# "Effect of learning culture and management control system on innovation performance: Evidence from startup companies in Indonesia"

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# EFFECT OF LEARNING CULTURE AND MANAGEMENT CONTROL SYSTEM ON INNOVATION PERFORMANCE: EVIDENCE FROM STARTUP COMPANIES IN INDONESIA

## Abstract

The startup must be able to innovate in response to the uncertainty of the business environment, which is changing rapidly along with advances in technology. This study aims to analyze the relationship between learning culture, belief, boundary control, dynamic capabilities, and innovation performance. Quantitative methods with AMOS and structural equation modeling were used to test 260 samples. Questionnaires were distributed among startup companies in Banten Province, Indonesia. The research results show that dynamic capabilities and the development of management control systems are influenced by learning culture. The findings inform that a strong learning culture attitude produces company confidence and a management boundary control system that can adapt to uncertain environmental changes. Startup companies should motivate their personnel to improve competence through a learning culture. The role of innovation performance is also indirectly influenced by beliefs and boundary control systems. Recognition of personnel abilities and contributions in collaboration with external sources opens up opportunities to compete in business. This finding is a key factor explaining that startup companies must face a rapidly changing environment by optimizing management's ability to innovate, implementing management control systems routinely, and building a trust system to inspire and motivate employees.

| Keywords | learning culture, dynamic capability, innovation performance, startup company |
|---|---|
| JEL Classification | L21, L25, M13 |

## INTRODUCTION

Startup companies face intense competition, requiring strategies to improve performance. Business strategy and the management control system influence performance (Pham & Tran, 2023). Innovation is crucial for the success of technology startups. Unlike traditional companies, startups operate in dynamic and uncertain environments, needing agility, adaptability, and creative thinking. Internal factors, like fostering a learning culture, affect these dynamics (Chen et al., 2018). A learning culture unifies talents and expertise, fostering innovation (Gonzalez, 2021). It significantly shapes employees' attitudes toward risk, openness to change, collaboration, and experimenting with new ideas (Severo & De Guimarães, 2022). Therefore, understanding the factors supporting innovative capacity, especially a learning culture, is crucial. Unveiling the culture within technology companies provides insights essential for creating an environment conducive to creativity, experimentation, and sustainable improvement (Pham & Tran, 2023).

# 1. LITERATURE REVIEW

A learning culture is an attitude related to leadership that provides opportunities for training, improves curiosity, encourages a willingness to learn, and promotes collaboration to improve companies' quality and performance (Farzaneh et al., 2021). This variable has been recognized as a crucial factor influencing the behavior and performance of individuals within companies. These include shared values, beliefs, assumptions, and norms that collectively shape employees' perceptions of the work environment and interactions with each other (Gonzalez, 2021). In the context of innovation, a learning culture plays an important role in determining the ability to cultivate a climate of creativity, risk-taking, and knowledge.

The startup industry must be able to adapt to changes in the cultural patterns of society and consumers to face dynamic capabilities. Pollok et al. (2019) stated that learning culture influences the dynamic capability to develop organizational intelligence and create new knowledge. This approach enhanced employee participation in presenting new ideas and assisting companies in adapting to a changing environment. According to Abd-Mutalib et al. (2023), knowledge is seen as a dynamic entity evaluated based on skills and new experiences. The implementation of the management control system plays a crucial role in performance as the primary tool used to plan, budget, analyze, and evaluate information essential for accurate decision-making (Endenich et al., 2023).

Management control systems in an organization focus on human resources and are a critical aspect in supporting a company's strategy. This system is used to manage the tension between innovation creation and the achievement of predictable objectives, balancing the fundamental organizational dilemma between control and flexibility (Henri, 2006; Kienast, 2023; Abane et al., 2022; Barros & Ferreira, 2023). Ismail (2015) stated that the configuration of a management control system is shaped by organizational operation, necessitating adjustments in line with the specific needs and circumstances of the entity. Organizational strategy is a critical variable influencing the design of management control systems because a one-size-fits-all control system is not universally applicable.

The literature provides diverse definitions of business strategies for achieving competitive advantage. Strategic performance measurement is an integral component of business strategy to enhance performance (Acquaah, 2013; Mehraliana et al., 2023; Drago et al., 2023).

The belief system communicates core values to inspire and motivate employees to explore, create, and engage in actions consistent with the strategy (Widener, 2007). The system is used to inspire and guide employees to discover existing opportunities, explore new ideas, transmit fundamental values, and provide organizational aims and direction (Biswas & Akroyd, 2022). This variable is intended to communicate the mission, creed, and objectives of the organization. Leaders can inspire employees while controlling their behavior to prevent opportunistic actions through this system (Phan et al., 2023; Herath & Harrington, 2023).

A boundary system supports company activities to achieve strategic objectives and anticipate potential risks (Ismail, 2015). These risks can be avoided through business ethics codes, strategic planning, asset acquisition, and operational guidelines. This variable is used to establish boundaries in the form of rules and other related aspects (Shurafa & Mohamed, 2016). Dynamic capability is a concept for construction and reconstruction to anticipate environmental changes through companies' resources. According to Farzaneh et al. (2021), this variable consists of the contribution of dynamic capability to performance and environmental changes. Innovation performance is the ability to transform inputs into outputs for optimal operation (Pollok et al., 2019). To achieve this, companies should have the ability to mobilize resources and collaborate dynamically while leveraging opportunities from environmental changes (Chen et al., 2018).

The importance of research examining the relationship between management control systems and innovation is also driven by inconsistent findings. Ismail (2015) introduced four forms of control systems known as levers of control: belief systems (core values), boundary systems (behavioral constraints), diagnostic control systems (monitoring), and interactive control systems (management inclusion). Innovation is a source of competitive

advantage that significantly contributes to performance. According to Ismail (2015), belief, diagnostic, and interactive control systems, as well as organizational learning, have a positive and significant impact on performance. The capability construct considered was limited to organizational learning, but Baird et al. (2019) stated that the core capabilities for achieving competitive advantage consisted of innovation, organizational learning, market orientation, and entrepreneurship. Based on these explanations, this study focused on two management control systems' measurement tools, namely, belief and boundary control systems. The focus on these tools is motivated by the relatively limited research in this domain.

A learning culture is necessary to provide direction to employees in developing skills, learning innovations, and clear guidance for allocating resources (Pedraza-Rodríguez et al., 2023). This aspect is a source of competitive advantage that influences behavior and work methods and motivates managers and subordinates to achieve organizational performance (Einhorn et al., 2023; Devie & Prastowo, 2021; Kunz & Heitz, 2021). In this context, contingency theory states that no management accounting and control system can be universally applied. The best way to organize companies depends on the internal and external situation (Santos et al., 2022; Rocha & Grilli, 2024; Waerness et al., 2023). This is because a learning culture can lead companies to achieve planning and goals. Furthermore, the belief system communicates various core values in companies to members. Einhorn et al. (2023) stated that this variable inspires and motivates employees to engage in exploring, creating, and making efforts with appropriate actions. Moreover, a learning culture can assist companies in case of a change in strategic direction. This is widely known as a key factor associated with the belief control system (Ong, 2019; Kienast, 2023; Abane et al., 2022; Barros & Ferreira, 2023). Therefore, the variable leads to the creation of interactions and strengthens companies' core values.

The significance of cultural elements within management control systems becomes essential, as shown by Ismail (2015) and Einhorn et al. (2021), where the use of levers of control is implemented in companies to communicate guidelines, specify-

ing the boundaries of actions. The objective is to empower employees with the freedom to innovate, explore, create, and attain specified standards (Sarwar et al., 2023; Noviaristanti et al., 2023; Pinto et al., 2023). This approach aims to prevent the inefficient allocation of resources within the organization.

Pedraza-Rodríguez et al. (2023) showed the role of organizational culture in four key aspects. First, in the planning function, considerations include the optimal level of risk and the decision on whether plans should be formulated by individuals or teams. Second, in the organizing function, factors include the degree of autonomy granted to employees, the choice between individual and team-based task execution, and the level of interactivity among department managers. Third, within the leading function, attention is directed toward enhancing job satisfaction, determining appropriate leadership styles, and addressing the question of how to resolve conflicts. Fourth, in the controlling function, decisions comprise the enforcement of external controls to self-regulate, as well as repercussions for violations committed by individuals (Pedraza-Rodríguez et al., 2023).

Lam et al. (2021) showed that an existing learning culture can influence the creation of regulations within an organization, such as the establishment of boundaries. Therefore, the boundaries of this organization are reflected in operational standards or behavioral guidelines. Learning culture was a crucial factor in developing an environment that facilitates the renewal of essential capabilities. Jamshed and Majeed (2019) argued that the behavior and attitudes of employees could be shaped by learning culture to influence their ability to rebuild skills. A learning culture enables companies to operate effectively by leveraging experiences and insights to anticipate environmental changes.

Innovation can be easily carried out and implemented in a company through a belief control system. Every company member is motivated to conduct new activities through external ideas (Lam et al., 2021; Foster et al., 2023). The belief control system allows companies to seek and investigate the desires of consumers (Santos et al., 2022). Furthermore, the variable is essentially used to expand the search for opportunities and learning.

Concerning the main feature, senior managers are strongly included. The primary focus is constant and continuous information change. Dynamic capability focuses on the capacity of an organization to face a rapidly changing environment; it requires the creation of new resources, updates, or changes in combination and recognizes that top management teams may play a crucial role (Hariandja & Sartika, 2022; Mehraliana et al., 2023; Drago et al., 2023).

The boundary system is used to establish limitations that should be avoided by every member of the organization. The implementation can take various forms, such as the existence of a code of ethics, rules, and planning system. Apart from providing specified limitations, opportunities are offered for all company members. Various factors result in the regulation of members' behavior, generating negative energy. In this context, risks can be effectively managed through the implementation of the boundary system. Organizational capability is one of the strategic factors in companies. According to Haustein et al. (2014), this variable is one of the strategic factors used to face competition in the market. The aim is to understand how companies can sustain competitive advantages by creating environmental changes.

Innovation occurs when employees possess knowledge to generate new insights (Ledesma-Chaves & Arenas-Gaitán, 2022; Pundziene et al., 2022; Robertson et al., 2023). In this context, the work environment becomes a comfortable place for learning to create innovation with knowledge. Employees with more knowledge and skills can generate new ideas, examine current company routines, or acquire new knowledge from external sources to help them identify new products, processes, or methods. To create outstanding innovation performance, companies should leverage dynamic capabilities, such as the ability to generate, integrate, share, and use knowledge, reconfigure resources, and modify knowledge (Açıkgöz et al., 2021; Jäger et al., 2022). Absorbing knowledge from external and internal sources is also important in identifying external opportunities. The belief system communicates core values to inspire and motivate employees to explore, create, and engage in actions that are consistent with the strategy. In the implementation process, this system is related to strategy as a perspective (Phan et al., 2023; Herath & Harrington, 2023). Communication also triggers the development of creative ideas to generate innovations that are beneficial to companies (Shurafa & Mohamed, 2016).

The boundary system limits the domain or scope accepted from strategic activities for members within companies (Keszey, 2018). This system communicates rules or actions to be avoided. The purpose is to allow an employee the freedom to innovate and achieve predetermined objectives. Furthermore, it is created through commands given to business managers, and its implementation is enforced as a position (strategy as a plan) (Baird et al., 2019). Companies communicate boundary and belief systems through ethics or business actions and mission or vision, respectively. The systems have similarities in motivating employees to obtain new opportunities. The boundary system shows control by constraining existing behavior, which has a negative impact, while the belief system
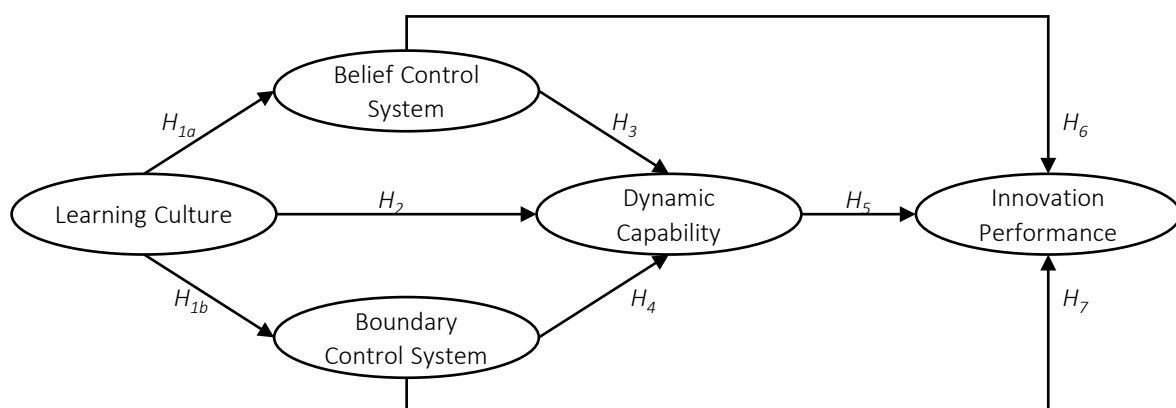


**Figure 1.** Research model

achieves control more positively through the use of methods such as inspiration (Michaelis et al., 2021; Wulfert, 2023; Möller et al., 2022).

The objective of this study is to investigate the relationship between learning culture, belief control system, boundary control system, dynamic capability, and startup companies' innovation performance in Indonesia (Figure 1). The following hypotheses are proposed:

$H_{1a}$: Learning culture has a positive influence on belief control system.

$H_{1b}$: Learning culture has a positive influence on the boundary control system.

$H_2$: Learning culture has a positive influence on dynamic capability.

$H_3$: Belief control system has a positive influence on dynamic capability.

$H_4$: Boundary control system has a positive influence on dynamic capability.

$H_5$: Dynamic capability has a positive influence on innovation performance.

$H_6$: Belief control system has a positive influence on innovation performance.

$H_7$: Boundary control system has a positive influence on innovation performance.

## 2. METHOD

Quantitative research was used. Questionnaires were distributed to startup companies in Banten Province, Indonesia, considering that many startup companies are not yet familiar with product and service innovation. The process was conducted through hypothesis testing, with the intention of identifying the effects of learning culture, management control system, and dynamic capability on management control system, dynamic capability, and innovation performance, respectively.

Measurement is carried out using a seven-point Likert scale. Table 1 shows the distribution of questionnaire items: learning culture variable with 13 questions, belief control system with four questions, boundary control system with four questions, dynamic capability with 10 questions, and innovation performance with 10 questions. The analysis technique is multiple regression, using SEM (AMOS).

**Table 1.** Questionnaire items

| No. | Variable | Indicators |
|---|---|---|
| 1 | Learning Culture (Gonzalez, 2021) | Level of internal control:<br>Employees identify the skills and knowledge needed for future tasks.<br>Employees are valued for learning new skills.<br>Employees engage in honest and open dialogue with each other.<br>Employees build trusting relationships.<br>Teams are free to adjust the required objectives.<br>Teams treat people fairly.<br>Team performance is considered more convincing than individual performance.<br>Teams review beliefs and actions based on group discussions and thinking.<br>The achievements of teams are highly valued.<br>Lessons learned by all employees are provided.<br>Employees are allowed to control resources related to job processes.<br>Collaboration is enhanced between departments in terms of problem-solving and improvement.<br>Leaders use knowledge and experience to guide and teach employees. |
| 2 | Belief Control Systems (Shurafa & Mohamed, 2016) | Human resources expertise and policies regarding the competence of people who manage finances:<br>The company's mission statement is clearly communicated to employees.<br>Top managers communicate core values to employees.<br>The workforce is aware of the company's core values.<br>The mission statement inspires employees. |
| 3 | Boundary Control Systems (Shurafa & Mohamed, 2016) | Belief in the importance of internal control:<br>Defining appropriate behavior.<br>Informing about off-limits behavior.<br>Communicating risks should be avoided.<br>The workforce is aware of the code of conduct. |

**Table 1 (cont.).** Questionnaire items

| No. | Variable | Indicators |
|---|---|---|
| 4 | Dynamic Capability (Gonzalez, 2021) | Circumstances that demonstrate honesty, quality, and responsibility:<br>The company absorbs knowledge.<br>New knowledge is generated internally through individual learning.<br>The company engages in research and development activities to produce new knowledge.<br>The company builds strategic alliances with institutions and other companies that promote new internal knowledge.<br>Generated and absorbed knowledge is documented.<br>Recorded knowledge is easily interpreted and used by individuals.<br>Recorded knowledge is shared among employees.<br>Individuals apply the generated knowledge in various processes through learning.<br>The company values the integration of knowledge from various fields, individuals, and teams.<br>The company combines core and newly created or absorbed knowledge. |
| 5 | Innovation Performance (Pollok et al., 2019) | A company's research and development are faster than those of its competitors.<br>Improvements in production are faster than competitors.<br>The company's research and developments have enhanced production innovation skills.<br>A company's production is more tailored to customer needs than to competitors' needs.<br>The company uses innovative technology to improve the quality and speed of production as well as services to customers.<br>The company uses innovative technology to enhance the quality and speed of production as well as services to customers.<br>Over the past three years, the number of patent registrations has significantly increased.<br>The company adopts the latest human resource practices.<br>The innovation structure is more flexible than that of competitors.<br>A company's ability to innovate with new logistics methods is faster than that of its competitors. |

## 3. RESULTS

Convergent validity is shown by high standardized loading factor (SLF) values, and Hair et al. (2010, p. 678) suggested a value of ≥ 0.5. Construct reliability (CR) is also a determinant indicator of convergent validity. According to Hair et al. (2010, p. 679), CR values ≥ 0.7 and between 0.6 and 0.7 are considered good and acceptable, respectively.

The indicator variables must show good validity, and an AVE value of ≥ 0.5 indicates adequate convergence. The SLF values for each indicator are > 0.5. Table 2 presents the values of AVE and CR.

The AVE values are > 0.5, indicating good convergent validity. Moreover, the CR values are > 0.7, indicating good convergent validity, as shown in Table 2.

**Table 2.** Average variance extracted (AVE) and CR calculations

| Variable | Indicator or Item | SLF | Error | SLF^2 | AVE | CR |
|---|---|---|---|---|---|---|
| Learning Culture (LC) | LC1 | 0.614 | 1.723 | 0.377 | 0.614 | 0.953 |
| | LC2 | 0.911 | 0.378 | 0.830 | | |
| | LC3 | 0.874 | 0.555 | 0.764 | | |
| | LC4 | 0.873 | 0.553 | 0.762 | | |
| | LC5 | 0.889 | 0.483 | 0.790 | | |
| | LC6 | 0.956 | 0.200 | 0.914 | | |
| | LC7 | 0.900 | 0.447 | 0.810 | | |
| | LC8 | 0.923 | 0.337 | 0.852 | | |
| | LC9 | 0.966 | 0.149 | 0.933 | | |
| | LC10 | 0.904 | 0.450 | 0.817 | | |
| | LC11 | 0.922 | 0.380 | 0.850 | | |
| | LC12 | 0.932 | 0.322 | 0.869 | | |
| | LC13 | 0.888 | 0.547 | 0.789 | | |
| Belief Control System (BE) | BE1 | 0.565 | 2.673 | 0.319 | 0.510 | 0.800 |
| | BE2 | 0.971 | 0.129 | 0.943 | | |
| | BE3 | 0.978 | 0.098 | 0.956 | | |
| | BE4 | 0.970 | 0.134 | 0.941 | | |

**Table 2 (cont.).** Average variance extracted (AVE) and CR calculations

| Variable | Indicator or Item | SLF | Error | SLF^2 | AVE | CR |
|---|---|---|---|---|---|---|
| Boundary Control System (BO) | BO1 | 0.975 | 0.111 | 0.951 | 0.566 | 0.835 |
| | BO2 | 0.615 | 2.184 | 0.378 | | |
| | BO3 | 0.979 | 0.097 | 0.958 | | |
| | BO4 | 0.978 | 0.099 | 0.956 | | |
| Dynamic Capability (DC) | DC1 | 0.977 | 0.100 | 0.955 | 0.684 | 0.955 |
| | DC2 | 0.970 | 0.130 | 0.941 | | |
| | DC3 | 0.977 | 0.100 | 0.955 | | |
| | DC4 | 0.977 | 0.100 | 0.955 | | |
| | DC5 | 0.658 | 2.072 | 0.433 | | |
| | DC6 | 0.977 | 0.100 | 0.955 | | |
| | DC7 | 0.803 | 1.108 | 0.645 | | |
| | DC8 | 0.977 | 0.100 | 0.955 | | |
| | DC9 | 0.975 | 0.112 | 0.951 | | |
| | DC10 | 0.977 | 0.100 | 0.955 | | |
| Innovation Performance (IF) | IF1 | 0.960 | 0.173 | 0.922 | 0.689 | 0.956 |
| | IF2 | 0.977 | 0.100 | 0.955 | | |
| | IF3 | 0.969 | 0.131 | 0.939 | | |
| | IF4 | 0.969 | 0.131 | 0.939 | | |
| | IF5 | 0.974 | 0.112 | 0.949 | | |
| | IF6 | 0.787 | 1.406 | 0.619 | | |
| | IF7 | 0.974 | 0.112 | 0.949 | | |
| | IF8 | 0.711 | 1.546 | 0.506 | | |
| | IF9 | 0.974 | 0.112 | 0.949 | | |
| | IF10 | 0.977 | 0.100 | 0.955 | | |

**Table 3.** Goodness of fit model testing

| Fitness parameter | Value | Benchmark Value | Model Fit to Data |
|---|---|---|---|
| Probability Chi-Square | 0.06239 | > 0.05 | Yes |
| RMSEA | 0.01750 | < 0.1 | Yes |
| TLI | 0.99657 | > 0.9 | Yes |
| CFI | 0.99678 | > 0.9 | Yes |
| IFI | 0.99678 | > 0.9 | Yes |

**Table 4.** Hypothesis testing

| Hypothesis | Path coefficient | CR | Estimated (β) | Conclusion |
|---|---|---|---|---|
| $H_{1a}$ | 0.712 | 7.017 | 0.594 | Accepted |
| $H_{1b}$ | 0.924 | 9.031 | 0.200 | Accepted |
| $H_2$ | 0.423 | 4.070 | 0.217 | Accepted |
| $H_3$ | 0.360 | 4.391 | 0.202 | Accepted |
| $H_4$ | 0.291 | 5.083 | 0.577 | Accepted |
| $H_5$ | 0.278 | 4.560 | 0.974 | Accepted |
| $H_6$ | 0.371 | 4.754 | 0.802 | Accepted |
| $H_7$ | 0.275 | 5.063 | 0.614 | Accepted |

Table 4 explains the results of hypothesis testing. Considering hypothesis 1a, a path coefficient value is 0.712, CR of 7.017 > 1.96, and $p < 0.001$, $< 0.05$ ($H_{1a}$ is accepted). Therefore, the belief control system can be enhanced with the implementation of a learning culture. As for hypothesis 1b, a path coefficient value of 0.924 is obtained, with a CR of 9.031 > 1.96 and $p < 0.001$, $< 0.05$ ($H_{1b}$ is accepted). Therefore, when learning culture is maximized, the boundary control system can be enhanced.

Next, a path coefficient value of 0.423 is obtained with a CR of 4.070 > 1.96 and $p < 0.001$, $< 0.05$ ($H_2$ is accepted). Therefore, when learning culture is maximized, dynamic capability can be improved. Considering hypothesis 3, a path coefficient value of 0.360 is obtained with a CR of 4.391 > 1.96 and $p < 0.001$, $< 0.05$ ($H_3$ is accepted). Therefore, when the belief control system operates optimally, dynamic capability can be enhanced.

As for hypothesis 4, a path coefficient value of 0.291 is obtained with a CR of 5.083 > 1.96, and $p < 0.001$, $< 0.05$ ($H_4$ is accepted). Therefore, the boundary control system operates optimally to enhance dynamic capability. Next, a path coefficient value of 0.278 is obtained with a CR of 4.560 > 1.96 and $p < 0.001$, $< 0.05$ ($H_5$ is accepted). Therefore, innovation performance is improved when companies can maximize dynamic capability.
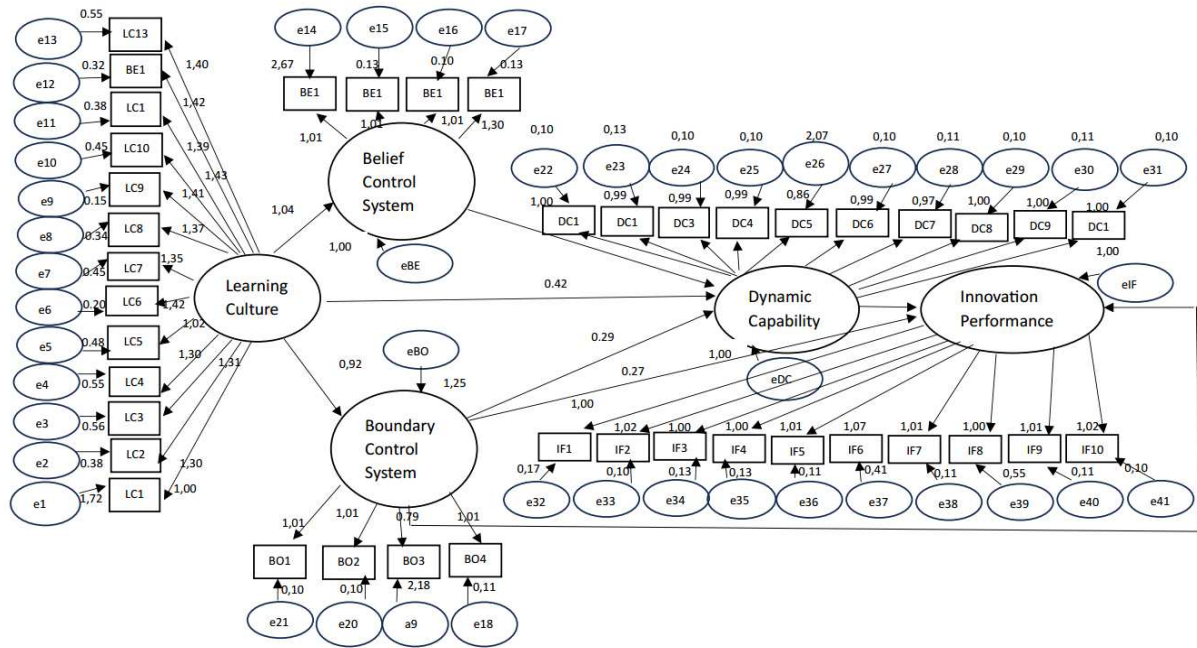
**Figure 2.** Overall model fit test

Considering hypothesis 6, a path coefficient value of 0.371 is obtained with a CR of 4.754 > 1.96, and $p < 0.001, < 0.05$ ($H_6$ is accepted). Therefore, companies can maximize their belief control system to enhance innovation performance, demonstrating the positive influence of these variables. Next, a path coefficient value of 0.275 was reported with a CR of 5.063 > 1.96 and $p < 0.001, < 0.05$ ($H_7$ is accepted). Therefore, innovation performance can increase when companies maximize their boundary control systems.

## 4. DISCUSSION

A learning culture has a positive influence on belief control system, boundary control systems, and dynamic capability. A learning culture is a work environment where employees are encouraged to continue learning and developing. It refers to an organizational environment that promotes and supports continuous learning, development, and capability improvement for employees through belief control systems, boundary control systems, and dynamic capability. The results have succeeded in proving that success in building a learning culture in an organization influences belief control systems, boundary control systems, and dynamic capa-

bility. Therefore, each member needs to feel that the leader supports the learning process. The objective is to make learning have clear core values. Core values will later be used to make decisions and guide the actions taken by the organization. Committing to learning also means the organization commits to providing the necessary resources to support each member's learning and development. Jäger et al. (2022) assumed that teams formed by a learning culture were more willing to share knowledge with other members, thereby enhancing the core values and trust of companies. Learning culture has a positive influence on dynamic capability. Jamshed and Majeed (2019) and Açıkgöz et al. (2021) argued that the behavior and attitudes of employees can be shaped by the internal learning culture, influencing the ability to rebuild competencies.

The belief control system and boundary control system of organizational members have a positive influence on dynamic capabilities. Organizational expertise in managing human resources according to competency makes it easier for management to control the resources they have to achieve company goals. The belief control system is also built to communicate core values, which are the company's positive beliefs to improve the ability of organizational members to face business competi-

tion and the challenges of environmental change. These findings are in line with Phan et al. (2023), who showed that the belief control system and the boundary control system were positively correlated with dynamic capability since the success of a team is dependent on the ability to comprehend and cultivate explicit and tacit knowledge. In belief control systems, core values such as vision and mission collectively build a shared mentality and understanding (Herath & Harrington, 2023). Dynamic capabilities should always be developed and applied to a company's daily activities. The benefits obtained from the resources and ability of the company reflect the integration of superior resources, such as knowledge (Abane et al., 2022; Barros & Ferreira, 2023). Startup companies must have good dynamic capability if they want their business to survive by carrying out many innovations in business processes, products, and services.

New knowledge is generated internally through individual learning. A company engages in research and development activities to produce new knowledge. A company's ability to build strategic alliances with institutions and other companies that promote new internal knowledge is a dynamic capability. This dynamic capability activity can be well received by employees and implemented more effectively to support the creation of innovation performance needed by startup companies to be able to compete. However, the dynamic capability must also be supported by the existence of the workforce being aware of the company's core values and appropriate behavior that supports the proper implementation of internal controls. A more effective control system can support teamwork, innovation, and winning business competition. Farzaneh and Nazari (2020) and Waerness et al. (2023) supported this finding. Informed dynamic capability, the belief control system, and the boundary control system have a positive influence on innovation performance. Employees with more knowledge and skills can generate new ideas, examine current company routines, or acquire new knowledge from external sources to identify new products, processes, or methods.

## CONCLUSION

This study aimed to investigate the influence of learning culture on belief control systems, boundary control systems, and dynamic capability. The belief control system and boundary control system have a positive influence on dynamic capability. Dynamic capability, belief control system, and boundary control system have a positive influence on innovation performance. The results indicate that learning culture partially has a positive effect on belief control system, boundary control system, and dynamic capability. These results prove that the knowledge of organizational members influences the way they view, think, and believe in the core values of the organization, as well as their ability to adapt to environmental changes faced by startup companies. The results also inform that the belief control system and the boundary control system have a positive influence on dynamic capability.

Dynamic capability, belief control system, and boundary control system have a positive influence on innovation performance. Startup companies must be able to innovate in business processes and product development by increasing their ability to adapt to environmental uncertainty and knowledge to win business competition. The managerial implications suggest that manufacturing companies should consider organizing workshops and training sessions focused on the Hazard Analysis Critical Control Point (HACCP) to improve its learning culture. The inclusion of employees was envisioned to ensure product quality and cultivate collaboration among different departments within the organization. To improve teamwork, team members should be granted flexibility in decision-making processes related to work procedures. In this context, the company absorbs more knowledge to face future challenges and increase dynamic capability. Internal controls, such as engaging in activities and monitoring, should also be conducted to ensure that employees work effectively and efficiently, thereby minimizing expenses. The organizations should focus more on research and development in technology and products for improved innovation performance.

This analysis is also limited by the use of learning culture, teamwork, dynamic capability, and team performance as variables. Future research should broaden the scope beyond fishery export-import companies, including manufacturing and services companies, to increase the sample size for more robust data.

## AUTHOR CONTRIBUTIONS

Conceptualization: Elvin Bastian, Arfah Piliang, Meutia.
Data curation: Elvin Bastian, Arfah Piliang, Meutia.
Formal analysis: Elvin Bastian, Arfah Piliang.
Funding acquisition: Elvin Bastian.
Investigation: Elvin Bastian, Arfah Piliang, Meutia.
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Project administration: Elvin Bastian.
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Software: Elvin Bastian, Arfah Piliang, Meutia.
Supervision: Elvin Bastian, Arfah Piliang, Meutia.
Validation: Elvin Bastian, Meutia.
Visualization: Arfah Piliang, Meutia.
Writing – original draft: Elvin Bastian, Meutia.
Writing – review & editing: Arfah Piliang.

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