



# STRATEGIC LEADERS' TRAITS AND THEIR EFFECTS ON INNOVATION: AN OVERVIEW OF STUDIES

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## Abstract:

Strategic leadership entails activities on behalf of individuals at the highest organizational level such as CEOs, Top Management Team members, Directors, and General Managers, to achieve strategic impact on the organization. Innovation within organizations involves introducing novel services or products to the market which allows the company to achieve competitive advantage and enhance its performance. This paper provides an overview of five empirical studies that deepen our understanding regarding how strategic leaders' characteristics may affect an array of organizational outcomes in the field of innovation. CEO traits that influence organizational innovation include polychronicity, temporal focus, executive hubris, narcissism, and CEOs' skillset when they come from outside the organization. The impact that CEOs' traits may have on organizations include innovation, investments in research and development, and new product introductions.

## Keywords:

strategic leadership, CEO characteristics, innovation.

## 1. INTRODUCTION

Strategic leadership entails activities on behalf of people at the highest organizational level such as CEOs, Top Management Team members, Directors and General Managers, with the aim of having a strategic impact on the organization (Samimi, Cortes, Anderson, & Herrmann, 2022). Research has recognized that the strategic leader attributes may influence organizational level outcomes including innovation (Georgakakis, Heyden, Oehmichen, & Ekanayake, 2022; Samimi *et al.*, 2022; Vera, Bonardi, Hitt, & Withers, 2022). Innovation within organizations implies presenting the market with novel services or products which allow the company to secure competitive advantage and enhance its performance (Rubera & Kirca, 2012). It can also be conceptualized as a specific know-how generated through organization's operation, and may be impacted by the organization's strategic leaders (Wadhwa & Kotha, 2006; Yadav, Prabhu, & Chandy, 2007). Factors that influence organizational innovation may include CEO traits such as polychronicity (Chen, 2022), temporal focus (Nadkarni & Chen, 2014), executive hubris (Tang, Li, & Yang, 2015), narcissism (Gerstner, König, Enders, & Hambrick, 2013) and CEOs' skillset when they come from outside the organization (Cummings & Knott, 2018).

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Polychronicity represents a CEO's trait to work on several ventures concurrently rather than focusing on them one at the time since they believe that this enables them to achieve greater productivity (Alipour, Mohammed, & Martinez, 2017). Temporal focus involves an individual's preference towards focusing their thinking towards the past, the present, and the future (Shipp, Edwards, & Lambert, 2009). Executive hubris represents enlarged belief in one's own views that diverts from realistic criteria (Hiller & Hambrick, 2005). The impact that CEOs' traits may have on organizations include innovation (Chen, 2022; Tang *et al.*, 2015), investments in research and development (Cummings & Knott, 2018), and new product introduction (Nadkarni & Chen, 2014). This paper provides an overview of five empirical studies that enhance our understanding regarding how strategic leaders' characteristics may affect an array of organizational outcomes in the field of innovation.

## 2. OVERVIEW OF STUDIES

Chen (2022) investigates the impact of polychronicity, a particular CEO trait, on organizational innovation. Polychronicity is referred to as a CEO's tendency to work on several ventures concurrently rather than focusing on them one by one because they perceive it to be the most optimal way to achieve productivity (Alipour *et al.*, 2017). Nevertheless, the impact of polychronicity on innovation seems to be interchangeable. Namely, when CEOs focus on one venture at the time, they tend to gain comprehensive understanding of the matter through focus and immersion, which in turn leads to effective and reliable enhancement of organizational innovation. Continuity and profound knowledge provides the organization with the sense of familiarity and enables it to minimize the excessive efforts while designing a product or delivering a service (Nerkar, 2003). In contrast, working on several ventures and the intersection of various concepts leads to the diversification of information and creativity which in turn promotes the formation of novel solutions (Katila & Chen, 2008). Indeed, creativity and originality which could be gained through multitasking can significantly contribute to organizational innovation. The downside of polychronicity is that it leads to the dissolution of focus and may inhibit a clear understanding of the current task. The thinking process may be disrupted with constantly shifting the focus from one project to another. Chen (2022) suggests that the impact of polychronicity on organizational innovation depends on the organizational environment and context. The results of the study based on the data from 111 SMEs in China show that CEO polychronicity has beneficial impact on organizational innovation when organizations are embedded in more aggressive settings, when they are large and have struggled with performance in the past. In contrast, this impact is detrimental when organizations are embedded in more stable environments, when they are small and have good previous performance (Chen, 2022).

Even though the innovation is primarily responsible for organizational and economic advancement, Cummings and Knott (2018) observed that one inclination may be responsible for 65% decrease in organizations' research and development (R&D) output. The authors suggest that hiring a CEO outside an organization may lead to this negative trend since those individuals seem to have less technological domain-specific knowledge to effectively supervise R&D. The trend to hire outside CEOs is based on the attractiveness of their general skills including financial and human resources management which are omnipresent across organizations and industries (Murphy & Zabochnik, 2007). Even though other factors could have contributed to this trend, placing emphasis on general skills seems to be detrimental to context-specific skills which are vital for CEOs' abilities (Bailey & Helfat, 2003), and especially dynamic managerial skills which contribute to the organization's performance such as innovation (Helfat & Martin, 2015). The study was based on interviews with Chief Technology Officers (CTOs) and largescale database analysis. The results show that R&D output weakens once a CEO outside the organization takes over compared to when an inside CEO takes over the company. This is more evident in cases where organizations have intensive R&D activities. This may be explained with CTOs observation that new CEOs turned from treating R&D as an investment to perceiving R&D as an expenditure. The authors emphasize that the results of the study should not discourage boards from hiring outside CEOs, but that they should consider the impact that their knowledge may have on innovation (Cummings & Knott, 2018).

Temporal focus represents a variation within each person that shows the extent to which they tend to direct their thinking towards the past, the present, and the future (Shipp *et al.*, 2009). Becoming familiar with CEO's assessment of time seems to be relevant to the area of strategy. This process is highly significant for strategic decision making since it tends to shape a person's previous expertise, assessment of instant information and future projections. Indeed, these judgements operate as chronological filters that shape estimations of specific situations and directly impact CEO's decisions regarding resource distribution, prioritization and acknowledgment of the timeliness and necessity of strategic choices (Shi, Sun, & Prescott, 2012). The outcome of effective strategic decision making is new product introduction (NPI).



This concept demonstrates the ways in which organizations adjust to unstable contextual circumstances, achieve competitive advantages, and attain exceptional outcomes (Fleming, 2001). Drawing on the theory of CEO temporal focus, Nadkarni and Chen (2014) examined how organizational pacing of NPI may be impacted by CEO's concentration on the past, the present and the future and its interface with environmental dynamism. The study analyzed 221 organizations across nineteen industries over time (starting 1996 ending 2003). The results showed that when firms operate in stable contexts, new products are launched more quickly when CEOs primarily focus on the past and the present compared to the future. In dynamic contexts, new products are launched more quickly when CEOs primary focus was on the future and the present compared to the past. These results indicate that CEO temporal orientation impacts the pace of NPI (Nadkarni & Chen, 2014).

In their study, Tang *et al.* (2015) investigated the ways in which executive hubris may be advantageous for firm innovation. Executive hubris represents amplified conviction in one's own beliefs that is misaligned with realistic criteria (Hiller & Hambrick, 2005). When a person is unrealistically confident in his or her own forecasting, above and beyond the general exactness of those forecasting, he or she may be viewed as hubristic (Hilary & Menzly, 2006). Interestingly, the psychological predisposition of hubris may be notably present among organizational CEOs. Research has shown that this over-confidence may have negative impact on managerial risk taking, organizational monetary regulations and acquisition rewards (Hayward, Shepherd, & Griffin, 2006). Hubristic CEOs tend to place great emphasis on firm innovation, which directly contributes to the organization's competitive advantage. Therefore, they tend to provide more assents to the organization innovation endeavors leading to successful innovation products and services. In order to examine the proposed beneficial impact of hubris on firm innovation, Tang *et al.* (2015) conducted two studies. The first study surveyed numerous CEOs of production firms located in China. The second study analyzed a set of longitudinal archival data on technological firms located in the USA. The results of both studies showed that hubristic CEOs have beneficial impact on organizational innovation. Nevertheless, this impact weakens when organizations are in more munificent and intricate environments. Munificent environments tend to provide greater growth opportunities to the organizations. In such environments, CEOs have more options when it comes to choosing strategic paths and this variety may divert them from their key matter – innovation (Tang *et al.*, 2015).

Gerstner *et al.* (2013) investigated why organizations have varying tendencies to embrace technological discontinuities. A discontinuous technology represents a new paradigm when it comes to generating value which drastically diverges from the idea of continual incremental innovation and from the conventional innovation routes (Anderson & Tushman, 2018). Namely, technological discontinuity represents a shift from the dominant developments in an industry by which the current organizational knowledge, processes and configurations become outdated (Abernathy & Clark, 1985). In their study, Gerstner *et al.* (2013) argue that narcissistic CEOs are likely to be aggressive when it comes to the embracement of technological discontinuities. The authors suggest that the impact of a CEO's narcissism will be affected by audience engagement. Audience engagement refers to the extent to which spectators perceive a new field, such as an innovative technology, as remarkable and provoking. Infatuation with a particular technology can fluctuate over time. As such, an engaged audience is the major source of opportunities for narcissistic self-enhancement. According to the authors, increased audience engagement encourages CEOs expectations to be admired for their risky acts which in turn leads them to aggressively invest in discontinuous technology (Gerstner *et al.*, 2013). Furthermore, the authors suggest that CEOs' narcissism will impact their executives' focus on discontinuous technology, which is also enhanced by audience engagement. Lastly, the authors posit that leaders' focus on discontinuous technology will be mirrored in organizational investments in the new technology (Gerstner *et al.*, 2013).

### 3. CONCLUSION

There are several practical implications regarding the outlined studies which strategic leaders may consider in their activities. Also, the authors propose how limitations of their studies could be overcome by future research endeavors. Chen (2022) suggests that considering polychronicity could be vital when it comes to selecting CEOs for companies whose strategic priority is innovation. Indeed, including polychronicity as a selection principle may significantly advance CEO appointment outcomes. Future studies could overcome the limitations of the study by Chen (2022) in several ways. Since the data was collected in China, future studies should collect data in other countries with different socio-cultural contexts, making thus the results more generalizable. Furthermore, future studies should include both SMEs and large established organizations to investigate the effects of the organizational size. Lastly, due to the cross-sectional design of the study, future studies should use longitudinal design assess the impact of CEO polychronicity on firm innovation (Chen, 2022). Cummings and Knott (2018) imply that organizations with internal CEOs are more



successful when it comes to managing innovation since these CEOs seem to possess the necessary domain specific knowledge needed to secure expansion based on research and development. This expertise becomes evident when CEOs choose to invest more in research and development following enduring incentive compensation. The limitations of this study could be overcome by investigating how top management teams, and CTOs in particular, of external CEOs differ from those of internal CEOs (Cummings & Knott, 2018).

Nadkarni and Chen (2014) posit that acknowledging temporal focus may be a significant criterion for CEO selection process in organizations who highly prioritize NPI and that this criterion may improve hiring outcomes. Future studies should include SMEs and diversified organizations in their samples. One of the key practical implications of the study by Tang *et al.* (2015) is that hubristic CEOs seem to intensively focus on firm innovation, which could also be a valuable selection criterion when it comes to hiring decisions. Limitations of the study could be overcome with the use of more proximate instruments, such as directly enquiring about CEOs (hyper) core self-evaluation and by estimating managerial attention with more specific questionnaires. Gerstner *et al.* (2013) argue that narcissistic CEOs are eager to embrace disruptive technologies especially when they are encouraged by audience engagement. Therefore, narcissism could be evaluated during CEO selection processes, and the right fit should be made with the candidate's profile and the industry. Future studies should explore the extent to which CEO narcissism enables organizational adaptation and existence. The authors also suggest that future studies should employ qualitative research and the field method in particular, to estimate the genuine behaviors of narcissistic CEOs who are faced with a discontinuous technology Gerstner *et al.* (2013).

## LITERATURE

- Abernathy, W. J., & Clark, K. B. (1985). Innovation: Mapping the winds of creative destruction. *Research Policy*, 14(1), 3-22.
- Alipour, K. K., Mohammed, S., & Martinez, P. N. (2017). Incorporating temporality into implicit leadership and followership theories: Exploring inconsistencies between time-based expectations and actual behaviors. *The Leadership Quarterly*, 28(2), 300-316.
- Anderson, P., & Tushman, M. L. (2018). Technological discontinuities and dominant designs: A cyclical model of technological change *Organizational Innovation*, 34(5), 373-402.
- Bailey, E. E., & Helfat, C. E. (2003). External management succession, human capital, and firm performance: An integrative analysis. *Managerial and Decision Economics*, 24(4), 347-369.
- Chen, J. (2022). A juggling act: CEO polychronicity and firm innovation. *The Leadership Quarterly*, 33(3), 101380.
- Cummings, T., & Knott, A. M. (2018). Outside CEOs and innovation. *Strategic Management Journal*, 39(8), 2095-2119.
- Fleming, L. (2001). Recombinant uncertainty in technological search. *Management Science*, 47(1), 117-132.
- Georgakakis, D., Heyden, M. L., Oehmichen, J. D., & Ekanayake, U. I. (2022). Four decades of CEO-TMT interface research: A review inspired by role theory. *The Leadership Quarterly*, 33(3), 101354.
- Gerstner, W.-C., König, A., Enders, A., & Hambrick, D. C. (2013). CEO narcissism, audience engagement, and organizational adoption of technological discontinuities. *Administrative Science Quarterly*, 58(2), 257-291.
- Hayward, M. L., Shepherd, D. A., & Griffin, D. (2006). A hubris theory of entrepreneurship. *Management Science*, 52(2), 160-172.
- Helfat, C. E., & Martin, J. A. (2015). Dynamic managerial capabilities: Review and assessment of managerial impact on strategic change. *Journal of Management*, 41(5), 1281-1312.
- Hilary, G., & Menzly, L. (2006). Does past success lead analysts to become overconfident? *Management Science*, 52(4), 489-500.
- Hiller, N. J., & Hambrick, D. C. (2005). Conceptualizing executive hubris: the role of (hyper-) core self-evaluations in strategic decision-making. *Strategic Management Journal*, 26(4), 297-319.
- Katila, R., & Chen, E. L. (2008). Effects of search timing on innovation: The value of not being in sync with rivals. *Administrative Science Quarterly*, 53(4), 593-625.
- Murphy, K. J., & Zbojnik, J. (2007). Managerial capital and the market for CEOs. Available at SSRN 984376.
- Nadkarni, S., & Chen, J. (2014). Bridging yesterday, today, and tomorrow: CEO temporal focus, environmental dynamism, and rate of new product introduction. *Academy of Management Journal*, 57(6), 1810-1833.
- Nerkar, A. (2003). Old is gold? The value of temporal exploration in the creation of new knowledge. *Management Science*, 49(2), 211-229.
- Rubera, G., & Kirca, A. H. (2012). Firm innovativeness and its performance outcomes: A meta-analytic review and theoretical integration. *Journal of Marketing*, 76(3), 130-147.



- Samimi, M., Cortes, A. F., Anderson, M. H., & Herrmann, P. (2022). What is strategic leadership? Developing a framework for future research. *The Leadership Quarterly*, 33(3), 101353.
- Shi, W., Sun, J., & Prescott, J. E. (2012). A temporal perspective of merger and acquisition and strategic alliance initiatives: Review and future direction. *Journal of Management*, 38(1), 164-209.
- Shipp, A. J., Edwards, J. R., & Lambert, L. S. (2009). Conceptualization and measurement of temporal focus: The subjective experience of the past, present, and future. *Organizational Behavior and Human Decision Processes*, 110(1), 1-22.
- Tang, Y., Li, J., & Yang, H. (2015). What I see, what I do: How executive hubris affects firm innovation. *Journal of Management*, 41(6), 1698-1723.
- Vera, D., Bonardi, J.-P., Hitt, M. A., & Withers, M. C. (2022). Extending the boundaries of strategic leadership research. *The Leadership Quarterly*, 33, 101617.
- Wadhwa, A., & Kotha, S. (2006). Knowledge creation through external venturing: Evidence from the telecommunications equipment manufacturing industry. *Academy of Management Journal*, 49(4), 819-835.
- Yadav, M. S., Prabhu, J. C., & Chandy, R. K. (2007). Managing the future: CEO attention and innovation outcomes. *Journal of Marketing*, 71(4), 84-101.