learning); AVE (average variance extraction); and CR (combinatorial reliability).

Confirmative factor analysis (CFA) was used to test discriminant validity among variables. AMOS 28.0 was selected for its graphical interface, which simplifies model building and evaluation. While R 4.2.3 and Mplus 7 also support CFA, AMOS's visual approach makes it more intuitive and efficient, especially for researchers who prefer a code-free environment. As shown in Table 3, the four-factor model showed the best fit:  $\chi^2/df = 1.175$ ; RMSEA = 0.013; GFI = 0.940; CFI = 0.997; NFI = 0.980; AGFI = 0.928, superior to other models.

**Table 3.** Confirmative factor analysis.

| Model                           | $\chi^2/df$ | RMSEA | GFI   | AGFI  | NFI   | CFI   |
|---------------------------------|-------------|-------|-------|-------|-------|-------|
| Four-factor model               | 1.175       | 0.013 | 0.940 | 0.928 | 0.980 | 0.997 |
| Three-factor model <sup>a</sup> | 2.182       | 0.217 | 0.851 | 0.833 | 0.825 | 0.891 |
| Two-factor model <sup>b</sup>   | 2.182       | 0.217 | 0.851 | 0.833 | 0.825 | 0.891 |
| Two-factor model <sup>c</sup>   | 2.182       | 0.217 | 0.851 | 0.833 | 0.825 | 0.891 |
| One-factor model                | 2.232       | 0.226 | 0.851 | 0.843 | 0.825 | 0.891 |

Notes: <sup>a</sup> Intellectual humility of external successor CEOs and strategic execution are combined into one factor; <sup>b</sup> organizational learning and intellectual humility of external successor CEOs are combined into one factor, and strategy execution and strategic change are combined into one factor; <sup>c</sup> organizational learning and strategic change are combined into one factor, and strategy execution and intellectual humility of external successor CEOs are combined into one factor.

Standardized survey procedures such as topic selection, anonymous completion, sequential surveys, and multiple respondents were adopted. Since the data for predictor and criterion variables came from different raters at different time points, human covariates were controlled in the process. Post hoc tests for common method bias were conducted using a single-method latent factor approach. The model with the inclusion of the method latent factor ( $\chi^2/df = 1.031$ ; RMSEA = 0.009; GFI = 0.951; CFI = 1; NFI = 0.984; AGFI = 0.935) did not outperform the original confirmatory factor analysis model ( $\chi^2/df = 1.175$ ; RMSEA = 0.013; GFI = 0.940; CFI = 0.997; NFI = 0.980; AGFI = 0.928). Therefore, there is no significant common method bias in the measurement.

The descriptive statistics and correlation analysis among variables are presented in Table 4. As shown in Table 4, there are significant correlations between the core variables. Subsequently, we conducted a multicollinearity test. Due to high VIF values in the linear regression analysis, we employed ridge regression for verification [93]. The results showed that all VIF values were below 10, indicating that there is no severe multicollinearity issue [94].

**Table 4.** Descriptive statistics and correlation analysis.

| Variables | Mean  | S.D.  | 1       | 2      | 3      | 4     | 5        | 6        | 7        | 8 |
|-----------|-------|-------|---------|--------|--------|-------|----------|----------|----------|---|
| Gen       | 1.519 | 0.5   | 1       |        |        |       |          |          |          |   |
| Age       | 2.476 | 1.052 | 0.124 * | 1      |        |       |          |          |          |   |
| SY        | 2.437 | 0.939 | −0.042  | −0.019 | 1      |       |          |          |          |   |
| EL        | 2.798 | 1.358 | 0.000   | −0.028 | −0.027 | 1     |          |          |          |   |
| IH        | 3.813 | 1.089 | −0.002  | 0.050  | −0.08  | 0.025 | 1        |          |          |   |
| SES       | 3.816 | 1.046 | −0.002  | 0.040  | −0.061 | 0.007 | 0.962 ** | 1        |          |   |
| SC        | 3.828 | 1.052 | −0.016  | 0.033  | −0.069 | 0.002 | 0.959 ** | 0.982 ** | 1        |   |
| OL        | 3.825 | 1.107 | −0.006  | 0.022  | −0.07  | 0.015 | 0.928 ** | 0.949 ** | 0.952 ** | 1 |

Note: \*, \*\* denote  $p < 0.05$ ,  $p < 0.01$ , respectively; the coefficients in the table are standardized coefficients, with the same below. The abbreviations in the table are Gen (Gender); SY (service year); EL (educational level); IH (intellectual humility); SES (strategy execution scale); SC (strategic change); OL (organizational learning).

In order to better validate the robustness of the model, we further conducted Lasso regression analysis. By plotting the regression trajectory, it was clearly observed that when the K value was set to 0.01, the standardized regression coefficients of the independent variables stabilized. This result indicates that the selected regression model demonstrates good robustness in controlling multicollinearity and variable selection.

### 3.2.2. Hypothesis Testing

Model2 in Table 5 indicates that the intellectual humility of external successor CEOs significantly influences strategic change ( $\beta = 0.910$ ,  $p < 0.01$ ), confirming H1. This underscores the pivotal role of intellectual humility in enabling external successors to navigate organizational transitions effectively. By embracing new ideas and recognizing their knowledge limitations, these leaders can drive strategic changes that enhance adaptability and competitiveness.

**Table 5.** Main effects and mediation effects tests.

| Variables            |                 | SC                   |                      |                       |                      | SES                  |                      |
|----------------------|-----------------|----------------------|----------------------|-----------------------|----------------------|----------------------|----------------------|
|                      |                 | Model 1              | Model 2              | Model 3               | Mode 4               | Model 5              | Model 6              |
| Control variable     | Constant        | 3.998 **<br>(14.808) | 0.461 **<br>(4.959)  | 0.226 *<br>(3.544)    | 0.207 **<br>(3.353)  | 3.897 **<br>(14.516) | 0.370 *<br>(4.139)   |
|                      | Gender          | −0.048<br>(−0.459)   | −0.026<br>(−0.880)   | −0.030<br>(−1.480)    | −0.028<br>(−1.448)   | −0.019<br>(−0.182)   | 0.003<br>(0.104)     |
|                      | Age             | 0.034<br>(0.680)     | −0.012<br>(−0.874)   | −0.004<br>(−0.406)    | −0.008<br>(−0.811)   | 0.039<br>(0.788)     | −0.007<br>(−0.520)   |
|                      | EL              | −0.076<br>(−1.354)   | 0.006<br>(0.355)     | −0.001<br>(−1.059)    | −0.004<br>(−0.423)   | −0.066<br>(−1.196)   | 0.015<br>(0.958)     |
|                      | SY              | 0.001<br>(0.030)     | −0.016<br>(−1.507)   | −0.003<br>(−0.466)    | −0.008<br>(−1.074)   | 0.002<br>(0.124)     | −0.013<br>(−1.218)   |
| Independent variable | IH              |                      | 0.910 **<br>(66.736) |                       | 0.288 **<br>(13.053) |                      | 0.907 **<br>(69.147) |
| Mediator variable    | SES             |                      |                      | 0.968 **<br>(100.714) | 0.685 **<br>(29.830) |                      |                      |
|                      | R <sup>2</sup>  | 0.006                | 0.921                | 0.964                 | 0.966                | 0.005                | 0.926                |
|                      | ΔR <sup>2</sup> | −0.004               | 0.920                | 0.963                 | 0.966                | −0.005               | 0.925                |
|                      | F               | 0.608                | 896.212 ***          | 2040.652 ***          | 1825.720 ***         | 0.524                | 961.233 ***          |

Note: \*, \*\*, \*\*\* denote  $p < 0.05$ ,  $p < 0.01$ ,  $p < 0.001$ , respectively; the coefficients in the table are standardized coefficients. The abbreviations in the table are IH (intellectual humility); SES (strategy execution scale); SC (strategic change).

Additionally, intellectual humility positively affects organizational strategy execution, which in turn significantly impacts strategic change (model 6,  $\beta = 0.907$ ,  $p < 0.01$ ; model 3,  $\beta = 0.968$ ,  $p < 0.01$ ), validating H3a and H4. H3a demonstrates that strong execution capabilities are essential for implementing and sustaining strategic changes, thereby improving organizational adaptability and competitiveness. H4 highlights that leaders with intellectual humility foster robust execution by recognizing their limitations and valuing diverse perspectives, leading to more effective strategy implementation.

Moreover, the indirect effect of intellectual humility on strategic change via strategy execution is significant ( $\beta = 0.734$ ,  $p < 0.01$ , 95% confidence interval [0.694, 0.822]), supporting H5. This confirms that external CEOs with high intellectual humility drive strategic change by enhancing their organization's execution capabilities. Following Baron and Kenny's (1986) [95] recommended steps to test the mediating effect of strategy execution, the specific regression results are presented in Table 6. Model 6 indicates that the intellectual humility of external succession CEO has a significantly positive impact on strategy execution ( $\beta = 0.907$ ,  $p < 0.01$ ), supporting H4. Model 3 shows that strategy execution has a significantly positive impact on strategic change ( $\beta = 0.968$ ,  $p < 0.01$ ), confirming H3a and H3b. After introducing the mediating variable, strategy execution, the impact of the intellectual humility of external succession CEOs on strategic change decreases from 0.910

(model 2) to 0.288 (model 4), indicating a complete mediating role of strategy execution, supporting H5.

**Table 6.** Moderating effects test.

|                          | Variable     | SES                  |                      |                      |                      |
|--------------------------|--------------|----------------------|----------------------|----------------------|----------------------|
|                          |              | Model 5              | Model 6              | Model 7              | Model 8              |
| Control variable         | Constant     | 3.897 **<br>(14.516) | 0.370 *<br>(4.139)   | 0.223 **<br>(2.967)  | 0.249 **<br>(3.141)  |
|                          | Gender       | −0.019<br>(−0.182)   | 0.003<br>(0.104)     | 0.004<br>(0.183)     | 0.004<br>(0.176)     |
|                          | Age          | 0.039<br>(0.788)     | −0.007<br>(−0.520)   | 0.003<br>(0.232)     | 0.003<br>(0.239)     |
|                          | EL           | −0.066<br>(−1.196)   | 0.015<br>(0.958)     | 0.014<br>(1.070)     | 0.014<br>(1.081)     |
|                          | SY           | 0.002<br>(0.124)     | −0.013<br>(−1.218)   | −0.010<br>(−1.145)   | −0.010<br>(−1.142)   |
| Independent variable     | IH           |                      | 0.907 **<br>(69.147) | 0.539 **<br>(22.782) | 0.528 **<br>(19.871) |
| Moderator variable       | OL           |                      |                      | 0.398 **<br>(17.142) | 0.387 **<br>(14.846) |
| Second-order interaction | IH*OL        |                      |                      |                      | 0.004<br>(0.867)     |
|                          | $R^2$        | 0.005                | 0.926                | 0.949                | 0.948                |
|                          | $\Delta R^2$ | −0.005               | 0.925                | 0.948                | 0.947                |
|                          | F            | 0.524                | 961.233 ***          | 1185.487 ***         | 1004.992 ***         |

Note: \*, \*\*, \*\*\* denote  $p < 0.05$ ,  $p < 0.01$ ,  $p < 0.001$  respectively; the coefficients in the table are standardized coefficients, with the same below. The abbreviations in the table are IH (intellectual humility); SES (strategy execution scale); OL (organizational learning); EL (educational level); SY (service year).

The analysis of control variables, including gender, age, educational level, and service years, reveals that none of these factors significantly influenced strategic change. Gender differences ( $\beta = -0.019$ ,  $p > 0.1$ ), age ( $\beta = 0.039$ ,  $p > 0.1$ ), educational level ( $\beta = -0.066$ ,  $p > 0.1$ ), and service years ( $\beta = 0.002$ ,  $p > 0.1$ ) were all found to have no significant impact. These findings indicate that demographic and professional background variables, often emphasized in leadership studies, do not significantly influence strategic change in this context. Instead, CEO intellectual humility emerges as a distinct and consistent driver of strategic adaptability, transcending individual differences in gender, age, education, and tenure. This aligns with recent research emphasizing the importance of cognitive and emotional traits in leadership effectiveness [86,87].

Through the moderation effect test, Model 8 reveals that the second-order interaction term between organizational learning and intellectual humility of external succession CEOs has an insignificant impact on strategy execution ( $\beta = 0.004$ ,  $p < 0.01$ ), indicating that our verification of Hypothesis 6 (H6) has failed.

An in-depth analysis of the data in this study reveals that the moderating effect is not significant. This directly leads to the failure of the hypothesis of the moderated-mediating model. Based on this, only the mediating path is confirmed to hold in this study. Figure 2 illustrates the path coefficients diagram of this study.

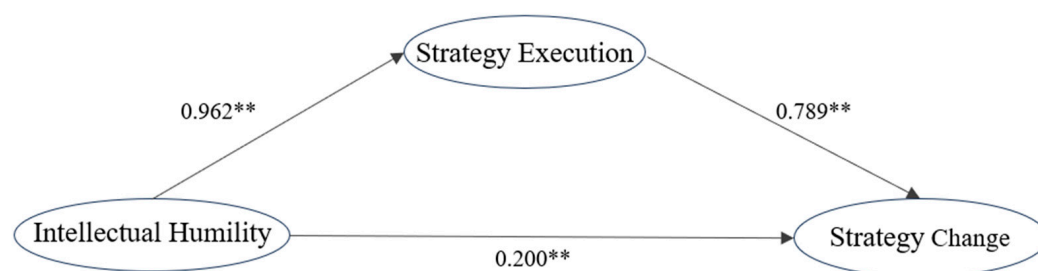


**Figure 2.** Path coefficients diagram. Note: \*\* denote  $p < 0.01$ .

## 4. Conclusions and Implications of the Study

### 4.1. Discussion

Existing research on leadership and strategic change has several key limitations. First, many studies conflate intellectual humility (IH) with general humility (GH), neglecting IH's distinct cognitive characteristics. Second, the role of leadership traits, such as IH, in driving strategic change through strategy execution has not been adequately explored. Third, prior studies have overlooked the moderating effect of organizational learning on the effectiveness of leadership traits. Our study addresses these gaps by extending Upper Echelons Theory and providing empirical evidence to clarify the unique role of IH, its influence on strategy execution, and how organizational learning moderates this relationship.

Firstly, strategic management increasingly emphasizes balancing knowledge capital and organizational characteristics [96]. Intellectual humility (IH), as a cognitive trait, promotes openness to new ideas and belief revision, aligning with the concept of cognitive diversity—diverse perspectives and knowledge within teams. External successor CEOs with intellectual humility can leverage cognitive diversity to enhance collaboration and decision-making. Previous leadership research has largely focused on general humility (GH) [19,20], while our focus on intellectual humility as a distinct trait represents a significant departure. Unlike GH, which emphasizes interpersonal modesty, IH specifically highlights whether a leader can adjust their viewpoints when confronted with new evidence [21]. This distinction addresses the gap in Upper Echelons Theory regarding the influence of cognitive traits on strategic decision-making. Upper Echelons Theory emphasizes the impact of top management's background and traits on strategic decisions, focusing particularly on demographic characteristics such as age, education, and experience [14], while giving less attention to the role of cognitive traits in strategic outcomes. Moreover, this theory emphasizes internal succession, suggesting that internal candidates, having proven their competence and understanding of the organization, are better suited for leadership roles, ensuring smoother transitions and reducing risks and costs [97,98]. However, intellectual humility, as a cognitive trait, helps us understand how a CEO's cognitive openness can drive strategic change, especially in the context of external CEO succession. External successor CEOs often bring new perspectives and experiences, which help them adapt and drive strategic adjustments in a changing environment. Unlike traditional theories that focus on static individual characteristics, the introduction of intellectual humility broadens the explanatory power of the theory, particularly in relation to strategic adaptability and leadership in dynamic environments. Furthermore, while cognitive diversity can foster innovation, it can also create friction. Intellectual humility helps mitigate these potential risks by promoting open communication and reducing conflicts. Thus, incorporating intellectual humility as part of Upper Echelons Theory helps fill the gap in the theory's explanation of dynamic adaptability. Leadership effectiveness relies not only on the CEO's interpersonal skills but also on their cognitive traits. Intellectual humility

should be regarded as one of the key leadership traits, providing new perspectives and theoretical support for the further development of Upper Echelons Theory.

Secondly, our study highlights the essential role of strategy execution in driving strategic change, especially for external successor CEOs. While previous research has emphasized the importance of execution in achieving strategic goals, such as the work of Xu et al. (2008) [62], it often treats execution as a static capability, overlooking the dynamic role of leadership traits in shaping execution. For example, Hambrick (2007) [63] proposed a framework for strategy implementation that focuses on resource allocation and process control but does not consider the cognitive traits of leaders as drivers of execution capabilities. Our study fills this gap by demonstrating how IH enhances strategy execution, which in turn drives strategic change. An example of strong execution can be seen in Alan Mulally's leadership at Ford. When he took over as external CEO in 2006, Ford was nearing bankruptcy. He implemented the "One Ford" strategy, fostering team alignment and collaboration to improve product quality, reduce costs, and enhance customer satisfaction. His leadership enabled Ford's recovery without a government bailout, demonstrating how execution can achieve transformative change.

Thirdly, our study challenges traditional views on organizational learning (OL). While existing research (e.g., Flores et al., 2012 [66]) emphasizes the positive impact of OL on performance, it has not explored how OL interacts with leadership traits to influence strategic outcomes. We hypothesized a paradox: in high-learning environments, the positive impact of intellectual humility (IH) on strategy execution is weakened. This finding contradicts the assumption that "OL universally enhances adaptability" [27], suggesting that leadership effectiveness is highly dependent on organizational context. Specifically, the openness and adaptability of IH may be perceived as a lack of decisiveness in high-learning environments, hindering strategy execution. For example, in rapidly changing organizations, charismatic or transformational leaders may be more effective than IH leaders, as their decisiveness and charisma better align with the decision-making demands of transformation periods. This finding reveals a boundary condition for IH: in high-learning environments, its lack of decisiveness may be perceived as a weakness, undermining its positive impact on strategy execution.

Unfortunately, our data analysis did not support the moderation effect as significant. This result may be due to the nature of organizational learning measured in our study. The existing scale primarily assesses internal, local learning, which may not fully capture the increasingly important cross-boundary learning processes that are crucial for driving strategic change. In today's rapidly changing environments, cross-boundary learning—drawing knowledge from external sources and diverse networks—plays a more significant role in driving strategic transformation [99,100]. Therefore, the emphasis on local learning in the current model may explain why we did not observe a significant moderation effect of organizational learning on the relationship between IH and strategy execution.

#### 4.2. Implications

Firstly, intellectual humility in external successor CEOs is crucial for successful strategy execution. Since ancient Greece, Socrates and Xenophon's philosophical views on "self-awareness of ignorance" and "general's modesty" have provided management insights for the selection of CEOs' succession. When selecting external successor CEOs, organizations should prioritize intellectual humility to guide strategic goals effectively. While internal successor CEOs have the advantage of understanding organizational culture and ensuring smooth transitions, they may lack innovation and fresh perspectives. In talent assessment, companies should distinguish between general modesty and intellectual modesty in succession CEOs. Companies should observe CEOs' tolerance for new things

and opposing opinions more deeply in their thinking styles, rather than considering their low-key demeanor as intellectual modesty. Objectively speaking, intellectual arrogance and behavioral modesty can coexist. In practical terms, organizations can measure intellectual humility of succession CEOs through validated psychometric tools, such as the scale developed by Leary, which gauges intellectual humility through items like “I question my own views because they may be wrong” and “I reconsider my views when presented with new evidence”. These tools can help organizations systematically assess the intellectual humility of their leaders, providing a concrete basis for leadership development.

Secondly, our study also suggests that strategic success hinges not only on ambitious plans but also on a team’s strong execution capabilities. The management should focus on building a team adept at adapting to change and implementing strategies effectively. Successor leader traits–strategic execution of the management team–strategic change. This mediating path provides managers with comprehensive and systematic understanding, emphasizing implementation throughout the strategic process and offering practical guidance for strategic transformation. Encouraging open communication and fostering a culture of continuous learning can further enhance execution capabilities. Additionally, organizations should invest in leadership development programs that focus on both strategic thinking and operational efficiency to equip their management teams with the skills necessary to navigate complex strategic changes.

Finally, by integrating organizational learning (OL) into the Upper Echelons Theory, our study highlights how leadership traits like intellectual humility (IH) can influence strategic execution and change. However, its effectiveness depends on the organizational learning environment. A strong organizational learning culture fosters member involvement in decision-making and problem-solving, encourages innovation, and enhances agility by reducing CEO dependency in strategic change. Therefore, cultivating organizational learning capabilities is essential, particularly in organizations with flat management structures. To optimize leadership transitions, organizations should balance IH with decisiveness in leadership development, ensuring leaders can adapt while making timely decisions. Regular feedback systems, such as 360-degree evaluations, can help leaders recognize when their intellectual humility may hinder decision-making. Additionally, fostering knowledge-sharing mechanisms, encouraging cross-functional collaboration, and investing in continuous training are key practices. These actions align learning with organizational goals and support ongoing development, ultimately enhancing performance and competitiveness.

#### *4.3. Limitations and Future Research*

Our study has several limitations. First, its cross-sectional design restricts our ability to infer causality. While regression analysis was sufficient for our hypotheses, future research could benefit from using more advanced methods like SEM for more complex models, especially those involving latent variables, such as Cross-Lagged Panel Models (CLPMs) or Latent Change Score Models (LCSMs), to explore how intellectual humility, strategy execution, and strategic transformations evolve over time in external successor CEOs. Additionally, while our study investigates the moderating effect of organizational learning (OL), the results did not support a significant negative moderation. This may be due to the existing scales focusing on local learning, while modern strategic changes rely more on cross-boundary learning. Future research should incorporate scales measuring cross-boundary learning to better capture the learning dynamics crucial for strategic transformation.

While intellectual humility has proven effective in external CEO succession, other leadership styles, such as transformational leadership, may be more suitable for certain organizational contexts. Leadership approaches emphasizing visionary thinking and

decisive action may drive strategic execution more effectively in environments requiring rapid change. Future research could explore how intellectual humility interacts with transformational and contingent leadership, combining humility with decisive action to offer more adaptable strategies for diverse organizational needs.

Furthermore, while the definition of intellectual humility in this study emphasizes openness to new ideas and the ability to adjust one's beliefs, future research could expand this definition by considering additional dimensions such as courage, resilience, and emotional intelligence. These traits—vital for navigating complex environments—could complement intellectual humility, particularly when decisive action and perseverance are needed to implement strategic changes successfully. Exploring how intellectual humility intersects with these other traits could enhance our understanding of leadership effectiveness in dynamic contexts.

Finally, another limitation of the current study is the concentration of the sample in China, which may raise concerns about sample representativeness and cultural bias. Future research should aim to expand the sample scope by including participants from different countries, industries, and cultural contexts. This would help mitigate potential biases and enhance the generalizability of the findings. Specifically, exploring international differences and cultural factors, such as how collectivist vs. individualist cultures influence the effectiveness of intellectual humility (IH) in leadership, could offer valuable insights. Future studies could also examine how leadership styles and organizational practices vary across cultures and affect the role of IH in strategic change.

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