

Modes of Organizational Learning

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The appeal of organizational learning ought to be obvious; in our knowledge society, learning faster than the competition may be the only real sustainable competitive advantage. In this article, we explore the concept of organizational learning and elaborate on three types of organizational learning (i.e., single-, double-, and triple-loop learning) as well as identify the circumstances in which engaging in each type is most effective.

Introduction

“A successful company is one that can learn effectively” - Arie de Geus¹.

Learning is essential for an organization to adapt, improve and innovate. We are all conditioned to learn from the obvious consequences of our actions. We do not touch the hot stove again after the first try. We are also conditioned to identify obvious problems and apply quick solutions. Quick solutions do not always address the root issue and often lead to unintended consequences in other parts of the system or organization.

Having grown up under the Western mindset, we are typically not conditioned to examine underlying systems and assumptions. We don't often hear questions such as “what must we learn in order to accomplish a task” or “how do our mindset (paradigms) limit our perspective on a situation and therefore our growth.” As consultants, we see this everyday when assisting organizations with learning and change. It is our job to help organizations learn in a more profound way and gain insight that can take the organization to a new level. In order for organizations and their members to effectively evolve and develop over time, different types of learning must take place.

Different Types of Learning

Even before the 1990 publication of Peter Senge's seminal work, *The Fifth Discipline: The Art and Practice of the Learning Organization*, organizational learning was a hot topic among managers, consultants, and academics. Based in part on the work of organizational theorists Chris Argyris and Peter Senge, as well as pioneering thinkers such as Gregory Bateson, the organizational learning literature distinguishes between three different types of learning: single-loop, double-loop, and triple-loop learning.^{2 3}

b. Single-loop Learning

When organizational members engage in single-loop learning, they are focusing primarily on their actions and not on underlying assumptions or overt patterns of behavior. In this form of learning, organizational members learn new skills and capabilities through incremental improvement. Employees accept the organization's “rules” without question and seek to improve performance within the context of those rules. In this sense, organizational members are engaging in what psychologist Jean Piaget termed “learning by assimilation.” Learning by assimilation is defined as “taking in information for which the learner already has structures in

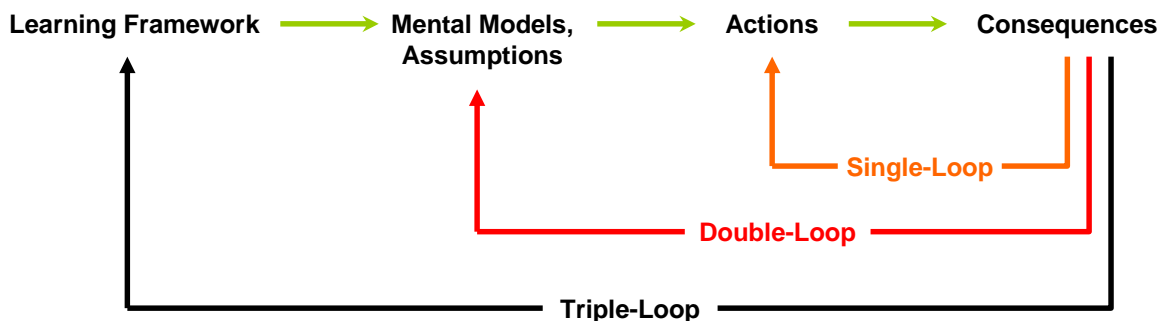
¹ de Geus, A. (1997). *The living company: Habits for survival in a turbulent business environment*. Boston, MA: Harvard Business School Press.

² Senge, P.M. (1990). *The fifth discipline: the art and practice of the learning organization*. New York: Doubleday/Currency.

³ Bateson, G. (1972). *Steps to an ecology of mind*. San Francisco: Chandler Publishing Company.

place to recognize and give meaning to the signal”⁴. In this single-loop learning framework, organizational members detect errors and recognize them as deviations from the ideal. There is a desire to remedy these errors by doing what is already being done, but doing it better. Consequently, single-loop learning can be characterized by “how” rather than “why” questions. Single-loop learning is appropriate when tackling routine and repetitive issues that do not require challenging one’s mental models, assumptions, or learning framework. As such, single-loop learning is limited in scope, but is still a necessary part of standard operating procedures.

Learning Loops



b. Double-loop Learning

This stands in stark contrast to double-loop learning. Double-loop learning is similar to what Piaget called “learning by accommodation.” As opposed to the assimilation/single-loop learning framework, individuals learning by accommodation undergo internal structural change in their beliefs, ideas and attitudes. By learning in this manner, individuals (and organizations) remain in harmony with the fundamental and continuous changes occurring in the external world.

In the context of organizations, double-loop learning leads to insights about why a particular approach or solution to an organizational problem actually works. Here the focus is on insight, about asking “why” or “so what” questions that help to improve understanding and develop new knowledge. With double-loop learning, organizational members must recognize the underlying patterns of their thinking and behavior. In doing so, they fundamentally reshape their thoughts and actions. With this form of learning, error detection still occurs, but members challenge their mental models and assumptions to try and understand the existing organizational policies or structures that help to bring these errors about. Double-loop learning is reflective and is appropriate when dealing with complex, non-programmable issues. By recognizing that they are part of a system of interaction, members can begin to develop the necessary skills to impact the system.

⁴ de Geus, A. (1997). *The living company: Habits for survival in a turbulent business environment*. Boston, MA: Harvard Business School Press, p. 59.

Three Types of Organizational Learning

Type of Organizational Learning	Type of Work (Change)	Appropriate for What Kind of Situation?	Results in a Change of Action?	Challenges your Assumptions and Mental Models?	Challenges your Learning Framework?	Focus of Learning Type?
Single-Loop Learning	Technical	When tackling routine, repetitive issues	Yes	No	No	Improving
Double-Loop Learning	Technical/ Adaptive	When tackling complex, non-programmable issues	Yes	Yes	No	Understanding and Improving
Triple-Loop Learning	Adaptive	When you want to learn how to learn	Yes	Yes	Yes	Transforming, Understanding, and Improving

Single-loop learning: Occurs when errors are detected and corrected without modifying a firm’s existing policies, goals, or assumptions.

Double-loop learning: Occurs when errors are detected and corrected such that a firm’s existing policies, goals, and/or assumptions are called into question and challenged.

Triple-loop learning: Occurs when firms learn how to effectively carry out single- and double-loop learning. This requires identifying the various factors (both individual and organizational) that help to facilitate organizational learning. With triple-loop learning, firms “learn how to learn.”

NOTE: The information in this table is based on work by Chris Argyris, Donald Schön, Ron Heifetz, Gregory Bateson, and Peter Senge.

c. Triple-loop Learning

Triple-loop learning encompasses and transcends both single- and double-loop learning. While single-loop learning asks questions pertaining to actions and double-loop learning asks questions regarding underlying mental models and assumptions, triple-loop learning focuses on transforming organizational members by helping them *learn how to learn*. That is, triple-loop learning focuses on the ability to effectively utilize single- and double-loop learning. As such, triple-loop learning challenges one’s existing learning framework as well as one’s mental models and assumptions. Ideally, triple-loop learning links all of the local learning *units* into a unified learning *organization*. In accomplishing this task, organizational members learn how to tap the collective knowledge embedded in various parts of the organization. By learning how to learn over time, organizational members discover what facilitates or inhibits their learning and can thus produce new strategies to develop their knowledge.

While single-loop learning focuses on correcting errors without questioning existing procedures or underlying assumptions, double-loop learning detects errors, questions the validity of the procedures in place, and corrects or modifies the assumptions and procedures so as to prevent future errors. Triple-loop learning resides at a higher level of abstraction; it develops the organization's ability to learn about learning.

The Role of Play in Learning

This typology is useful as an overarching framework in that it allows managers to align the correct type of learning with its associated challenge. However, it fails to answer important underlying questions such as: How does my organization best learn? How can we engage in effective decision making? Perhaps more importantly, how can we engage in an effective discovery process that leads to innovation?

Based on the work of D.W. Winnicott, Arie de Geus argues that a decision making process that accelerates learning can only do so by making skillful use of *playing*⁵ ⁶. In fact, "the essence of learning is discovery through play"⁷. The logic behind both Winnicott's work and de Geus' argument is rather simple.

The first premise is that play is always conducted with something in hand—a "toy." As opposed to playing a game or a sport, when playing with toys, there is no way to win. The person playing with the toy is simply experimenting with this object in some way that represents reality. A toy as it is meant here can be something as simple as an actual child's toy (a doll, for example) or as complex as a prototype hybrid car. What is important is that the toy itself is a representation of the real world; accordingly, the learner can experiment with the toy without having to fear the consequences of making a mistake.

The main thesis of Winnicott's work is this: Underlying all this play, there is a very serious purpose: *The ability to play with reality allows an individual to better understand the world we live in.* Thus, these "toys" are transitional objects in that they help people to transit from one phase in life to the next; in other words, people playing and learning in this way move from one level of understanding of the world to another. In short, play best allows us to learn.

In organizations, we find this type of play in simulations and prototype experiments, which can range from day-to-day operations in R&D to complex strategic planning exercises conducted by upper management. In these situations, de Geus argues that the key point to remember is that, "The more in-depth the simulation, and the more that 'play' triggers the imagination and learning, the more effective the decision-making process seems to be"⁸.

⁵ Winnicott, D.W. (1971). *Playing and reality*. New York: Routledge.

⁶ de Geus, A. (1997). *The living company: Habits for survival in a turbulent business environment*. Boston, MA: Harvard Business School Press.

⁷ Ibid, p. 64.

⁸ Ibid, p. 73.

In Conclusion

To summarize, organizations engage in different types of learning for different types of purposes.

While single-loop learning is appropriate for simple problem-solving, it is a learning approach that would be ineffective for solving problems that require the higher-level thinking embedded in double- and triple-loop learning. At the same time, this is not to say that single-loop learning is any less valuable as a form of learning than either double- or triple-loop learning; applying triple-loop learning in a situation that calls for single-loop learning would be just as erroneous in that it would be inefficient (and as such, less effective).

Ultimately, there is evidence that the most effective forms of learning - regardless of whether it is single-, double-, or triple-loop - can be developed not through rational analysis, but from the freedom of playful experimentation.

The challenge for managers and consultants is to be able to effectively apply these unique types of learning to their appropriate situations, and to do so in a manner that allows organizational members the opportunity and the time to interact, reflect, and develop shared mental models. Without these ingredients, there will be no playing and learning will not occur.

About the Author

As President of Kollner Group, Soren Eilertsen has helped numerous clients in different industries activate and align leadership teams around business results and innovation. Clients praise him for his ability to guide business leaders and teams to insights and new levels of success.

Soren works as a business consultant, educator and leadership coach specializing in strategy and organization development. He helps clients build effective leadership teams, create winning strategies, and obtain success with change initiatives.

Since establishing Kollner Group in 1999, Soren has helped shape the strategic directions and create results for numerous businesses and non-profits in both Europe and the United States. He has worked on world-class endeavors and been fortunate to engage with leaders in great organizations such as AECOM Design, American Suzuki, McKesson, Mission Critical Technologies, MK Sound, Motown Museum Project, Nordisk Film Biografer, Pacific Coast Producers, Pacific Theatres, Polar Air Cargo, Rand, System Simulations, UC Health System and Vulcan (Paul Allen).

Combining his education as a psychologist with years in corporate executive roles, Soren takes a unique integral approach that enables him to examine a business from the perspective of its internal leadership, systems, and culture as well as from the market-, business value-, and external customer perspectives.

Visit www.kollnergroupp.com to find out more about Soren Eilertsen and the Kollner Group.

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