



A Theoretical Review of the Cognitive School and the Learning School in Strategic Education

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ABSTRACT

The cognitive school emphasizes the importance of reasoning and interpretations in strategic actions by focusing on how people process information, create knowledge, and make decisions. On the other hand, the learning school places strong emphasis on organizational learning, viewing it as a living, breathing entity that continuously adapts to its environment. This article examines the core ideas of both approaches and assesses their relevance to management practices. It aims to provide deep insights into how strategies can be developed and implemented more successfully by integrating theories and models from both cognitive school and learning school. The article offers practical guidance for enhancing organizational performance and gaining competitive advantages in the fast-paced business environment through a literature review. Based on research findings, it can be concluded that both cognitive school and learning school can lead to successful outcomes through strategic processes and development.

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INTRODUCTION

The need to understand how people and organizations learn is increasingly urgent in an increasingly complex and dynamic world. The cognitive school and the learning school are two major schools of thought in strategy and management studies that have emerged as important pillars in this context. Both schools provide distinct and comprehensive perspectives on the thinking and learning processes that occur in organizations and how these processes can affect long-term success and strategic decision-making. The cognitive school, also known as the information-processing school, focuses on how people gather information, create knowledge, and make decisions. This method places great emphasis on the role of perception, reasoning, and interpretation in selecting the best course of action. The cognitive school focuses more on strategy formation as a mental process (Mintzberg, H., Ahlstrand, B., and Lampel, J., 1998). According to cognitive thinking, in order for managers and leaders to make wise decisions, they must understand how the human brain interprets and processes information. The main concerns are

cognitive biases, mental models, and cognitive maps. Gaining knowledge about how the human brain functions is essential to developing and executing strategies more skillfully. Learning School or known as learning flow emphasizes the internal learning process that takes place within the company.

Organizations are viewed in this school as living, breathing entities that are constantly learning and adapting to their environment. Individual, group, and organizational learning as a whole are just some of the mechanisms that shape organizational learning. The learning school emphasizes that gaining experience, trying new things, and reflecting are essential to building strategic knowledge and skills. This methodology also emphasizes the importance of an organizational culture that encourages continuous education and creativity. In short, the learning school focuses more on strategy formation as an emergent process (Mintzberg, H., Ahlstrand, B., and Lampel, J., 1998). Both schools are relevant to academics and industry practitioners. Gaining competitive advantage in today's dynamic business world requires the capacity to understand and modify strategies based on cognitive knowledge and organizational learning. Companies that can quickly learn and adapt to change will be better able to survive and thrive in the face of technological disruption than those that take longer to learn.

The management and strategy literature has benefited greatly from the historical contributions of the cognitive school and the learning school. To test the theories and models put forward by these two schools, many studies have been conducted. The findings of these studies have deepened our understanding of organizational dynamics and provided useful suggestions for dealing with innovation and change. We can create more successful interventions to improve organizational performance by having a better understanding of how people and organizations think and learn. The main purpose of this article is to examine the concepts of the cognitive school and the learning school in more detail and assess their application in management practice. A deeper understanding of these two schools is expected to yield new approaches to improving organizational competitiveness and strategic efficacy. In addition, the relationship between learning and cognitive processes will be highlighted, as well as how they influence each other when making strategic decisions. The article will begin with a literature review that summarizes the main theories and models from both schools to build a comprehensive case.

METHODS

This study employs a qualitative approach with a literature review as its methodological foundation. Data were collected systematically through the examination of scholarly sources, including books, academic journals, and relevant documents discussing theories of organizational cognition and learning. The collection process involved careful reading, note-taking, and analysis of materials selected for their relevance and contribution to understanding strategic thinking and organizational adaptation. The data were then analyzed descriptively and comparatively to identify the key principles and conceptual distinctions between the Cognitive School and the Learning School, with particular emphasis on cognition, perception, reasoning, and organizational learning processes. The analysis was grounded in the strategic theory classification proposed by Mintzberg, Ahlstrand, and Lampel (1998), and further supported by complementary models such as incrementalism, experiential learning, and strategic venturing. This method was chosen to provide an in-depth conceptual exploration and critical reflection on how individual cognition and organizational learning contribute to effective strategy formulation in dynamic environments.

RESULTS AND DISCUSSION

A. The Cognitive School

The need to understand how people and organizations learn is increasingly urgent in an increasingly complex and dynamic world. The cognitive school and the learning school are two major schools of thought in strategy and management studies that have emerged as important pillars in this context. Both schools provide different and comprehensive perspectives on the thinking and learning processes that occur in organizations and how these processes can affect long-term success and strategic decision-making. The cognitive school, also known as the information-processing school, focuses on how people gather information, create knowledge, and make decisions. This method places great emphasis on the role of perception, reasoning, and interpretation in choosing the best course of action. The cognitive school focuses more on strategy formation as a mental process (Mintzberg, H., Ahlstrand, B., and Lampel, J., 1998).

According to cognitive thinking, in order for managers and leaders to make wise decisions, they must understand how the human brain interprets and processes information. The main concerns are cognitive biases, mental models, and cognitive maps. Gaining knowledge about how the human brain functions is essential to developing and executing strategies more skilfully. Learning School or known as learning flow places more emphasis on the learning process internal learning that takes place within the company. Organizations are viewed in this school as living, breathing entities that are continually learning and adapting to their environment. Individual, group, and organizational learning are just a few of the mechanisms that shape organizational learning. The learning school emphasizes that gaining experience, trying new things, and reflecting are essential to building strategic knowledge and skills. This methodology also emphasizes the importance of an organizational culture that fosters ongoing education and creativity. In short, the learning school is more about strategy formation as an emergent process (Mintzberg, H., Ahlstrand, B., and Lampel, J., 1998). Both schools are relevant to academics and industry practitioners. Gaining a competitive advantage in today's dynamic business world requires the capacity to understand and modify strategies based on cognitive knowledge and organizational learning.

Companies that can quickly learn and adapt to change will be better able to survive and grow in the face of technological disruption than companies that take longer to learn. The management and strategy literature has benefited greatly from the historical contributions of the cognitive school and the learning school. Much research has been conducted to test the theories and models put forward by these two schools. The findings of this research have deepened our understanding of organizational dynamics and provided useful suggestions for dealing with innovation and change. We can create more successful interventions to improve organizational performance by having a better understanding of how people and organizations think and learn.

B. Learning School

The research method used by the researcher in this article is a literature study. This study uses a literature approach (research literature). In this study, the researcher uses data collection techniques through reading, recording, and processing research materials. Data collection is carried out by reviewing and developing several journals, books, and documents and other data sources related to the research. The learning school is one of ten schools of thought on management strategy identified by Henry Mintzberg and his colleagues in their

work on business strategy and management. In this context, the learning school does not refer to a particular educational institution, but rather to an approach or perspective in the formation of corporate strategy.

This approach emphasizes that strategy is not always produced through a formal and analytical process, but can also emerge from the continuous learning process in the organization. The learning strategy school views strategy creation as an evolving and emerging process driven by learning. Specifically, individuals in an organization develop strategies as they experience situations, learn to shape them, and use resources in those situations. According to Ahadiat, A. (2010), there are several learning models: 1. disjointed incrementalism: policy is something that is serial, always improving and fragmented. The policy is made to solve problems by exploiting existing opportunities. It should be understood that policy making is a never-ending process. 2. Logical incrementalism: while the planning school does not explain how they formulate strategies, the logical incrementalism model explains it based on the logic of gradual change (incremental). 3. Strategic venturing: evaluation of internal ventures depends on judgment, experience or in other words learning with the concept of strategic management strategic management: multi-perspective theoretical review 1-14 itself is more important than formal analysis. 4. Emergent strategy: this concept opens the door wider to strategic learning which is the result of individual leader efforts or supported by a small team.

C. Premises of the Learning School

1. The complex and unpredictable nature of the organization's environment and of knowledge diffusion is an impediment to purposeful control. The complex and unpredictable nature of the organization's environment and of knowledge diffusion is an impediment to purposeful control. The complexity of the organization's environment consists of three important parts.

a. Multiple Factors

The organization's environment is influenced by a variety of interrelated factors, such as technological developments, market dynamics, government policies, and social trends. This creates a complex web of interactions.

b. Rapid change

Factors in the external environment can change rapidly. For example, a new technological innovation can change the way an industry operates in a matter of months or government policies can change suddenly, affecting business strategy.

c. Uncertainty

With so many variables and complex interactions, it is often difficult to predict the direction of change in the external environment. This makes long-term planning a major challenge. (Iswahyudi, M. S., Irianto, I. et al. 2023).

Knowledge Diffusion in Organizations also involves three important things. (1) Distributed Knowledge, knowledge is not concentrated in one individual or group, but is spread throughout the organization. Each member of the organization has a different part of knowledge and insight. (2) Communication and Knowledge Transfer, so that knowledge useful, it must be communicated and transferred effectively throughout the organization. This process can be slow and complicated, especially in large organizations. (3) Variability in Understanding, the knowledge that is disseminated can be understood and applied differently by individuals in the organization, which can lead to variations in

execution and outcomes. (Maryani, D., and Nainggolan, R. R. E. 2019). Impediments to deliberate control include four parts. (1) Information Limitations, the complexity and uncertainty of the environment mean that managers often do not have complete or accurate information to make perfect decisions. The information they do have can be out of date or irrelevant in a short time. (DR HA Rusdiana, M. M., 2021) (2) Reactivity rather than Proactivity, in an unpredictable environment, organizations are more often in a reactive position, responding to external changes, rather than proactive, planning and controlling the future with certainty. (3) Limited Flexibility, deliberate control usually involves strict plans and procedures. However, in a changing situation, flexibility is key to survival and growth, meaning that too much control can be a hindrance. (4) Communication Complexity, slow and complex knowledge diffusion in the organization hampers the ability to take rapid and consolidated action. This reduces the effectiveness of deliberate control. (Sugiarti, E., Mukrodi, M., & Mawardi, S., 2022)

The complexity and uncertainty of the organizational environment and the diffusion of knowledge are major barriers to deliberate and structured control efforts. To address these challenges, organizations need to adopt a more flexible and adaptive approach, leveraging continuous learning and collaboration to deal with change and effectively exploit opportunities. Controls that are too tight and rigid can hinder an organization's ability to adapt and thrive in a dynamic environment. (Sanjaya, I. K. G., Hadiyat, Y. et al., 2024).

2. The organization should learn collectively, and not only through a set of selected individuals (managers), in order to not miss the appearance of any potential strategist. The organization should learn collectively, and not only through a set of selected individuals (managers), in order to not miss the appearance of any potential strategist. Collective learning in an organization is a process in which all members of the organization are involved in the acquisition, sharing, and application of knowledge to achieve organizational goals effectively.

This means that learning does not only occur among managers or selected individuals, but involves all levels of employees from various levels and departments. Some reasons for the importance of collective learning.

(1) Optimal Utilization of Knowledge, each individual in the organization has different knowledge and experience. By encouraging the participation of all members, the organization can utilize this variety of knowledge to gain richer and more comprehensive insights. (2) Supporting Creativity and Innovation, by involving all members of the organization, there are more opportunities for the exchange of new ideas and concepts. This creates an environment that supports creativity and innovation, because new ideas can come from various sources. (3) Increasing Involvement and Ownership, when all members feel that they have a role in the learning and decision-making process, this can increase their involvement in the overall success of the organization. They feel more connected to the vision, mission, and goals of the organization. (4) Avoiding Mistakes and Bad Decisions, by involving many perspectives, the organization has a greater chance of detecting and correcting mistakes or deficiencies in strategic thinking or plans. This helps prevent bad decisions or ineffective policies. (5) Leadership and Skills Development, learning collectively allows individuals to develop leadership, collaboration, and communication skills. This can create a strong foundation for the development of future

leaders in the organization. Why collective learning? Why not just a select group of individuals?

There are several reasons, including.

- a. Limited Perspective A select group of individuals may only have a limited view or, a uniform perspective. This can result in more innovative and effective solutions or strategies being missed.,
 - b. Potential Talent Ignored; By involving only a small group of individuals, organizations risk missing out on the talent and strategic expertise that other members may possess. This can hinder the organization's ability to adapt and evolve. Lack of Support and Involvement: When only a small number of individuals are involved in the learning and decision-making process, this can reduce the sense of ownership and involvement of other members in the organization's success. This can hinder the organization's readiness to respond to change or crisis.
 - c. Unrepresentative Policies; Decisions made by a small group of individuals may not represent the interests or perspectives of all members of the organization. This can lead to policies or strategies that are not in line with the needs or goals of the organization as a whole. Collective learning within an organization is key to creating an environment that supports innovation, engagement, and continuous learning. By involving all members, organizations can harness the full potential of the diverse knowledge, talents, and perspectives that their members possess. This helps ensure that organizations can continue to grow, adapt, and achieve their goals in a rapidly changing and complex environment. (Tahir, R., Aulia, D. I., Sunarto, S, 2023)
3. Learning does not follow a pre-established path since it can arise in totally unexpected ways. In spite of this unpredictable behavior, successful initiatives always create streams of experiences that can converge into patterns that become emergent strategies that once recognized, should be purposefully formalized.

Learning does not follow a pre-established path since it can arise in totally unexpected ways. Despite this unpredictable behavior, successful initiatives always create streams of experiences that can converge into patterns that become emergent strategies that once recognized, should be purposefully formalized. Learning in this context refers to the process by which organizations accumulate knowledge and insights from their practical experiences, which can include both successes and failures.

A strategic pattern is a series of actions or approaches that have proven effective in achieving organizational goals. The characteristics of learning and the emergence of unexpected strategic patterns can be viewed in several aspects

- a. Flexibility in Learning Learning does not always occur according to a predetermined plan. Organizations must be prepared to respond to changes and opportunities that arise in their environment with flexibility and creativity.
- b. The Possibility of Unexpected Emergence Learning can emerge from completely unexpected situations or experiences. This can happen when organizations are faced with new challenges or when they test new ideas or strategies. Creating New Strategic Patterns involves (1) Experience Streams, although learning can occur unexpectedly, successful initiatives will create experience streams that can be aligned and turned into recurring patterns. (2) Recognizing New Patterns, organizations need to monitor and analyze their experience streams to identify patterns that are

developing and working. (3) Deliberate Formalization, once these patterns are recognized and recognized, they must be deliberately formalized into new strategies. This involves adjusting organizational processes, policies, and work practices to reflect these successful patterns. Example: For example, a company may find that an unconventional marketing strategy, such as focusing on viral marketing on social media, results in significant growth in their sales. Although this strategy emerged unexpectedly, the organization may then recognize successful patterns in this marketing approach and decide to integrate it into their broader marketing strategy.

Learning in organizations often does not follow a predetermined path and can emerge in completely unexpected ways. However, successful initiatives always create a flow of experiences that can serve as patterns that form the basis of new strategies. It is important for organizations to be open to unexpected learning and to intentionally recognize, develop, and integrate these successful patterns into their organizational practices. (Tampubolon, M. P. 2020)

4. The role of leadership in this context is not to deliberately create strategies but to manage the process of strategic learning from which new strategies can arise. The role of leadership in this context is not to deliberately create strategies but to manage the process of strategic learning from which new strategies can emerge. The role of leadership in this context is how organizational leaders manage and facilitate the process of strategic learning within the organization. Strategic learning is the process by which organizations accumulate knowledge and insights from their experiences to create new strategies and adapt to changing environments.

The role of leaders in this case is:

- a. Directing Thinking and Culture, leadership is responsible for shaping an organizational culture that supports learning and innovation. They can direct the organization's thinking to be open to new ideas and willing to take risks.
- b. Encouraging Collaboration and Communication: leadership must facilitate collaboration and communication across departments and levels within the organization. This allows for the exchange of ideas and experiences necessary for strategic learning.
- c. Building an Experimental Environment: leaders need to create an environment that allows for safe experimentation and failure. This provides opportunities for members of the organization to learn from their experiences and create new strategies.
- d. Focus on Process Management, the role of leadership is not to create strategy directly, but to manage the learning process that can produce new strategies. They provide the direction and support necessary to facilitate the creation of strategy from the bottom up. Providing Resources and Support, leaders are responsible for providing the resources and support necessary for the learning process, such as training, technology, and time
- e. Facilitate Reflection and Evaluation, leadership must also facilitate reflection and evaluation of strategic experiences and outcomes. This helps organizations learn from their mistakes and successes. The role of leadership in this context is to manage the strategic learning process within the organization, not to create strategy directly. Through direction, support, and coaching, leadership helps facilitate the creation of new strategies that emerge from experience and collaboration across the

organization. (Prameswari, Y. 2022).

D. The Criticism of the Learning School (Criticism of the Learning School)

1. Lack of Structure and Focus One of the main criticisms of the learning school approach is the lack of clear structure in the strategy-making process. This approach emphasizes learning and adaptation rather than formal planning, which can lead to a lack of focus or clear direction for the organization.
2. Uncertainty and Uncertainty In an uncertain and dynamic business environment, relying too much on emergent learning can be challenging. Organizations may find it difficult to respond quickly and effectively to environmental changes without a clear strategic plan.
3. Limitations in Large Organizational Contexts Learning Schools may be more appropriate for relatively small and flexible organizations. In large organizations with complex hierarchical structures, implementing collective learning can be difficult due to coordination and communication challenges.
4. Delays in Decision Making The continuous and collaborative learning process may slow down decision making. In situations where rapid response is needed, this approach can be inefficient.
5. Difficulties in Measurement and Evaluation Assessing the effectiveness of collective learning and identifying successful strategic patterns can be difficult. Without clear metrics or evaluation tools, it is difficult to know whether organizations are truly growing and learning from their experiences.
6. Resistance to Change the Learning School approach may require significant cultural change within the organization, which may be met with resistance from members of the organization who prefer to maintain the status quo or who are not used to a more open and collaborative approach. While the Learning School approach offers many benefits, including flexibility, rapid adaptation, and employee empowerment, it also has its own criticisms and challenges. It is important for organizations to consider their own context and tailor their strategy-making approach to their unique needs and characteristics. Sometimes, a more structured, formal planning-oriented approach may be more appropriate, while in other situations, the more flexible and adaptive approach of the Learning School may be more effective. (Ratna Dewi, 2019).

CONCLUSION

The cognitive school places great emphasis on the use of unique thinking processes to make strategic decisions. This method focuses on the understanding, processing, and interpretation of information by managers and leaders to develop strategies. This theory, which is rooted in cognitive psychology, emphasizes the importance of understanding, perception, and interpretation when making decisions. The important things in the cognitive school are as follows. 1. Individual Thinking and Analysis: Highlights the importance of individual thinking in developing action plans. 2. Mental Models: One of the key ideas is the mental models that managers use to understand and create strategies. 3. Knowledge-Based Process: Strategy is believed to be a process that relies heavily on cognitive abilities and knowledge. 4. Cognitive Limitations: Recognizes that a person's cognitive biases and limitations can affect the way they make strategic decisions. The learning school highlights that developing successful strategies requires organizations to be able to learn and adapt. Organizations can increase their flexibility and resilience in the marketplace by implementing continuous learning processes that help them identify and react to environmental changes. This method also recognizes that developing

dynamic, forward-thinking strategies is greatly aided by collective learning—from both successes and failures. Successful strategies adapt, as follows. 1. Dynamic Process Strategy is the end product of an ongoing learning process, not something static. 2. Organizational Learning The main emphasis is on learning at the organizational level, where success depends largely on an individual's capacity to gather, evaluate, and act on information. 3. Feedback and Adaptation Through an efficient feedback process, organizations must continually adapt to changes in the environment. 4. Collaboration and Experimentation 5. Encourage departments and individuals to work together and experiment to produce creative solutions and better tactics. The Cognitive School and the Learning School both provide a broad perspective for understanding strategy development and implementation in business. The Learning School places great emphasis on the value of continuous learning and adaptation in organizational strategy, while the Cognitive School highlights the importance of individual cognitive processes in strategic decision-making. Combined, the two offer a comprehensive understanding of how businesses can improve their effectiveness and responsiveness in managing the complexities of a complex business environment.

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