Sequences of Learning Types for Organizational Ambidexterity

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Sequences of Learning Types for Organizational Ambidexterity

INTRODUCTION

Ambidexterity involves strategies for effectively managing the inherent tensions between short-term stability and long-term investments, a challenge known as the exploitation-exploration paradox. Despite the acknowledged importance of learning in the context of ambidexterity, there is a limited understanding of how various forms of organizational learning are employed over time in projects focused on either exploitation or exploration. This gap in knowledge is significant because the timing and sources of knowledge acquisition that support innovation can significantly impact the success of an ambidextrous approach. In essence, ambidexterity not only requires balancing the conflicting demands of exploitation and exploration but also necessitates the integration of both internal and external knowledge sources.
Nurturing a culture of continuous learning is essential as it fosters adaptability.

Ambidexterity within organizations involves balancing the seemingly contradictory elements of exploration and exploitation. It's not just a balancing act but a complex interplay of critical components. First, nurturing a culture of continuous learning is essential as it fosters adaptability. An open organizational mindset and a readiness to embrace paradoxical cognitive frames are equally crucial. Diverse individual experiences provide fertile ground for ambidexterity, and resource flexibility moderates the balance between exploration and exploitation. Coordinating structures, which include integration, differentiation, resource mobilization, and collaboration, play a pivotal role in establishing ambidexterity. Cognitive acceptance of paradox and leadership's guidance further enhance this delicate equilibrium.

The outcomes of ambidexterity are improved performance and successful product development. The link between ambidexterity and organizational learning is also vital. Learning for exploration and exploitation is not mutually exclusive but coexisting, yet the sequencing of learning types throughout the innovation process remains insufficiently explored. The study focuses on two core learning forms: experiential and vicarious. Experiential learning involves hands-on engagement with internal knowledge creation, while vicarious learning centers on external observation and inference. This dual focus enables organizations to balance internal and external knowledge creation effectively, impacting their ability to navigate the exploration-exploitation tightrope.

LEARNING-TYPE SEQUENCING FOR EXPLOITATION AND EXPLORATION

Understanding the sequence of learning types in organizational processes is crucial for achieving ambidexterity. Exploitation, which involves enhancing existing expertise, often begins with experiential learning to leverage in-house capabilities during the early stages of innovation. As projects progress into the development phase, issues like technical complexity and stakeholder management become prominent. At this point, vicarious learning from similar industry peers, such as competitors, becomes valuable as it offers insights derived from their experiences. However, during the implementation phase, there's a shift back to experiential learning. Organizations recognize the need to directly engage with customers and stakeholders to gather feedback and fine-tune their innovation.

On the other hand, exploration ventures into uncharted territory, focusing on search, variation, risk-taking, and experimentation. Here, a balance between experiential and vicarious learning is crucial right from the project's initiation. Both direct experience and external observations play a role in generating the unique insights necessary for radical innovation. This equilibrium between learning methods continues during the
Our aim is to lay a strong foundation for future research in this area.

While experiential learning is vital for both exploration and exploitation, there are distinctions in how these learning types are sequenced and their external orientation. This raises the question of how organizations can effectively balance exploitation and exploration. Structural forms play a pivotal role in fostering an exploratory orientation, leading to greater integration—a contextual approach. In this study, we explore structural differentiation involving separate units for

**Figure 1: Learning Sequences**

Figure 1 outlines the learning sequences for exploratory and exploitative innovation. It shows how different types of learning evolve during the innovation process. The upward slope signifies the accumulation of knowledge over time. These sequences and their relevance for organizational ambidexterity are derived from our analysis of projects at Calabasas and Palisades, with potential variations in other industry sectors.

Finally, during implementation, the emphasis shifts back to experiential learning as organizations internalize the lessons needed to sustain the success of their new offering.
Organizations striving for ambidexterity can enhance their exploratory and exploitative efforts by implementing structures that facilitate knowledge acquisition from various sources.

Organizations striving for ambidexterity can enhance their exploratory and exploitative efforts by implementing structures that facilitate knowledge acquisition from various sources. Technology brokering, the practice of establishing connections across different industries, is a valuable approach. It serves two key functions: identifying external knowledge from diverse sources and integrating this knowledge to enrich the organization's experience base. To integrate technology brokering into structures supporting ambidexterity, organizations should define specific roles.

In exploratory innovation, both experiential and vicarious learning are essential. Vicarious learning involves gaining knowledge from dissimilar sources outside the organization. This external focus is vital, especially in the initiation and development phases of exploration. To support this, cross-industry technology brokering roles play a critical role. These brokers interact with organizations in different industrial contexts, summarizing and integrating external knowledge to make it usable for exploration.

In the pursuit of ambidexterity, organizations must consider how they sequence and implement different types of learning in their innovation processes. In the context of exploitative innovation, which involves refining and enhancing existing products or services, organizations emphasize vicarious learning from similar referents, often competitors. This requires structures like intra-industry technology brokering roles. This external focus becomes prominent during the development stage of exploitative innovation.

In addition to structural considerations, organizations seeking ambidexterity need integration mechanisms. Flexible and targeted integration mechanisms can balance exploration and exploitation without requiring a comprehensive shift in organizational culture. Here, cross-unit interfaces incorporating both cross-industry and intra-industry brokerage roles are essential, serving as bridges between different product development activities.

The timing of these cross-unit interfaces aligns with experiential learning, crucial for ambidexterity, as organizations consistently revert to it during the implementation phase of innovation. This integration fosters a deliberate focus on experiential learning, enriching the organizational knowledge base.

In summary, the sequencing and integration of learning...
Stage of the Innovation Process

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<td>Cross-industry technology brokerage to leverage vicarious learning from dissimilar referents (<em>Exploratory Innovation</em>)</td>
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Table 1: Value Propositions

types, along with the structural and organizational mechanisms, are vital for organizations aiming to achieve ambidexterity in biopharmaceutical innovation. Further research can explore whether these mechanisms apply differently across industry sectors.

Table 1 summarizes the various propositions throughout the innovation process for both exploratory and exploitative projects.

CONCLUSION

The research presents a valuable contribution to the understanding of how organizations can successfully achieve ambidexterity by effectively aligning structural differentiation and integration mechanisms with various stages of innovation. This enhances comprehension of organizational learning and its pivotal role in driving technological innovation while maintaining a delicate equilibrium between incremental and radical advancements. We underscore the symbiotic relationship between experiential and vicarious learning, advocating that these two approaches should be integrated to optimize innovation strategies.

From a practical standpoint, the research serves as a valuable resource for managers seeking to navigate the complex landscape of technology brokering roles and their timing within the innovation process. Executives aiming to foster ambidexterity can leverage the model's insights, with a particular emphasis on the significance of both experiential and vicarious learning at distinct phases of innovation. This underscores the need for creating incentives that encourage both learning paradigms and facilitating seamless transitions between them as new product development evolves.
ABOUT THE AUTHOR

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