

The Role of Intellectual Capital in building a Learning Organization: Inferential Reading

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Summary:

This research paper aimed to demonstrate the role of intellectual capital in building the learning organization, and the inferential approach was adopted to achieve that goal. The research began with the theoretical review of both concepts and foundations of their meanings and characteristics as well as the importance of each one, and through this review the role of intellectual capital with its three components - human capital, structural capital, relational capital - in building and shifting towards the model of the learning organization was devised. The research concluded that the organizations need to become learning and to achieve this they should possess intellectual capital that facilitates, accelerates, enhances and ensures continuity in learning.

Keywords: intellectual capital; learning organization; organizational learning; human capital. **Jel Classification Codes:** M12

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I- Introduction:

Since change is an inherent characteristic in the business world in the age of knowledge learning must be an attribute of business organizations. Knowledge and learning have become imperative for the organization's survival and continuity because learning has become a crucial role in aligning organizational forces with the unreliable environment, and the organization must be consciously managed towards learning so that the latter becomes an important component of its values, vision, goals, and evaluation of performance and in its daily operations, that is the learning organization.

On the way to a shift towards a knowledge economy, some administrative concepts have emerged that have been associated with this new paradigm, such as knowledge management, intellectual capital, the learning organization, and organizational learning. These concepts seem to be similar and sometimes overlap at other times, but it is very clear that they are closely related to each other and this is what the opinion of the researchers went to, and the reason is that they are all linked to knowledge, whether related to obtaining it or exploiting it and maximizing its return.

If this study deals with the concepts of intellectual capital and the learning organization, then it must be said that they are closely related to each other, as we cannot talk about learning organizations without these organizations being aware of the value of knowledge in them and embodied in their intellectual capital, i.e. aware of the importance of their evaluation in achieving value for these organizations. On the other hand, we cannot talk about the concept of intellectual

capital in light of traditional organizations that do not recognize the importance of learning and knowledge but rather are oriented towards production and profits.

The aim of this theoretical review paper is to deduce what is valid to say that intellectual capital has an effective role in building the learning organization, and the explanation is that the organization's acquisition of intellectual capital enhances its ability to achieve learning quickly, easily, effectively, and continuously.

II- Theoretical framework: intellectual capital

However, it achieved consensus regarding its increasing role as a tool for creating value and for achieving discrimination in light of the majority of economics heading towards the new economy and in light of the dynamic that has become characteristic of the business environment, and in light of the dynamic that has become the hallmark of the business environment, and this is perhaps the most important reason that has led to a rush of scientific efforts and research to discover ways to benefit from and maximize intellectual capital.

The meaning of intellectual capital has witnessed a continuous development associated with the renewal of studies and researches. We often find that its definition relates to the human resource in the organization, which was called human capital. Specifically, we find has been linked directly to a distinct category of human resources, which can bring about excellence for the organization. Bontis, who is considered to have contributed to the subject of intellectual capital, indicates that the latter represents the sum of all that most individuals in the organization know so that it achieves a competitive advantage in the market ¹. It represents the distinct capabilities of a limited number of individuals working in the organization, enabling them to make intellectual contributions that help the organization increase its productivity and achieve high levels of performance compared to its competitors.

At other times, we find that the definition of intellectual capital has been associated with the terminology of intangible resources or assets, where a number of other researchers - many of them also - have focused on defining the concept on capabilities and knowledge as intangible assets, assets and resources used by organizations to create value. In their view, organizations depend for this - to create value - on tangible and intangible resources represented in intellectual capital. Brooking defines it as the organization's intangible assets that give it the ability to perform its functions ². So the concept of intellectual capital is mainly based on the organization's intangible, hidden or invisible assets, which would create and maximize interest to shareholders³.

In other places, we find that the concept of intellectual capital is equivalent to the concept of knowledge in general, whether results or assets, as Marr defined it as "the set of knowledge assets that an organization can possess, that effectively contributes to improving its competitiveness by adding value to the most important stakeholders of the organization.

In the context of talking about intellectual capital, we should also talk about its components, and here we can say that there is a good consensus to classify the components of intellectual capital into three capitals: human capital, structural capital and relational capital. The first is expressed by all human resources who have knowledge, experiences, skills, competencies and creativity, and are gifted from them as well ⁵. The second represents the strategies, processes, systems, procedures, organizational culture and intellectual property (including patents and copyrights) owned by the organization ⁶. As for relational capital aims to create value through the following relationships: relationships with clients, relationships with suppliers, relationships between organizations and investors, relationships with all other stakeholders present in the business environment, and are usually referred to as the networking relationships ⁷.



III- The learning Organization:

The developments that have occurred in the field of business and in the markets have made the organizations rethink the way they are managed in order to grow and flourish, and more precisely make them reconsider their options and retest their components that could be a barrier between them and the rest of the competitors, as this barrier exceeds the material capabilities and infrastructure structures to focus on what organizations know and how they can benefit from their knowledge to achieve a strategic advantage ⁸. So organizations always need to learn and adapt in

order to make improvements in their performance, and achieving that need is embodied in their transformation into a learning organization.

The learning organization was called this name because it is an organization that continues and persists in learning due to the instability in the business environment. Garvin asserts that the philosophy underlying the concept of the learning organization is that learning is an essential element if the organizations want to survive ⁹. So, we can imagine that the organization learns as a person learns. As Kolb notes that just as individuals learn in different ways, the same applies to organizations, because the latter as contexts of social interaction between individuals working together stimulate learning naturally and learning occurs through the nature of organizational life ¹⁰. Therefore, managers need to understand the nature of social interaction in their organizations and how the current behavior and routine leads to learning, and once management understands how its organizations learn, it can direct these learning processes towards what is strategically desired.

More clearly Moillanen defined a learning organization as a consciously managed organization with "learning" as a vital component in its values, visions and goals, as well as in its everyday operations and their assessment. The learning organization eliminates structural obstacles of learning, creates enabling structures and takes care of assessing its learning and development. It invests in leadership to assist individuals in finding the purpose, in eliminating personal obstacles and in facilitating structures for personal learning and getting feedback and benefits from learning outcomes ¹¹.

On the other hand, it is not possible to elaborate on the subject of the learning organization unless we follow it with a talk about the topic of organizational learning and, on the whole, it can be said that the concept of the learning organization is different from the concept of organizational learning, but it is completely impossible to perceive it without referring to organizational learning, and most researchers have indicated that organizational learning it is one of the fundamental processes for building an learning organization, as it is a difference between the structure of the organization and its operations.

This concept was associated with the work of many researchers, Argyris and Schon in 1978, Duncan and Weiss in 1978, Levitt and March 1988 who defined organizational learning as "the process by which an organization encodes its experiences and experiences that have occurred with it in the past and transforms it into a routine that guides organizational behavior." ¹².

In addition, Crossan and her colleagues believe that the concept of organizational learning is based on four assumptions that I have gathered as follows 13 :

- The concept of organizational learning is a term that oscillates between assimilation of new learning (exploration) and the use of what has been learned (exploitation).
- Organizational, multi-level learning: individual, group, and organizational.
- The three levels of organizational learning are related to social and psychological processes, induction, interpretation and integration, and institutional or organizational characterization. Knowledge awareness affects behavior and behavior (and vice versa).

For the process of building a closer look at the literature of the learning organization tells us to the fact that there is no single entry or an ideal strategy to build a learning organization. After the publication of the Senge book in 1990 - in which he presented his own model on learning organizations, there have been many scientific endeavours and efforts to present other or similar perceptions expressing models of learning organizations, and this makes it difficult for many organizations to turn to the learning organization because of the difficulty in choosing the appropriate model.

IV- Inferring the role of intellectual capital in building the learning organization:

Previous studies that combined the two concepts tend to show the role of learning in building and improving the intellectual capital of organizations, which is logical and absolutely correct because knowledge arises as a result of learning in its various forms, methods, and tools, and without the learning and knowledge acquisition we would not be able to talk about intellectual capital. Thus it is correct to believe that if we say that the organization is learning, this means that it is in constant renewal and improvement of itself, its knowledge and behaviors towards its existence and survival, and the organizations need to transfer and refine their knowledge resources according to environmental conditions, and this is possible through learning processes.

Intellectual capital represents the knowledge resources that exist in an organization at a particular point of time, and the way in which intellectual capital (knowledge resources) changes and develops over time depends on learning processes ¹⁴. So, the organization must learn to add knowledge to its knowledge capital or intellectual capital. However, what is important for this study is the inverse relationship, that is, the extent to which intellectual capital contributes and its role as an essential input for building the learning organization, and the literature on this is few.

The researcher's vision in this is that the organization's provision of intellectual capital with all its components, human, structural and relational, enhances its ability to achieve learning easily, quickly, effectively, and continuously. We start inferring that role with what Cymanow put forward, which emphasized that the ultimate goal of organizations is the situation in which the entire organization and all its different members are fully prepared and able to change constantly and that goal is achieved through learning. Therefore, organizations should diagnose their ability to learn by examining the state of organizational culture, its organizational structure, and evaluating its staff in terms of their capabilities and openness to change, their flexibility and motivation to learn ¹⁵. The elements mentioned reflect part of the components of intellectual capital.

In this regard, Prieto and Revilla assert that learning processes use knowledge resources and produce new or modified knowledge resources in order to understand the environment and take action to deal with its data. Then, learning and knowledge resources are intertwined in a reciprocally reinforced and repeated cycle ¹⁶. Noting the important role played by intellectual capital in building the learning organization, the two researchers stated the following:

"learning capability is composed of continually evolving knowledge resources (human, structural and relational) that flow through learning processes to continuously exploit and explore knowledge resources in accordance with the environmental conditions. Knowledge resources and learning processes are so tightly intertwined that it may be counter-productive to define learning capability as dependent on either one or the other. Thus both knowledge resources and learning processes must be combined to define the learning capability of any organization".

On the other hand, the impact of intellectual capital on the building of the learning organization can also be understood from the opinion of one of the pioneers of this field, which is March 1991, which



sees that there are two alternative forms of learning processes: exploration learning processes and exploitation learning processes. Exploration as a learning process is "experimenting with new alternatives that have unsecured returns, often negative, that is, exploration is an aspect of organizational learning that requires challenging existing knowledge, ideas and competencies with innovative concepts. This process revolves around studying the environment for new opportunities and includes activities such as research, discovery, innovation, risk and research. Accordingly, exploration and new knowledge can broaden the capabilities and scope of options available to the organization".

As for exploitation as a learning process, it includes "improving and expanding existing competencies, techniques and models." The basic thesis of exploitation is that it is possible to secure a comfortable position in the market by allocating sufficient resources to ensure the organization's current feasibility against its competitors, and therefore the focus is on revising and organizing existing knowledge and competencies. Therefore, through learning to exploit, organizations learn to improve their capabilities, apply their current knowledge, and focus on current activities in existing fields.

Through the March 1991 approach about learning in organization, we can read the role of intellectual capital in achieving learning for the organization, for exploration as a learning process does not take place easily, but rather needs explorers, any individuals with high theoretical knowledge and mature thought to carry out experiments and innovations, and on the other hand, they need motivation and desire for learning and exploration (human capital). Experimenting with new alternatives requires the availability of high potentials, technologies, resources, and procedures to implement it without bureaucratic complications (structural capital). Also, exploration in the organizational context has its goals and objectives, foremost among which is customer service, and therefore it needs to know everything that achieves customer service and includes its satisfaction to work for it (customer capital). As for the exploitation as a learning process, it is very clear that this process at its origin is based on exploiting the existing knowledge and intellectual assets with all its human, structural and relational in order to improve and expand its effectiveness.

Always and in the context of seeking to demonstrate the role of intellectual capital and its contribution to building the learning organization and through a review of the most important models that were interested in building it, one can infer from the Marquardt model, which indicated the necessity of having five subsystems ¹: learning, individuals, organization, technology and knowledge. The last four fall within the components of intellectual capital, as the system of individuals with their distinct skill, experience and knowledge represents human capital, and both the system of organization and what falls under it from the vision of the organization and organizational culture, strategies and organizational structure, and the technology system and what it includes under it tools, processes and devices in addition to the knowledge system, which mainly relates to knowledge management, all three of these subsystems represent the structural capital of the organization, the purpose of which is to encourage and support learning by material means that facilitate the flow of knowledge and its sharing. Marquardt confirmed the need of the learning organization for these subsystems to ensure learning in it, otherwise they wouldn't happen. It is a strong demonstration of the ability of intellectual capital and its necessity to transform into the learning organization, and even with the best results in terms of speed of learning, its ease, its effectiveness and its continuity.

For more detailed clarification, we can resort to clarifying the role of each of its three components and its contribution to promoting the building of the learning organization quickly easily, effectively, and continuously.

4.1. The role of human capital in building a learning organization

The concept of a learning organization is directly related to individuals, and all researchers agree that the organization learns through its people or human resources, and it is true that its learning is not equal to the total learning of its members, but it is absolutely

impossible to learn without them. It can be said that learning based on an intellectual and cognitive force is more effective towards what is intended to be learned because individuals who are considered within human capital can interact, ask, question and compare between recent and older data for example, and they can provide constructive and purposeful critical, they can understand any change or amendment and have more ability to deal and respond to change, simply because they are armed with their knowledge. Learning to learn is a continuity of the process, and here it can be said that human capital facilitates, speeds up and enhances the effectiveness of learning better than being a learner, just workers performing their tasks.

Dubees affirms the idea that any organization has logical, flexible and resilient resistance to changes is an organization that uses all the capabilities of its members to learn at all levels ¹⁸ and business organizations is only a result of the way of thinking and behaving by its members

so if we want to change an organization, then we should for individuals to change their way of thinking and doing, as well as if we want to change the organization to become learning one.

Explaining the role that human capital plays in shifting towards a learning organization can also be inferred from the Senge model of the learning organization, as its model is based on five disciplines ¹⁹, that are all directly related to individuals, and if true, it is linked to an optimal quality of human resources. Senge believes that learning requires workers who adopt holistic systemic thinking, and this is more effective for individuals who are distinguished and who understand the various data of work within the organization. The second discipline of Senge is related to excellence or personal mastery that reflects the ability of individuals to learn in the areas in which they excel, this will also improve and succeed if we are talking about workers that belong to human capital.

The third discipline relates to a shared vision, which requires a distinct elite of workers or leaders to develop it and it needs to be adopted and accepted by conscious individuals, which is embodied in human capital. As for team learning, they are essentially a group of individuals that reflects their ability to learn and improve performance, and it can be said that team learning based on human capital - that is, individuals with knowledge and intellectual capabilities - are more effective, learning and performing, because each of them if they contribute to the learning process The exchange of knowledge and discussions will give them a much better bid than just a worker who does not have that knowledge, but more than that it can be said that the opportunities for obtaining and sharing the implicit knowledge of knowledge workers are enhanced.

The most important discipline in this analysis is the mental models that reflect the ability of individuals to read the interpretation of their knowledge and information, and the ability is strengthened more and more if individuals are counted on human capital, which they were armed with their knowledge and experience, and therefore, the results of their interpretations and readings are more rapid and effective towards learning and performance.

It can also be said that human capital is an essential resource for the learning organization because its availability is necessary to achieve learning effectively, and this is possible through its contribution to:

- The accumulation of experiences and the development of knowledge and skills, which will improve the level of learning and performance of workers.
 Self-solving problems by enhancing empowerment opportunities for workers.
- Benefiting and learning from previous or scientific experiences.
- Learning from others by promoting opportunities for dialogue and sharing knowledge.

Lengnick-Hall (2003) considers human resource management a pivotal activity for developing and sustaining a focus on learning by facilitating continuous learning, identifying employee knowledge sources, understanding intermediaries that facilitate knowledge sharing and most importantly ensuring that knowledge is provided to workers²⁰. Other researchers have called for the need to revitalize the human resources management function to adequately respond to the new requirements of a knowledge



economy that reflect an urgent need for continuous learning. The revitalization of human resource management is achieved through the creation of new practices such as topic development, the creation of an enabling learning environment, as well as the acquisition and exchange of knowledge within the organization. Moreover, human resource management has a direct role in empowering employees by developing and building innovative, high quality skills to solve problems, and its contribution can lie in developing experiences in how to manage learning and restoring knowledge through lessons learned and highlighting the know-how, behaviours and practices required.

4.2. The role of structural capital in building the learning organization

If the organization wants to convert to become a learning, this should be accompanied by a shift in systems, structures, thought, culture and administrative practices in general. To understand the idea more clearly, we can refer to the difference between the traditional organization and the contemporary learning organization, as the latter are characterized by flat and flexible structures, and are based on work teams that self-manage, and systems that support participation and facilitate the flow of information, which is oriented towards adaptation and learning, which is embedded in its culture, values and style of management.

Sharing knowledge, exchanging experiences, and interaction among workers in general, as one of the forms of learning in the organization, helps and facilitates the transfer of learning from the individual level to learning at the collective level, and learning at the organizational level. To achieve this, the researcher Daum explains, "The organization needs the appropriate organizational infrastructure, innovative and stimulating culture, procedures and work plans that support the smooth and effective flow of knowledge and organization across the organization as a whole, and its flow between internal and external experts. In addition, the organization needs an appropriate IT infrastructure to support this knowledge sharing, which helps knowledge workers to work in a fruitful way. There is also a need for processes and technologies that help increase the effectiveness of knowledge-based value creation. This represents a structural capital, which can be divided into organizational capital and innovative and practical, it is a tool that makes the human capital and individual knowledge usable repeatedly to create value"

More specifically, it is possible to talk about the most important elements of structural capital such as organizational structure, organizational culture, and technological infrastructure, and to understand its impact and role in learning and building the learning organization, so how can these elements facilitate and enhance the shift towards the learning organization? The organizational structure as an organizational capital, its role in the learning organization is evident in what the researcher Örtenblad called "the learning structure" and according to his opinion it is required to include the following:

- The non-hierarchical structure (flat, consisting of lower organizational levels), which guarantees continuous learning and enables the organization to re-orient itself and perform new tasks.
- The high degree of decentralization means that the workers have a high degree of independence: the learning organization is decentralized because it works to extend the scope of power to the farthest point from senior management.
- Empowering employees: The learning organization is well aware that empowered workers can make better decisions than those provided by managers because they have the best information.

In addition to the organizational structure, the role of adaptive organizational culture should be highlighted as one of the components of structural capital towards learning and building the learning organization. Abu Kahdra and Rawabdeh point out: "The commitment to learning and the continuous improvement of the organization's productivity through learning is through an open culture to remove barriers that hinders learning and encourages participatory action, which encourages individuals to collective learning and provides opportunities for continuous learning for all of its members, as well as encouraging initiative, risk-taking and acceptance of change without resisting it".

Marsick and Watkins (1993) add that learning is easy in an organization that has a participatory and democratic culture, and where failures, accidents, breakdowns, mistakes become opportunities for learning to avoid all of this in the future. The learning climate according to Örtenblad involves:

- Effective leadership and a strong culture focused on learning rather than continuous blame and punishment.
- The learning environment is represented in the culture of the organization that gives learning a great value and encourages and rewards employees for bold initiative, and everyone within this culture bears the responsibility of learning for him and for others.
- The most difficult challenge an organization may face is developing a culture based on the values of learning.
- Individual learning should not only be facilitated, but should be encouraged.

As for the role of the organization's infrastructure, which is made up of a set of programs, systems, and means that the organization prepares for its individuals to work, it helps in developing their knowledge capabilities and exploiting them as they should, which are necessary for organizational learning. Nobody today can deny the extremely important role that technology plays in its various uses in business organizations, but its influence has been linked to concepts of the age of knowledge as intellectual capital and knowledge management that has become incomplete without them.

4.3. The role of relational capital in building the learning organization

Learning requires a relatively permanent change in perception and behaviour, and for the organization, it looks at how to develop, grow and renew itself to cope with the challenges of an increasingly complex and dynamic environment, in which customers, suppliers and competition are generally the most important factors that create change in it. So it can be said that if the organization has sufficient knowledge about these factors, it will facilitate and improve its learning and response to it, and this type of knowledge lies in the organization's relational capital.

Kotler believes that companies need continuous information about the main parties they deal with in the market from competitors, collaborators and consumers, the explanation of which is as follows:

• Information about consumers or customers: Consumers are people or facilities that buy the organization's products for final use or incorporate them into other products, and the service and satisfaction of these consumers is of course the reason for the existence of a marketing strategy, and for the latter to work well, this requires knowing many things about the targeted consumers, Kotler summarize it in the following questions: Who are the consumers? What do they need and what do they want? What are the goals that he is trying to achieve? How does a consumer make a buying decision? When are consumers ready to buy? Where do consumers prefer to buy? The answer to each of these questions is enough for the organization to learn from, benefit and build on consumer decisions.

Some researchers have indicated that clients can be considered a source of knowledge and learning, for example, the researcher Garvin sees that one of the activities of the learning organization is learning from others, including clients, because working with a specific customer can lead to better performance as a result of improved coordination and transfer of knowledge. Repeated interaction with a specific customer can improve an individual's learning and ability to provide satisfactory services to that customer, due to the following reasons:

- Repeated experience with a customer may provide in-depth knowledge and understanding from the customer's point of view, which in turn may enable greater effective implementation of the work.



- The continuous interaction of the worker with a specific customer gives him knowledge and experience that he can transfer across the organization, so that the benefit will have the greatest impact on learning and performance
- Because customers often do not prefer to exchange information with the provider of the service or product, frequent interaction may increase confidence between them and contribute to maintaining long-term relationships with the customer.
- The customer can also learn from his experience with the business contractor, and change his own practices to work more effectively. This mutual adaptation can lead to organizational learning from customer experience.

Relational capital is a tool to benefit from the organization's customers, because knowledge related to their tastes and satisfaction factors, suggestions, problems or objections about the organization's products is supposed to be present in the organization's databases, and the organization can learn from it in order to maintain the relationship or even to study transformations that may Showcases the consumption patterns of its customers.

- Collaborators Information: It includes information about those who assist the organization in carrying out operations and achieving its goals with consumers, middlemen and suppliers. Kotler sees that the organization must understand the needs of middlemen, distributors, wholesalers and retailers, and identify their goals, processes and commercial terms in order to gain their loyalty and enthusiasm. On the other hand, the quality of suppliers and their cooperation will have a significant impact on the success of the organization, as it occurs in some business organizations that suppliers play the role of the contributing partner in providing the best combination of quality, technology, service and price, and in other organizations they may reach more than that and contribute to preparing work designs for them. These are important approaches through which the organization can learn from and benefit from its relationships with suppliers, and this allows it to acquire relational capital.
- Information about competitors: The business world today requires that organizations collect accurate information about their competitors, about their goals and strategies, their strengths and weaknesses, about their suppliers and partners and other information that the organization can learn from in order to improve their competitive position.

In general, building more relationships and networks may lead to better obtaining of information, because people who have better communication skills through their communication with external parties from stakeholders, clients or suppliers have more opportunities to obtain different knowledge, and from it to maintain the head relationships tended to create a good interactive relationship with those external parties providing greater potentials, as business partners would share their professional technology with each other and organizations would gain more new knowledge from clients to improve their own organizational capabilities.

V- Conclusion:

The purpose of this research paper was to demonstrate the fact that the organization's acquisition of intellectual capital or knowledge resources enhances the chances of it becoming a learning organization, and theoretical review was relied upon to extract evidence to prove this relationship, whether directly or indirectly. The result was that organizations in the current era need to shift towards the model of the learning organization, and that achieving this transformation succeeds through its ability to develop intellectual capital that guarantees speed, effectiveness and continuity in learning.

It was also clear through the research the size of the role that human capital plays in building the learning organization through knowledge, skills, experiences, motivation and creative capabilities that the human resource of the organization possesses. This can be enhanced by paying attention to the human resource management function, which should contribute to providing a learning environment for the organization's employees. This is achieved through the following factors:

- ➤ Develop a job that creates challenge for the worker through job enrichment, developing work and making it an opportunity to explore and to break a routine and boring work.
- ➤ Changing intellectual patterns: changing mental models through education, participation, and self-learning.
- ➤ Caring about worker returns, regardless of the focus on its evaluation, that provides a form of creative culture where employees are willing to change their thinking and understanding habits.
- ➤ Plan and invest effectively in human resources.
- ➤ Work to transform individual knowledge from implicit to explicit and organizational knowledge.

Likewise, from the foregoing, it is possible to say that the availability of the business organization with structural capital is an effective tool towards improving the level of learning, facilitating it, enhancing it and ensuring its continuity. Structural capital creates the conditions necessary for the rapid sharing of knowledge and the growth of sustainable and collective knowledge, and human capital will become more productive by making processes and mechanisms of work organized, smart and easy to access. It is therefore only the organization that can provide the continuity that knowledge workers need in order to be effective.

Finally, an important observation must be noted, namely that the three capitals do not achieve an impact on the organization's ability to learn individually, but their effectiveness toward learning is achieved by being interconnected and interrelated.

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