Exploring the Empowering Leadership under Different Organizational Contexts: Based on Multi-case Study of Chinese Hi-Tech Enterprises

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Abstract. The purpose of this study is to explore the how organisational contexts affect empowered leadership and we classified organisational contexts into four types in terms of the formalisation of organisational structure and the complexity of tasks. We adopted a multi-case study approach to study eight hi-tech enterprise to examine the effectiveness of empowered leadership from organisational perspective. This study found unique features for four distinctive organisational contexts and proposes four propositions for practitioners to enhance the effectiveness of leadership empowerment. This study enriches the field of research of empowering leadership behaviour in terms of various organisational structure. This paper focuses on hi-tech enterprises and provides a practicable suggestions for practitioners to implement empowered leadership in the future.

Keywords: ormalisation of organisational structure; task complexity; empowering leadership behaviour; Chinese hi-tech enterprises

1   Introduction

In light of the ongoing economic globalization and deglobalization, hi-tech enterprises are confronted with increasingly intense market competition. The complex and dynamic production and operational landscape necessitates a more sophisticated organizational structure and managerial approach. In the new era marked by rapid scientific and technological advancements, employees within enterprises are seeking greater autonomy, having a voice in decision-making, exploring creativity, and actualizing themselves at their work. Empowered leadership entails managers prioritizing the rights and interests of employees within the organization. It emphasizes power-sharing between managers and employees, enabling employees to leverage their subjective initiative to propose innovative ideas and achieve personal

growth. By adopting empowered leadership, organizations can enhance their over-all management capabilities and efficiency[1].

Numerous scholars have found implementing empowering leadership affect employees' behavior and organizational performance. Managers empower their subordinates, in turn, subordinates actively engage in assigned tasks. However, empowering leadership behavior fundamentally revolves around the relationship between leaders and subordinates, and this relationship can only be realized within specific organizational and environmental contexts. Therefore, it is critical to identify key factors and boundary conditions of empowering leadership behavior through the lens of diverse organizational structures. Such exploration not only expands the theoretical foundations in academic fields but also contributes to applicable actions in practices.

2   Theoretical Foundations

Scholars commonly define "empowerment" from two perspectives: situational empowerment, refers to the external conditions and organizational factors that enable or constrain individuals' empowerment., and psychological empowerment, which encompasses an individual's subjective experience of feeling empowered. It is a state of mind characterized by a sense of control, competence, self-determination, and impact [2]. Srivastava et al. suggested that empowering leadership behavior involves both granting power to subordinates for autonomy and reinforcing their intrinsic sense of value, representing a fusion of situational and psychological empowerment[3]. Extensive research has been conducted on the effectiveness of empowering leadership at individual-level, team-level, and organizational-level.

2.1   Individual-Level

The individual level focused on the employee behavior and found the personal characteristics as key factor to explain the effect of leadership empowerment. While some scholars argue that empowering leadership behaviors may have negative consequences, such as employee misconduct[4], Sun suggests that disparities in empowering leadership can lead to an unequal distribution of power, damaging employee relationships, triggering negative emotions such as, jealousy and contempt, and reducing employees' inclination to assist others[5]. Chen et al. contend that employee conflicts can diminish the positive effects of empowering leadership on innovative behavior and may even negatively impact empowering leadership when conflicts escalate to a certain degree[6].

Numerous scholars found that empowering leadership behaviors can motivate individual innovative behavior, enhance individual work performance, and exert positive influences on innovative behviors and organizational performance [7]. Wang et al. demonstrated that psychological availability significantly moderates the influence of empowering managers on innovative behavior[8]. Elsaied investi-

gated the impact of empowering leadership on work passion, found that empowering leadership facilitates both in-role and extra-role behaviors among employees[9]. Additionally, Rohlfer argued that empowering leadership behavior emboldens middle managers within companies to seek consultation, thereby fostering managerial innovation[10].

2.2   Team Level

Some studies also explored the outcomes and mechanisms of implementing empowering leadership at the team level. Harris et al. revealed that empowering leadership behaviors facilitates organizational innovation. They also explored the moderating role of team risk-taking, which positively affects the empowering leadership behaviors [11]. Fausing et al. demonstrated that when team leaders presented higher levels of empowerment, their team would tend to greatly share knowledge, skills, and power. This, in turn, enhances employees' passion and capabilities at work, and promotes the overall team performance[12]. Lisak et al. found that empowering leadership behaviors at the team level foster a positive and optimistic attitude among employees, and create a thriving team environment[13].

Detert et al. discovered that supportive behaviors of empowered leaders promote inter-employee collaboration and individual task performance[14]. Conversely, the openness of empowered leaders negatively impacts employee performance. Specifically, the openness of empowering leaders may be less responsive to direction and goals of the team, thus, it may lead to isolation and lack of support within the team. Moreover, the openness of empowering leaders may also neglect providing timely feedback to employees and leaving employee unaware of their job performance and restrict learning opportunities. On the other hand, Liu argues that when teams exhibit high levels of uncertainty avoidance, the effectiveness of implementing empowering leadership behaviors is weakened[15].

2.3   Organizational Level

Some research explore the effect of empowering leadership behaviors from the organizational level. For exmaple, Carmeli et al. concluded that empowering leadership behaviors enhance the cohesiveness of organizational management, integrate team resources more effectively, and create value for the organization[16]. Alameri et al. similarly found that empowering leadership behaviors positively contribute to organizational change, however, few studies focused on how various organisational contexts affect the implementation empowering leadership[17].

To summaries, scholars have predominantly focused on the implementation empowering leadership on organisational performance, while, there has been limited in-depth research examine the how various organisational contexts affect the effectiveness of empowering leadership.

3   Research Questions

An examination of existing research reveals a substantial body of resaerch of empowering leadership behaviors and their impact on individual and organizational performance. Furthermore, relevant discussions have explored mechanisms that affect these relationship. However, the majority of studies have predominantly focused on the individual and team levels, with limited investigation into the organizational dimension. Moreover, organisational contexts provides an organisational fundation to initiate the leadership empowerment, it is imperative to further explore the contextual factors that shape the implementation of empowering leadership behaviors from organizational perspective.

   To begin with, Xue identified structural formalization as a critical element for distinguishing between startups and mature enterprises[18]. Similarly, Ham proposed a task complexity model, highlighting the significance of task complexity as a criterion influencing the design of organizational structure[19]. Based on two identified dimensions, we have classified organizational contexts into four types.

3.1   The First Dimension: Structural Formalization

Existing research has demonstrated that the impacts of empowering leadership behaviors are influenced by specific environmental factors. Employees could actively response to empowerment and consequently affect their behaviors[20] Structural formalization allows individuals employ well-defined organisational systems to guide operational processes and business decisions process. Research has founded that structural formalization significantly influences the effectiveness of implementing empowering leadership behaviors [21]. Ambrose contends that organizational structure impacts the regularity of business management processes, and structural formalization ensures fairness in the management process, fostering employee trust and support for the organization. As a result, it promotes the internal coordination and organizational performance[22]. Dana et al. found that a formalized organizational structure fosters employee learning and knowledge sharing, thereby it supported innovative behaviors[23]. Moreover, Zhang has also revealed that greater levels of organizational structure formalization have a positive influence on innovation as well as organizational performance[24].

   Consequently, our study takes structural formalization as the first dimension to examine how it affects the implementation of empowering leadership behaviors, and complementing empowering leadership research from organizational level.

3.2   The Second Dimension: Task Complexity

Simultaneously, evidence suggests that task complexity affects employees' creative capabilities and, consequently, impacts on the organizational performance[25]. Task complexity refers to both the objective characteristics of tasks and individuals' per-

ceptions of these characteristics. This implies that different individuals may respond diversely to similar objective tasks based on their personal attributes and the external environment, leading to various outcomes. Amabile argues that employees operating within more liberal organizational environments are more inclined to actively engage in highly complex tasks, capitalizing on the challenges and satisfaction derived from participation, which fosters greater innovative behavior[26]. Scott discovered that when tasks are perceived as simplistic, employees may neglect the exploration of optimization strategies and overlook important task details, thus reducing their workload[27]. Conversely, when tasks are complex, employees tend to develop novel strategies to handle the task. Therefore, this study aims to investigate the influence of task complexity on the implementation process of empowering leadership behaviors, thus extending the existing research on factors that shape empowering leadership behaviors.

In summary, we tend to examine the effectiveness of empowered leadership in four classified organizational contexts. By doing so, this study contributes to enriching the research field concerning the boundary conditions of empowering leadership behaviors and provides a practical suggestions to exercise empowered leadership within specific organizational contexts.

4   Research Methodology

4.1   Methodology

In order to explore our research questions, this study employs a multi-case study approach for several reasons:

(1) The study seeks to examine how different organizational contexts, organisational formality, and task complexities, influence the implementation of empowered leadership. The research questions fall within the realm of "how" questions, which are well-suited for a case study approach[28]. The case study approach allows for a comprehensive exploration from a fresh perspective [29].

(2) Multiple case studies are adopted to analyze the relationships between multiple cases, employing the logic of repetition and comparison, patterns can be identified and meaningful conclusions can be drawn [28].

(3) This study adopts a multi-case study design to investigate the implementation of empowering leadership within distinct organizational contexts. By identifying patterns and formulating propositions, this approach aligns with the research objectives[30][31].

4.2   Sample

A total of eight hi-tech companies were selected (see Table 1) based on the following principles:

(1) Given the context of rapid technological advancement, high-tech companies require empowering behaviors to foster innovation capability. Therefore, all selected case

companies operate in the electronic information field and share similar business models, ensuring comparability for the multiple case studies.

(2) The case companies recognize the significance of empowering leadership in their organizations, and they actively integrate empowering leadership behaviors into their daily operations. The alignment between theory and the selected case objects facilitates the exploration of empowering leadership implementation.

(3) The selected hi-tech enterprises with high degrees of formalization have been established for over five years, enjoy at leading positions in their industries and have well-established corporate rules and processes. These companies serve as representative entities within the industry. On the other hand, the selected hi-tech enterprises with low degrees of formalization are fast-growing enterprises that require empowering leadership in their management and operations. Therefore, the selected cases provide sufficient information for studying the implementation of empowered leadership.

Table 1. Basic Information of the Case Companies

Enterprise	Year of Establishment	Enterprise Size	Business Scale
A	2016	25	Cosmetics Sales; E-commerce
B	2018	10	Electronic Component Sales
C	2006	4500	Digital Electronic Musical Instruments
D	1996	1342	Electronic Beauty Devices
E	2013	50	Chip Research and Development
F	2001	3029	Electronic Equipment Manufacturing
G	1995	5000	Health Care Products
H	1933	35992	Household Medical Equipment

5   Data Collection and Analysis

5.1   Preliminary Preparation

The literature on the implementation of empowered leadership was collected and organized, and the research questions and methods were clarified. However, there is a lack of discussion on the influence of organizational factors on the implementation of empowered leadership.

5.2   Field Research

Data collection took place from May 2021 to October 2022, using interviews supplemented by documentary archives and news sources to provide a comprehensive perspective [28].

The study aimed to investigate the implementation of empowered leadership under four organisational contexts. Eight hi-tech companies were selected based two dimensions to examine the differences in implementing empowered leadership in different-sized companies, as shown in Table 2.

Semi-structured interviews were conducted with key stakeholders, including General Managers, CEOs, Directors, Department Heads, and Employees, resulting in 28 pages of interview transcripts (see Table 3). Secondary data, such as company documentation archives and newspaper interviews, were also collected (118 pages) to provide a comprehensive understanding of the key elements of implementing empowered leadership. See Table 4 for samples of interview questions.

Table 2. Research Arrangements of Four Types of Enterprises

(1) Structural formalization: low; task complexity: high	(2) Structural formalization: high; task complexity: high
Company A & Company B	Company C & Company D
(3) Structural formalization: low; task complexity: low	(4) Structural formalization: high; task complexity: low
Company E & Company F	Company G & Company

Table 3. Data Sources

Research company	Interviewee	Length of interview (minutes)	Company information (pages)	Media information (pages)
A	CEO	25	3	10
	Company employee	20		
B	Sales manager	23	4	12
C	General Manager	35	9	4
	Head of department	20		
D	Project manager	20	4	19
E	R&D director	15	1	6
	Administrative director	20		
F	Production foreman	18	4	1
G	department manager	35	5	15
H	CEO	28	8	13
	employee	20		
	Team manager	25		

Table 4. Samples of Interview Questions

Interviewee	Interview questions
Leader	Please describe how you lead your subordinates
	Please describe the difficulties you encounter in leading delegated subordinates
	Please describe the impact after empowered.

	Describe the impact of empowerment.
	How do you empower to different subordinates?
	…
	Please describe the leader's leadership style
	Please describe how the differences in empowerment are felt by the leader
Subordinates	Describe the difficulties encountered in empowerment
	How can the problems in empowerment be solved?
	…

5.3   Data Analysis

The data analysis phase involved the following steps. Firstly, we examine all data in both interview data and other secondary data of empowering leadership behaviors. It was important to understand the four organisational contexts and identify the main behaviors of leaders and subordinates. The first author undertook the coding, moved back and forth between data analysis and the literature to generate numerous first-order codes about empowerment and related behaviors between leaders and subordinates.

Secondly, the second-order concepts were analyzed from first-order codes. The first author examined the properties of the first-order codes and integrate them into second-order concepts.

Lastly, the second-order concepts were further abstracted to enhance and optimize the theoretical explanation. This process aimed to explore the theoretical framework of empowered leadership implementation and propose new avenues for future research. By adopting a multi-perspective data collection approach, our study provided an objective perspective to present empowered leadership from four types of organisational contexts.

6   Finding

We have identified four types of empowerments based on four classifieds of organisational contexts. We will discuss each type of empowerment in the following session.

Type I: Professional Empowerment

The cases in this study involve companies with low structural formalization but high complexity of work tasks, which are typically innovative entrepreneurial companies in the start-up phase. During this phase, the entrepreneurs play a critical role to handle entrepreneurial challenge the business and operational tasks, which heavily relying on their personal skills. In these cases, the empowerment is greatly affected by leaders' expertise, and we referred it as "professional empowerment." The characteristics of this type of empowerment are as follows:

1. Underdeveloped organisational framework: enterpreses have basic structure to operate the business, however, some orgamosational rules and regulations may not be fully developed due to the early stage of the enterprises.

"I think the basic structure of the enterprise is in place, but maybe the rules and regulations are not very mature and perfect."

"It's not perfect to talk about, because after all, the company is not big, so many things are still under development."

2. Alignment of work tasks and employees' skills: Work tasks are clearly defined, and employees are assigned tasks that match their specific skills and expertise. There is a clear division of labor, and employees are assigned roles based on their educational background and qualifications.

"Because the professional division of labor at Chip R&D is very clear, people who work digital cannot work analog, people who work analog cannot work digital, people who test cannot develop, the job they learned in school directly determines their current job role, so I think it fits."

3. Providing opportunities for employees to learn: Employees are given sufficient autonomy and opportunities to explore different approaches. They are encouraged to innovative ways of solving problems and are allowed to take experimental sprite to build on their knowledge.

"There are several ways to get from point A to point B. ... I would encourage them to solve the problem in a better way by giving them the space to decide for themselves which of the three methods is ABC. They can use any method they prefer, but make sure the results are valid, then they have the freedom to decide for themselves whether to use AB or C. After a few trials, they will figure out the most efficient way."

4. Empowerment based on trust and competence: Empowerment of tasks depends on the manager's belief in the employee's initiative and ability to perform the task competently. Managers are more likely to delegate tasks to employees who demonstrate autonomy, strictly demand, and a proactive attitude towards learning and personal growth.

"I think if I believe the employee has no autonomy in their work, they will not move unless I push them. I am less likely to delegate to someone like that and more likely to monitor them to write weekly or daily work reports and make sure they are not fishing for fish."

"I think it still depends on the subordinate's attitude toward the work. To the subordinate who has higher standards and takes the initiative to learn, I will delegate more."

"Since everyone has different abilities, I will delegate some tasks more actively to the one who has been working in the company for several years and whose thinking ability is stronger ......"

"But for another girl who joined the company recently, her thinking ability is not so strong relatively, and she does not understand the internal situation of the company, she also does not have the ability to think independently of a small process, it is difficult for me to delegate all the work to her, I mainly give her some simple and intuitive instructions and let her do only one task."

The extent of empowerment may vary based on the employee's expertise. Employees with solid expertise may be delegated more challenging tasks. Overall, professional empowerment in these cases involves leaders matching tasks to employee expertise, providing autonomy and opportunities for growth, delegating tasks based on trust and

competence. These factors contribute to the implementation of empowered leadership within the organization.

Type II:Comprehensive Empowerment

The second type of company surveyed in this study is characterized by a high degree of structured formality and task complexity. These companies are typically medium to large organizations in a mature stage of development. Several key characteristics define this type of company, including their size, a well-established internal management system, reduced uncertainty in the external environment, tacit understanding and trust between managers and subordinates, and a focus on results over process. In this context, the empowerment behavior exhibited by leaders is classified as "comprehensive empowerment." The characteristics of this type of empowerment, as identified in the interview data, are as follows:

1. Results orientation: Managers emphasize the importance of achieving results and focus on the outcomes rather than the specific processes or methods employed by employees. Managers expect employees to come to them with answers and ask quantitative performance-related questions. As long as the goals are achieved, managers do not intervene or question the resources used by employees.

"Always come to me with the answer."

"Ask quantitative performance questions".

"As long as the QCD goal is achieved, the supervisor will not ask me what resources I should use.

2. Long-term cooperation and trust: There is a long record of cooperation experience between managers and subordinates, which has built a foundation of trust and understanding. Managers have confidence in their employees' abilities and trust them to perform their work independently. This high degree of trust allows for a high degree of autonomy and self-management. Communication is simplified and direct, reflecting the established trust and mutual understanding.

"Most of them are able to take responsibility for themselves and are basically very proactive. After ten and a half days, it's okay to turn off the phone."

"Long-term cooperation to reach a tacit understanding, there is trust and understanding, and it is pleasant to cooperate. Communication is simple and direct."

3. Clear understanding of rights, duties and responsibilities: Both managers and subordinates have a clear understanding of their roles, rights, duties and responsibilities. Employees know when it is necessary to report abnormal conditions or seek guidance from their managers. They are proactive in reporting problems and providing suggestions. Additionally, employees may feel a sense of ownership and responsibility to compensate for any missing guidance from their managers, prompting them to take initiative and make decisions independently.

"If you encounter abnormal conditions, you must report to leadership; in the regular course of work, it is not necessary to report. Problems and suggestions will be reported. Problems that are not resolved are also reported."

"I feel like my role has to make up for the missing pieces of my supervisor, so even without direction from my supervisor, I have to think about what to do so I can take initiative."

Overall, comprehensive empowerment in these cases is characterized by a results-oriented approach, a foundation of trust and long-term cooperation, and a clear understanding of rights and responsibilities. Managers give complete ownership to their employees, allowing them to take initiative, make decisions, and be accountable for their work. This type of empowerment relies on trust, mutual understanding, and a focus on achieving desired outcomes.

Type III: Selective Empowerment

The third type of company interviewed in this study is characterized by a less formalized structure, lower task complexity, and imperfect company rules and regulations. These companies may face greater uncertainties in the environment, and employees' tasks are relatively simple, requiring less authority and resources. In this scenario, managers consider factors, such as employee competence, the clarity of responsibilities, and the existing system before deciding whether to delegate, to determine the degree of empowerment. This type of empowerment behavior is classified as "selective empowerment." The interview data revealed the following aspects:

1. Focusing on personal interests: Employees in these companies may prioritize their personal interests and rewards from the work. If they perceive a lack of recognition or fair compensation, they may be reluctant to take on additional responsibilities.

"No one would do it if they could not get paid for it. But if I am not recognized, even if I do more, and the compensation does not match the position and I am just held accountable, then of course it will be like that (unwilling to do it)."

2. Unclear authority and responsibility: One of the challenges in these companies is the lack of clarity in authority and responsibility. If employees are unsure about their roles or the Empowerment of tasks, they may be hesitant to take on additional responsibilities. The organizational culture may also resist change, and employees who propose new ideas or changes may be questioned about their ability to take responsibility.

"The problem in our company is that authority is not very clear, and if authority is not clear, it cannot be delegated, right, and the assignment of responsibility becomes unclear. There's a culture of reluctance to change in our company, and from people who want to do new things and propose change, we occasionally hear things like 'can you take responsibility?'"

Overall, managers tend to adopt the selective empowerment when they perceive employees tend to focus on personal interest and the organisation maintain imperfect authorities.

Type IV:Institutional Empowerment

The fourth type of company surveyed in this study is characterized by a high degree of structural formality and low task complexity. These companies are typically large man-

ufacturing firms with a significant number of employees. The work in these organizations often involves repetitive tasks and adherence to operational norms and process systems. In this context, managers grant "institutional empowerment" to employees, and the interview data highlights the following points:

1. Clear operational guidelines: Employees in these companies are expected to work in accordance with clearly defined rules, regulations, and guidelines. Their tasks are well-defined, and there is a focus on following standardized procedures.

"Employees work in accordance with the rules and regulations and do not have many tasks that are outside the rules and need to be done independently."

"Financial work in accordance with national rules and guidelines; each person has a detailed division of labor."

2. Goal setting with justified procedure: Leaders in these companies play a crucial role in setting goals and providing direction. Justified organisational procedures allows leaders and subordinates to reach consensus and a unified goal, moreover, justified organisational procedure facilitates frequent reporting and periodic evaluations which contribute a better performance.

"It is more important for leaders to follow procedures to set some direction for goals and reach consensus. The overall direction of recognition, but also need to further discussion, change the direction, the beginning of the time completely decentralized is not good, but we have a unified goal, it is best to report frequently, divided into periods will be better."

In summary, institutional empowerment depends on clear operational guidelines and goal setting process. These distinct approaches allow organisations to empower subordinate and promote their performance. This paper summarizes the Empowerment approaches in different situations, as shown in Table 5.

Table 5. Summary of Empowerment Leadership Types

Empowerment Leadership Type	Structural Formalization	Task Complexity	Empowerment Approach
Type I	Low	High	Professional empowerment
Type II	High	High	Comprehensive empowerment
Type III	Low	Low	Selective empowerment
Type IV	High	Low	Institutional empowerment

7   Propositions

We have proposed four propositions to suggest organisations should take actions to promote leadership empowerment based on four organisation contexts.

Proposition 1:Improve leaders' professional skills and ability to manage subordinates

To facilitate the implementation of empowerment, we suggested that leaders should focus on improving their professional skills and capabilities to explore talents of subordinates. Leaders in start-up of technology-based companies should develop their expertise, expand academic knowledge, and enhance business acumen. Having leaders with high levels of expertise enables them to affect and manage subordinates effectively, provide constructive advice, and establish a foundation for high empowerment. Empowering leadership competencies, such as empowerment, information sharing, fostering innovation, mentoring, caring, and controlling outcomes and processes, should be developed and emphasized. Mentoring plays a crucial role in guiding employees to work independently, and managers with sufficient expertise can effectively share their knowledge with subordinates. Therefore, organizations should invest in the development of professional skills among middle-level managers, encouraging them to share their expertise with subordinates, fostering a culture of seeking guidance, and empowering employees to make independent decisions to solve problems and work more autonomously.

Proposition 2: Provide new tasks and challenges

It is important for organizations with high structural formalization and task complexity to provide employees with new tasks and challenges to promote empowerment. According to cognitive appraisal theory, job characteristics and task complexity motivate employees. Employees who are satisfied with their jobs tend to be more motivated and present outperformance. Complex tasks, which offer a sense of accomplishment, autonomy, and self-efficacy, can significantly impact motivation. Employees are more motivated to perform complex tasks as they perceive a higher level of challenge and recognitions. Encouraging employees to take on novel, ambiguous, and unstructured tasks can motivate them to take risks, and break existing rules and procedures. Employees who engage in complex tasks gain a sense of achievement and self-efficacy, leading to increased motivation. Therefore, in organizations that are growing smoothly and have a well-established structure, managers should provide employees with more autonomy and opportunities to take on new tasks and challenges. This approach promotes empowerment by fostering a sense of accomplishment, autonomy, and self-motivation among employees.

By implementing this propositions, organizations can create an environment that supports and facilitates empowerment, leading to increased employee autonomy, motivation, and independent decision-making, ultimately enhancing overall organizational performance and success.

Proposition 3:Clarify responsibilities and work objectives

It is crucial to clarify responsibilities and work objectives to facilitate empowerment in organizations maintaining low levels of structural formalization and task complexity.

Some our interviews showed that empowerment was hidden because responsibilities and authority was unclear in those enterprises. To address this, organizations should establish clear responsibility, which provide a foundation for defining the boundaries. Implementing modularity and a clear division of labor in the organizational structure could reduce interdependencies between departments, simplifies strategy development, and decreases uncertainty in decision-making. The continuous pooling and application of expertise in each department's work process also contribute to forming appropriate rules. By setting up departments and corresponding performance appraisal systems based on work duties and establishing clear work goals and development objectives, organizations can create a clearer framework for empowerment.

Proposition 4: Encourage knowledge sharing

Employees work organizations, which are characterized by high structural formalization and low task complexity, and they could follow established conventions and work instructions to perform their work. However, these organisational contexts may not be conducive to innovation and self-determination. Encouraging knowledge sharing among employees is essential in fostering innovation and empowering individuals. Studies have shown that innovative employee behavior relies on individuals having the necessary knowledge, expertise, and resources. Knowledge sharing avoids duplication of efforts between departments and products, reduces the cost of acquiring knowledge resources, and enables employees to integrate and utilize knowledge from a broader perspective. Through the sharing process, employees acquire a deeper understanding of the organization's operating mechanism, which enhances their ability to innovate and improve job performance. By promoting an organisational culture of knowledge sharing, organizations can enhance empowerment by providing employees with a broader knowledge base, fostering creativity, and enabling them to contribute more effectively to organizational success.

By implementing these propositions, organizations can enhance clarity and alignment in responsibilities with work objectives, provide a conducive environment for knowledge sharing and innovation, and empower subordinates to take ownership of their work and contribute to organizational growth and success.

8   Conclusion

In conclusion, this study conducted a multi-case study analysis of hi-tech enterprises to examine the implementation of empowering leadership behaviors under different organizational contexts. The findings revealed patterns and propositions for each case type, highlighting the importance of enhancing leaders' professional skills, addressing new tasks and challenges, clarifying responsibilities and work objectives, and promoting knowledge sharing.

The theoretical contributions of this study include enriching the understanding of organisational contexts and each contexts affect implementation of empowered leadership. By focusing on hi-tech enterprises, the study provides four propostions to promote empowered leadership in four different organisational contexts.

However, there are limitations to this study that should be addressed in future research. First of all, future research should consider other organizational-level factors as potential boundary conditions for the implementation of empowering behaviors, broadening the scope of inquiry in this area. Secondly, future research could examine the role of culture in empowered leadership and provide alternative perspective to facilitate empowerment process.

Overall, this study provides valuable insights and propositions for hig-tech organizations seeking to implement empowering leadership behaviors effectively, taking into account the nuances of organizational structure, and task complexity dimensions.

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