

How Strategic Organizational Competency Contributes to the Development of Organizational Intelligence?

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Abstract:

The knowledge that organizations possess, produce, and acquire adds to their strategic competency and intelligence. Organizations develop intelligence from practice and learning by doing. There is a definite relationship that exists between organizational learning and productivity that contributes to the development of organizational intelligence. Organizational intelligence is of difference kinds, but almost all of them develop from organizational actions and learning that includes but are not restricted to gaining market information, consumer interactions, business communications, creating new products and services, managing actions, solving emerging problems, etc. Intelligence is the ability to comprehend things or immediate situations and act rationally and according to what the situation demands.

In this paper, we examine on what respect organizational intelligence positively relates to organizational competency, and how intelligence help develop strategic competency which adds to their advantage and makes them more robust. We find using a theoretical model that the development of organizational intelligence confers competitive strength to an organization, and contributes to the overall development of higher productivity and organizational competence.

Keywords: organizational intelligence, organizational learning, productivity, organizational competency, knowledge management.

JEL Classification: O11.

Introduction

The assigned topic for this research taken up herein is the development of Organizational Intelligence and strategic competency, and how each relates to other. Organizational intelligence (OI) can be classified into difference types, but almost all of them develop from organizational actions and learning that includes but are not restricted to gaining market information, consumer interactions, business communications, creating new products and services, managing actions, solving emerging problems, etc. Some types of organizational intelligence most commonly encountered are:

- Business intelligence
- Marketing Intelligence
- Competitor Intelligence,
- Consumer Intelligence,
- Organizational Intelligence,
- Social Intelligence,
- Economic Intelligence,
- Brand Intelligence, etc.

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Intelligence is the ability to comprehend things or immediate situations and act accordingly to what the situation demands. In this paper, we examine on what respect organizational intelligence positively relates to organizational competency, and how intelligence help develop strategic competency which adds to their advantage and makes them more robust. Intelligence - in other sense, also means gathering information that may be beneficial for an organization. Information thus gathered as Intelligence could be secret, i.e., it may contain information of competitors, enemy, etc. In this paper, we are concerned with the topic of Organizational Intelligence that relates to the strategic information gathering and utilization by business organizations. We find, using a theoretical model, that the development of organizational intelligence confers competitive strength to an organization, and contributes to the overall development of higher productivity and organizational competence.

Organizations gain or acquire "intelligence" from various exogenous and endogenous sources; e.g., in-house research, individual learning of the employees, training and induction programs, managerial insights, market analysis, knowledge brought about by external consultants, and through explicit and implicit experiences obtained from doing business. A wide gap therefore exists between intelligence levels of different organizations, and among different kinds of business firms, for each firm does its business differently. Organizational intelligence - in essence - constitutes the "whole range of knowledge rooted in the life of an organization". It concerns "how organizations use knowledge and technology to strategically adapt to its immediate and future environments". We may say that OI is the intellectual capacity of the entire organization. It embraces both knowledge management (KM) and organizational learning (OL). It is the notion of collective intelligence that exists in an organization to counter collective stupidity (market humour!). Organizations leverage OI as a resource to makes decisions. We examine, in this paper, what "organizational intelligence" (henceforth OI) means, how it develops, and what factors contribute to its development. Then, we examine how OI help built organizational strategic competence since competency is the prime determinant of organizational success or failure.

1. Research Background

People gather intelligence from lessons learned. They use that intelligence to make dynamic decisions. Similarly, the information and knowledge that organizations possess become useful asset to them for they can exploit it to solve problems, formulate policies, bring innovation and creativity in business, make strategic decisions, or, maintain competitive edge over their competitors.

According to Wilensky's (1967) classic book titled "Organizational Intelligence", it is the "quality" of knowledge that goes into decision making which defines the concept of OI. It says much about experts and their data - who should be near to policy design and implementation in order to provide an organization with real intelligence to guide policy making.

Whereas, Liebowitz (2006) perceives OI as a form of Strategic intelligence (SI) that have underpinnings in both KM and Business Decision Making (BDM), Liebowitz also states that organizations must strive to bond synergies between various forms of intelligence effective in making decisions in business organizations, i.e., competitive intelligence, business intelligence, strategic intelligence, etc., so that they (internal and external intelligence) may contribute holistically towards making decisions more effective. Karl Albrecht (2003), in his book "The Power of Minds at Work: Organizational Intelligence in Action" considers OI as a power of mind in action. He states that Organizations do have minds and OI is the result of collective intelligence in action which defines organizational competence, smartness, and agility. Interestingly, Albrecht (2003) posits that alike individuals, organizational brain power can be measured in terms of IQ. Common logic would suggest so meaning that if organizational intelligence be considered as the power of mind in action, then organizations should allow continuous learning and unlearning to take place so that it will help increase it gradually in the long run (Liebowitz, 2009). It would also help organizations develop strong memory.

It has almost become a common knowledge for the managers as well as for their employees whom they manage that learning has great significance for an organization. Throughout the management literature, it could be found that organizational learning (henceforth OL) contributes to strategic performance when knowledge gained from learning is utilized for the greater benefit of the organization (Levitt and March, 1988; Argyris and Schön, 1978; Sinkula, 2002); e.g., innovation, product development, creative improvement in methods, and constructive changes that positively contribute to workforce and organizational productivity. Learning leads to the development of organizational competence, memory, knowledge base, and ability, thereby, when such learning is able to induce change or affect strategic management decisions of a firm, it is to be understood that such learning has become effective.

For, according to Fiol and Lyles (1985), change doesn't always imply learning in organizations, but organizational learning could be perceived as a form of intelligence (Levitt and March, 1988), nevertheless. Hence, to make learning more effective, a 360-degree approach to the development of Organizational Competence and Capability (OCC) is a necessity to have the effects of learning felt at different levels of organizational operations. This is perhaps more beautifully explained by Drucker (1943) in one of his initial works: "The Future of Industrial Man". Just as social life cannot function without a society, so does organizational life cannot survive without organizations, and it is for social good that organizations exist. But today, this is changing fast, as it appears the other way around: i.e., it is for an organization's sake that the society exists, but only for its own benefit. For, an organization exists for the benefit of the society. The intelligence here we talk about is the social intelligence collected, gathered, and harvested in organizations that become an organized form of intelligence that we may call Organization Intelligence (OI). Quoting Drucker (1943):

"Social life cannot function without a society... There can be a social organization of a physical reality on the basis of values, disciplines, ideals, conventions and powers which belong completely to another social reality".

Here arises the idea of social intelligence, from where we can quite easily but effectively figure out an idea of Organizational intelligence. The concept or idea of "Organizational Intelligence" (OI) has been hitherto discussed but sparsely in the management literature in the context of OL and KM (see, for example, Wilensky, 1967; Albrecht, 2003). We consider OI as a strategic power - a measure of organizational competency and capability that is unique to each and every organization. It is something of a product beyond the collective intelligence of its members, and constitutes organizational responses to situations and problem-solving capacity of the organization as a whole. In our context, however, we define OI as a form of intellectual competency of a firm by which they tend to maintain strategic advantage and gain competitive edge over their competitors. With proper utilization of intelligence obtained from learning and information processing, some organizations become the masters of their trades - and which help them become market leaders. It is not only the wisdom of doing business, but beyond that, it is also growing insights that help successful restructuring of organizational machineries employed in order to handle complex situations that define a certain level of intelligence which an organization possesses. Such intelligence if we may call it competency - would no doubt aid in their capacity of seeing and dealing with problems more efficiently. Let's now examine what's organizational learning has have to do with the idea and notion of the development of OI.

There are various models of organizational learning, each having its own advantages, as often characterized by the ecological structure of learning in different organizations (Argyris and Schön, 1978), but we will not be dealing with such models in this paper. Instead, we shall examine how OL help develop OI and how learning strengthens both productivity and performance of an organization, if and only if the effects of learning are able to change and affect employee behaviour. Besides, Ștefănescu et al. (2009) indicate that by leveraging their unique strengths and capabilities, organizations can effectively adopt and integrate intelligent tools and techniques into their operations, leading to improved decision-making, enhanced performance, and sustainable competitive advantage.

According to Fiol and Lyles (1985), organizations learn, unlearn, adapt, and change - as these four necessary actions greatly contribute to organizational success or failure. Organizations learn when their employees learn. Learning is a change in states of knowledge possessed, which may be directly perceived or remain implicit (Fiol and Lyles, 1985). It occurs through gaining new insights, new knowledge, and learning about more possibilities that could lead to better outcomes. When knowledge gets reflected through R&D output and performance, it brings about operational efficiency, improves productivity, enhances product development, and help acquire new customers, and so it becomes a kind of "intelligence" to the organization.

The concept of "Organizational Intelligence", thus, is grounded on learning, adaptation, and adoption of new knowledge, new technology, new methods, new capabilities, new strategic insights, and new organizational wisdom. While at the same time, organizations unlearn by replacing old knowledge with the new knowledge thus making way for new ideas and concepts that are internalized and stored as organizational memory for future use. In this way organizations continually develop strategic competencies by gaining new strategic insights from what they have already learned from interacting with their customers, suppliers, and from the knowledge that is rooted in the behaviour of workers.

2. What is Organizational Intelligence?

Organizational intelligence (OI) according to some of its latest proponents like McBreen, Silson, and Bedford (2022) is, the core capability of an organization in making smart choices and intelligent decisions based on available knowledge and analytical power; it is an organization's ability to innovate, create, and remain productive and competitive. Silver and Kearny (2010) define OI in terms of different kinds of logics - i.e., business logic, strategic logic, process logic, product logic, among others - which are nothing but the knowledge of reasoning based upon which organizations make smart and intelligent decisions. Therefore, "OI is the ability of an organization to think about businesses using smart logics of business and organizational science that are effective". Organizations gain this ability from the power of knowledge and information when such are applied to effect smart and fool proof decisions. McBreen, Silson, and Bedford (2022) believe that Organizational intelligence leverages different types of knowledge capital for making better decisions, and create new ideas to add value to business. But its history goes back a little further.

For any organization to function efficiently, knowledge is the lasting source of competitive advantage (Nonaka, 2007). Companies continuously create and embody knowledge in new technologies, products, and services. By such procedures, organizations learn from action-oriented productive activities that characterize their business of continuous innovation. It helps them develop strategic competency and intelligence which is nothing but their ability as a whole to respond to demanding situations. Experts and scholars of management sciences believe that organizations owe their competitive strength and morale to knowledge assets, organizational learning, and to employee capabilities (Nonaka, 2007; Nonaka, 1994). By inducting or employing new members, organizations increase and improve their operations, build up knowledge and develop capability to perform. This we may call the development of Organizational Intelligence (OI).

Definition: Organizational Intelligence is the creative capability of an organization to respond promptly to the presenting problems, and find effective solutions to deal with them.

Organizational Intelligence develops from learning and unlearning. Organizations unlearn by discarding old methods, processes, and logics and adopt new ones (e.g., new routines, technologies, tools, protocols, processes, methods, etc.) On the learning frontier, every organization learns:

- How to compete and survive,
- How to produce more and sell,
- How to get new customers and make profit (if you don't have customers, you don't have a business!).

By learning how to compete, sell, and make profit, business organizations develop experience and (tacit) knowledge which is not just memory that's being created, but beyond its organizations learn how to develop new capabilities and embed them in routines, since organizations are perceived as bundles of routines and organized tasks (Kilduff, 1992). They must function properly by following routines in order to survive. Routines guide behaviour (Nelson and Winter, 1982). They learn by encoding inferences into routines that are nothing but the natural outcome of lessons learnt (Sinkula, 2002). They must innovate and adopt change. They must acquire and produce direct knowledge required for proficient functioning and operation. And, they must routinize their activities following principles based upon structural rules that need to be optimized for best performance. Adoption of improved routines result in superior output and performance (Nelson and Winter, 1982; Sinkula, 2002). Only then knowledge would get reflected in innovative technologies and products developed. A noteworthy fact is that different organizations deal with different kinds of knowledge, and there are factors that influence what information the organization deals with. Big businesses employ both smart and highly well-trained workforce as well as effective tools and technologies for creating new knowledge. They have the structures and practices that produce continuous innovation. This we call the development of "Organizational Intelligence" for, it is such intelligence that help build up strategic competence. Strategic competence is considered as a durable asset for any organization.

All these could be better explained in terms of Nonaka's (2007) concept of knowledge creation that perhaps more aptly describes the development of organizational competence. According to Nonaka (2007), business organizations should be viewed not only as knowledge creating companies, but beyond that, they create value and trust. But what should be the nature of such a knowledge creating company? Firstly, knowledge is necessary, both as an input and output, and not just for expert guidance and efficient functioning, but also for creation of new knowledge that is to be reflected in new technologies and products developed. Secondly, companies must understand what they must do to exploit knowledge, and how they should be doing it to their best advantage. This how is the principle - code, standard or norm. Great companies adopt good principles that add value and guide their operations. A well efficient and learned management team with educated and trained employees are able to

use and develop knowledge in a far better way than a company with poor work ethics and unskilled workers. But, according to Nonaka, efficiency is not enough nor the only thing, for the secret to any business success is the ability of the management in managing the creation of new knowledge. Beyond this, we believe that it is a company's ability that help create its own image - a brand - which in turn creates new markets for it and its products. This has been stressed by various authors as well, including Nonaka (2007), who explained this in terms of the emergence and dominance of Japanese brands like Honda, Sharp, Cannon, Kao, etc. Here comes the importance and value of knowledge in organization. And, here, too, comes the advantages of learning in organizations that we call Organizational Learning (OL).

Organizations in their effort to dominate the markets and to stay afloat know it very well that they must develop new products rapidly and create innovative products that would define technologies and markets. Most big brands and emerging unicorns as well as evolving enterprises recognize this concept of the theory of product innovation by which they evolve, innovate, and make niche position for themselves. Therefore, it could be said that every organization needs to learn, and every organization is a learning organization. Learning in organizations—or more reasonably it could be said that organizational learning is a necessary means of achieving competitive advantage (Sinkula, 2002). It shall be born in mind that organizations have tasks beyond production of goods and services; i.e., fight competition, remain innovative, build customer relationship, provide 24/7 customer support, inform the public, share valuable information, and assume some degree of corporate social responsibilities. The task is no small, but the effects and the appeal must be big. In the next section, we shall discuss what kinds of knowledge befits organizational learning and is more expedient to them.

3. Tacit Knowledge and Organizational Intelligence

Does tacit knowledge contribute to the development of organizational intelligence? What's tacit knowledge after all? The sources of power for every kind of organizations are the knowledge brought in and generated by their employees. Organizations utilize this power to excel in their business activities in terms of performance. Knowledge has the power to induce change, since discovery and invention of breakthrough technologies have great power in them. As far as technologies are concerned, knowledge is embedded in innovation which constitutes the structure and edifice of any emergent technology. On the other hand, efficient use of human capabilities, wisdom, and effective utilization of skills increase organizational competence and contributes further to the development of intelligence. The collective knowledge of the employees and their decision-making abilities broadly define how smart an organization is, and how efficient organizations are at handling specific problems. It is this capacity that empowers organizations and contributes to the development of Organizational Intelligence.

The concept of organizations drawing power from human capital resources has been emphasized by Peter Drucker in many of his works (Drucker, 1947; 1988), including "Big Business". Certain level of intelligence brings stability and success, and is much desired. But it is success that brings stability as well. The social and economic structures of organizations supporting today's enterprises and businesses rests on the shoulders of knowledge capital and digital infrastructures. Knowledge capital is an intangible asset produced entirely by human effort. In the last century, industry was the center of social organization. Today's core of socioeconomic organization constitutes the digital economy, automation, communication technology, and the web. Much of what we see today in this age of business and industrial automation is based entirely upon the advancement witnessed in the IT and ITeS sectors. These hi-tech tools and systems confer great strength to modern industrial organizations, further enhancing their Organizational Intelligence and organizational capabilities which is nothing but their ability to respond quickly to solve complex problems. Seen in this way, an organization is a machine for processing information; a machine for solving problems; a machine for creativity and production.

Undeniably, organizations today operate differently from what they used to do some 50-60 years back. Industries still produce, and consumer still consume. Products still get advertised, and customers still buy products that are advertised. But the nature of production and output has changed the pattern of human consumption. Today, organizations learn by learning of its members, as well as from systems learning where AI based agents have been developed and introduced that are programmed to absorb information, process them, provide fast response, and build up dedicated knowledge bases. Learning today has evolved into digital mode. Therefore, old routines have been modified, or wholly abandoned in favour of the new ones.

Now, when changes are affected in routines, they get reflected in performance and output. Routines are, nevertheless, natural outcome of lessons learned that are made common by repetition. According to some scholars, behaviour in organizations is based on routines (Nelson and Winter, 1982; Levitt and March, 1988). The logic of routine is easier to comprehend; it is habit-building repetition of certain tasks that lead to attainment of some goals or intentions. Routine is a procedural practice of actions that organizations follow since they are highly oriented to achieving targets. Most organizational tasks are routine-based goal-oriented activities (Kilduff, 1992; Sinkula, 2002)

that constitute rules, conventions, strategies, protocols, procedures, etc. They expose organizations to direct or practical experiences.

Organizations as business firms and corporate entities learn a great deal from direct experiences. They develop conceptual frameworks for interpreting experiences. Indeed, organizations not only interpret, but they also create experiences. Anything relating creativity is a knowledge-dependent skilled activity that require adequate learning to master the art and science of creation. Some higher creative activities are dependent on tacit knowing. Large businesses are storehouses of creative energies and tacit knowledge. The best form of knowledge obtained insofar which involves creativity is from tacit learning which contributes to the development of tacit knowledge base of an organization. The process of tacit knowing has great significance for any organization including business firms. But tacit knowing and transfer of this kind of knowledge is rather difficult. This has been highlighted by Polanyi (1966) in his work, "The Tacit Dimension". It is more likely that tacit knowing is one of the contributors to the cultivation of organizational intelligence.

Nevertheless, routine-based, target-oriented learning occurs among the workers who continuously learn from various activities that characterize action outcomes of OL (Levitt and March, 1988). Learning occurs continuously as workers and supervisors keep absorbing knowledge of process, products, and procedures. They learn from outside, from their competitors, and from the markets. Learning also occurs at the individual level; i.e., among the workers. Individual workers learn which have consequences for an organization as well. Simon (1989, 1979), who studied various aspects of organizational and business decision making, considered that organizational decision-making is, to a large extent, dependent but not contingent on the knowledge and information and the ability of the agents in making correct decisions. They do so by choosing what's optimal and most appropriate, or profitable for the firm. Now, learning takes place in the minds, while data and knowledge gets stored in an organization's memory.

Today, organizational learning is also assisted by artificial intelligence (AI) tools and systems. AI-based learning systems help boost productivity of both the knowledge workers and industrial workers. In the past, as was considered by Drucker (1943), the productivity of the industrial workers was considered as a valuable asset. Today, productivity of the knowledge workers is considered a valuable asset (Drucker, 1999), and hence, to increase their productivities, organizations undertake various forms of learning to strengthen the knowledge base of their workers. In the next section, we develop a simple single-equation model to explain and understand the development of OI under organizational environment.

4. Model and Method

A model of organization system has been constructed to explain the workings of the system under study. Motivation hitherto has been derived from the previous works of Daft and Weick (1984) and Duncan and Weiss (1979) on this particular topic related to organizational learning, its implications, and for interpreting a model of organizations as a system. We propose a system of equation that helps define and explain a practical model of organizational intelligence along the necessary extrinsic and intrinsic determinants that constitute as the variables and parameters of the modelled equation. Some of the endogenous variables include learning x^l , routines (r), and productivity p^2 , whereas external intelligence (logics) include knowledge k^n sourced from the markets, technology factor τ^2 , employee effort, and human capital ($\frac{1}{u}$).

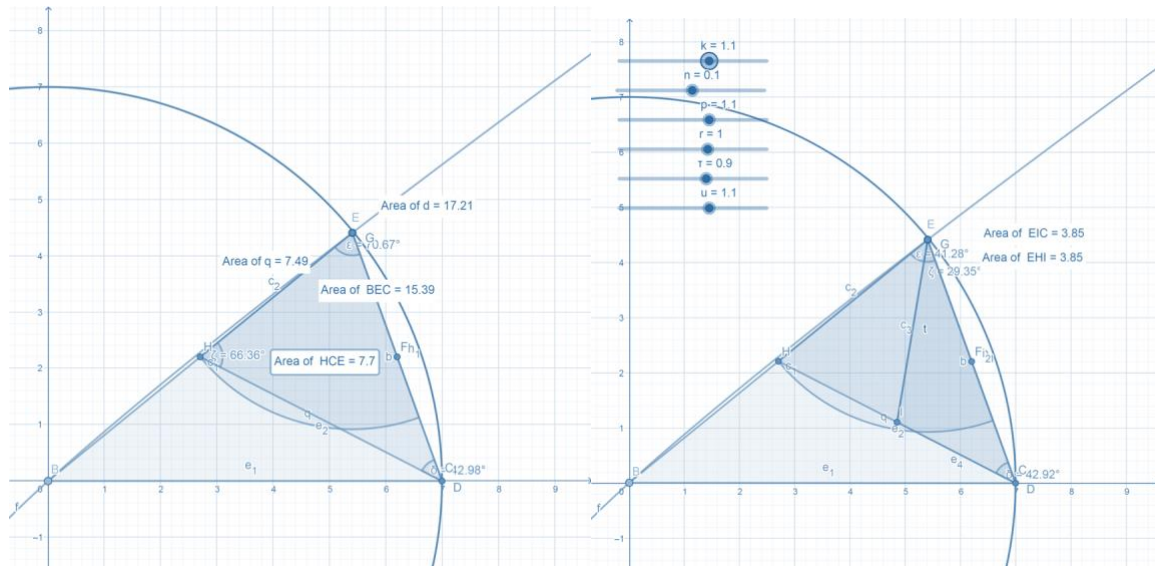
The equation thus constructed to explain the nature of organizational intelligence ($f(x)$) is defined by:

$$f(x) = \left((x^l + p^2)^r + \tau^2 - 1 \right)^{\frac{1}{u}} - k^n \quad \text{eq.(1)}$$

The single equation function model is able to describe and plot the functions of different independent variables defined above to elucidate the graphical representation of equation no.1. The numerical values of the variables are defined as follows, at steady state organizational equilibrium environment. Let's first describe the initial state of the equation drawn as two larger polygons having sides corresponding to T1 and T2 respectively. The two polygons are drawn as T1 = poly (B, E, C) with an area of 15.39 and T2 = poly (H, C, E) with an area of 7.7. The behavioural model of organizational intelligence defined insofar as to explain how intelligence as a dependent variable is affected by numerous independent variables made distinct above. The first triangle Δ (B, E, C) has three sides as $b = 4.69$, $c_1 = 6.97$, and $e_1 = 6.99$ respectively. F is the midpoint of line (E, C), and H is the midpoint of line (B, E) respectively.

Figure 1a. The modelled equation

Figure 1b. Competency development



The equation is plotted and 'q' as a circular sector taking three points (E, H, F) is drawn having an area 'm' measured as 7.48. Now, taking I as the midpoint (H, C), we draw two triangles $\Delta (E, H, I)$ and $\Delta (E, I, C)$ having areas 3.85 and 3.85 respectively within the polygon (H, C, E). Therefore, $\Delta BEC - \Delta HCE = \Delta BHC$. Again, polygon T3= (E, H, I) is equal to poly T4= (E, I, C) with I as midpoint of line (H, C). Now, this is reached exactly when the given values of the independent variables are equal to the steady state equilibrium as described above. It shows that both *learning* and *productivity* are equally important for organizations to develop "intelligence" and "competency". This is the most important finding that we obtain from the entire model. Now the respective angles of the polygons drawn so far are defined as follows: $\delta = \text{angle}(E, C, H) = 42.92^\circ$, $\varepsilon = \text{angle}(H, E, C) = 70.63^\circ$, $\kappa = \text{angle}(C, H, E) = 66.45$ respectively. $\theta = \text{angle}(E, I, C) = 107.73^\circ$ and $\iota = \text{angle}(E, I, H) = 72.27^\circ$ respectively.

Again, for $\lambda = \text{angle}(H, E, I) = 41.28^\circ$, and for $\zeta = \text{angle}(I, E, C) = 29.35^\circ$ respectively. Now it could be seen that the sum of all the angles within the two triangles adds up to:

$$(\lambda + \kappa + I) = (\zeta + \theta + \delta) \text{ where } \eta_1 = \lambda + \kappa + I, \text{ and } \eta_2 = \zeta + \theta + \delta,$$

where, $\eta_1 = 180^\circ$, and $\eta_2 = 180$; And, $\eta_1 = \eta_2$, when the stable equilibrium conditions are met. And, $\eta_1 \neq \eta_2$, when the stable equilibrium conditions are not met.

But, $\eta_2 + \eta_2 = 180^\circ + 180^\circ = 360^\circ$, as it must be under the given equilibrium condition, as under any given condition the value of $\eta_1 + \eta_2$ must be equal to 360° . Again, the areas of poly $\Delta (E, H, I) = \Delta (E, I, C)$, and, $[\Delta (B, E, C) - (\Delta (E, H, I) + \Delta (E, I, C))] = \Delta BHC$. These polys signify as follows: poly $\Delta (E, H, I) = \text{learning}$, and $\Delta (E, I, C) = \text{productivity}$. The entire system of *Organizational intelligence* is defined by $\Delta (B, E, C)$. The meaning of poly $\Delta BHC = \text{competency}$.

Now, let us consider the areas of $\Delta (B, E, C) = P_1$, $\Delta (E, H, I) = Q_1$ and $\Delta (E, I, C) = Q_2$ respectively. And, whereas, $\Delta BHC = R_1$. Not one of these triangles is isosceles, however. Then, we find congruency in terms of the areas under the polys,

$$P_1 = Q_1 + Q_2 + R_1, \tag{eq. (2)}$$

$$\text{and, } R_1 = P_1 - (Q_1 + Q_2) \tag{eq. (3)}$$

where in, $Q_1 = Q_2$, see Figure 1a and Figure 1b.

All these are defined values of the angles of the different sides of the polygons drawn over. Now, the whole system encompassing different variables, sides, angles, and polygonal is defined as:

$$f(P_1) = \eta(R_1) + \eta_1(Q_1) + \eta_2(Q_2) \tag{eq. (4)}$$

5. Results and Discussion

Results

The aforementioned model has been designed for the purpose of understanding under what conditions OI develops in organizations. That there is equal importance of learning and productivity, and each complementing the other has been highlighted and depicted in the workings of the model. The most important finding is that, organizations achieve success based on strategies, but strategies work when they are fully implemented. Learning and knowledge management involve several strategies or are outcomes of strategic decisions that guide organizations and help develop productive and tactical intelligence. Both learning and productivity, besides routines, technology, and other endogenous factors like for example, employee motivation and effort do play significant part in the development of strategic organizational intelligence (SOI).

Organizations attain fitness, capability, and competency when they acquire good skills, tacit knowledge, and knowledge that are meant to be utilized for the extraction of logic out of contexts that define creation of OI which is a gradual and ongoing process (Silver and Kearny, 2010). The model designed above depicts different scenarios when their parameter values are altered, altering the behaviour of the equation and having its effect on the outcome of the entire simulation. We also find the use of routines important for it amplifies the development of organizational intelligence. Hence, routines are crucial among endogenous factors that need special consideration.

Discussion

On what principles organization intelligence is to be based? It is based on the nature of information that organizations process, and the kinds of information that are present in the organizational environment. An environment is created by its inhabitants, and the quality of an ambience depends on the ability and collective actions of the incumbent agents. Therefore, OI depends on several factors that are apparently endogenous to an organization. Organizations develop intelligence by means of acquiring new knowledge, capabilities, skills, and technologies, and from induction of new employees who bring new intelligence. The overall intelligence of an organization gets reflected in its collective wisdom possessed by its entire workforce, productivity, and knowledge environment, and also on its ability to respond to various situations. These may be summarized and listed as follows:

- How far organizations are able to present themselves, develop their brand images, and get their products effectively to their customers?
- How well they read and understand consumer behaviour, and how fast and effectively do they respond?
- How efficiently organizations are able to deal with emergent situations and handle complex problems?
- How ingeniously organizations deal with their customers?
- How much creative and innovative organizations could become?
- How fast, efficiently, and perfectly organizations produce their goods and services?
- How resilient organizations are, and how they respond to crisis and critical situations?
- How effectively they compete with others and create markets for their own products and services?
- On the strategic frontiers, how proficiently they are able to devise penetrative strategies that provide them with competitive advantage?
- What effective strategies and policies they have use in place to increase and maintain the productivity of their knowledge workers?
- How efficiently they deal with economic crises and business cycles when these hit the markets?
- How they still manage to generate revenue when markets are depressed and nobody's buying?
- How efficiently they optimize and streamline their operations for best performance to obtain best results?
- How effectively they cultivate Brand Intelligence?

These aforementioned questions have been addressed or researched already and extensively in the literature of management science and organizational studies. It is to be said that organizations today seek intelligence out of anything or everything plausible. They seek knowledge, wisdom, and intelligence out of Big Data, analytics, systems research, market-based experiences, and other extrinsic sources that contain some information. Organizations must be smart enough to face today's tough competitions. And, it is by their sheer excellence in performance and productivity that businesses innovate to survive today to remain buoyant for tomorrow, and by overcoming obstacles using business intelligence, they are able to effectively exploit the available resources at their disposal for efficient functioning. In that sense, OI is a tool, a means for overcoming bottlenecks and obstacles to achieving business success. Making sense of this term, we can say that OI is tool for organizational productivity that greatly increases the overall agility of an organization in making quick, fast, and effective decisions.

Conclusion

Intelligence imparts smartness to an individual. So does it to an organization. Today's business and industrial environments are clustered with smart organizations (companies) that are highly intelligent entities when considered holistically. They must be intelligent entities to face today's businesses' internal and external complexities. How they gain intelligence? From collective wisdom of their employees, actions, analysis, knowledge processes, and from various external sources such as books, periodicals, magazines, and things learned from direct interactions with their customers, suppliers, clients, information derived from the markets, data obtained and retained as information, and even from the environment and the nature. Organizations develop their intelligence from conducting their businesses, handling customers, solving problems, and overcoming obstacle that add knowledge, information and wisdom to their existing brain - what we may call organizational mind. OI is the result of collective wisdom of action and outcome of business decisions.

Credit Authorship Contribution Statement:

The Corresponding author takes the sole credit for writing the paper, and drafting and modeling the theory, as to conceiving the idea of the paper, thus having played the full part in conducting the entire research.

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Conflict of Interest Statement

I declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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