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Intellectual Capital as A Competitive Advantage Source for Businesses

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ABSTRACT

Intellectual capital has been identified as the fundamental source of wealth creation and firm sustainability. This is accomplished through the application of what individuals currently know as well as the invention of new information, which is a source of organizational competitive advantage. The accumulation of new information is the means by which this goal can be achieved. In this piece of work, an attempt is made to study the role of intellectual capital as a source of competitive advantage by conducting a theoretical-conceptual evaluation of a significant amount of vocabulary. This evaluation is carried out in order to study the role of intellectual capital as a source of competitive advantage. The key insights that have been gleaned from the research that has been conducted up to this point and that has been published point to the significance of intangible assets in the process of cultivating a sustainable competitive advantage for a company. An investigation of the components that contribute to intellectual capital as a possible source of competitive advantage is the primary contribution that this study makes.

I. Introduction

In the past, a country's prosperity and competitiveness were invariably correlated with its possession of physical resources. These physical resources are expressed in a variety of production components, including labor, money, buildings, and land. While the importance of knowledge received less consideration [30]. Prior to now, the requirement for knowledge was limited to tasks related to production variables. To gain a competitive advantage, however, it is necessary to modify one's way of thinking in light of today's intensifying competition. Wealth or an abundance of production elements cannot ensure a company's success in the marketplace [19]. It is essential to emphasize that today's economy is knowledge-based. According to [31], the primary factors of wealth in an economy are natural resources, capital, and knowledge. However, the relative importance of each has shifted during the late 20th and early 21st centuries, when knowledge has emerged as a key source of wealth creation.

To obtain a competitive advantage, firms began changing their operations into science-dominated knowledge-based enterprises [34]. This is achieved through optimizing key success aspects (cost, quality, innovation, and time). Instead of industrial equipment, the ability of human resources to continue innovating is now the focal point of business development. The importance of intangible resources (intangible assets) exceeds that of tangible resources. This eventually led to an area of accounting study [9], [37], [38] that questioned the usefulness and trustworthiness of financial statements as a means of reporting on corporate assets.

Companies that can excel have truly distinctive qualities that are difficult for competitors to duplicate, as seen by the adaptation, innovation, and quality of human resources in predicting such quick changes [36]. This type of advantage is only possible if the company has a resource base [32]. In this scenario, [3] categorize the company's resources as actual resources, intangible resources, and human resources. Tangible resources, such as financial capabilities and assets displayed on the company's balance sheet, are relatively straightforward to detect and analyze. The advantages of a company can only be determined by comparing its financial capabilities and assets with those of competitors. However, by utilizing science and technology, it will be feasible to learn how to use other resources efficiently and inexpensively, providing a competitive advantage later on. This is also backed by the viewpoint of [27], who argue that organizations who are actually able to endure for a long period continue to develop, not because of size and luck, but because these companies are able to demonstrate their ability to adapt to changing times more swiftly. This ability is only achievable if the organization successfully employs knowledge resources or intellectual capital [13].

In such a way intangible assets play an important role in creating value for the organization [41]. On the other hand, these assets can provide organizations with a new resource base with which to compete. These assets have succeeded in becoming the main source of sustainable competitive advantage for organizations, basically in their intangible assets [5]. These assets are strategic resources that enable organizations to create sustainable value. However, despite the importance associated with the organization, they are not available in large quantities, as well as their value and how to manage them [18]. That is why this essay has the aim of making a theoretical analysis of how intellectual capital contributes to the creation of competitive advantage in organizations.

Findings from several research have shown a discrepancy between market values and a company's book value [44]. Investors may be paying more attention to a value that isn't included in the financial statements. Intellectual capital, on the other hand, refers to the value of an unlisted commodity (IC). This IC is made up of three key components: human and structural/organizational capital, as well as external and relational capital [26].

Resource-based theory (RBT) can be used to explain the presence of IC, which Barney developed (1991). A key component of a company's competitive edge is the availability of resources that are extremely valuable, uncommon, one-of-a-kind, and inimitable. VRINs go by the acronym [6]. In order to build and maintain a competitive advantage, IC is essential. As part of RBT, IC enhances competitive advantage by utilizing unique resources and abilities to create value. The faster the organization gains a competitive edge, the better it will be at managing IC [14].

Based on the above, the organization seeks to promote stability, firmness of the structure over time, that is, to integrate intangible assets in such a way as to generate competitiveness. Intellectual capital stands out in these intangible assets, which are defined as the combination of intangible resources that enable the firm to generate growth, efficiency, and stability within the organization [8]. Resources that make organizations work [39].

Now, having made this brief introduction and considering intellectual capital as an intangible asset relevant in the creation of competitive advantage, this document shows, firstly, the origin and development of intellectual capital, and further an analysis of the importance of this asset as a competitive advantage, profit factor for organizations..

II. Methods

In the study of intellectual capital's contribution to an organization's competitive advantage, qualitative approaches and descriptive methodology are employed. Understanding and discovery are utilized in qualitative research to produce knowledge. The qualitative research methodology is an inquiry and comprehension process based on an approach to studying social and human problems. In this study, scientists utilize intricate images, in-depth reports, and in-depth examinations of experienced scenarios [21]. This study collects data relating to the object of investigation using library methods. Library research is the collection, analysis, and processing of library data without the need to investigate the field..

III. Result and Discussion

A. *Intellectual Capital*

The origin of intellectual capital stems from the work of [25], who put forward the idea of considering organizations as a broad set of resources and understanding intangible assets as value generators in organizations, where knowledge can be classified. Furthermore, the theory of resources and capabilities was developed, which from the beginning has considered knowledge as an intangible resource, which is able to provide a competitive advantage for organizations [6].

The early research on intellectual capital concentrated on its measurement, management, and assessment; later, they sought for performance through intellectual capital; and eventually, a study on its performance arose. John Kenneth Galbraith coined the term "intellectual capital" in 1969 (Edvinsson & Sullivan, 1996). However, there is no consensus on the concept; Different theoretical proposals have emerged that have explained the subject. it is the expression given to the intangibles that enable the organization to function. According [11] it is knowledge that is converted into value. [8] mentions that it is the cause of the relationship between human, relational and organizational capital. As for Bueno (2002) it is a strategic perspective of the organization's intangible accounts and reasons. For its part, the scientific community argues that it is considered a source that creates economic growth and technological progress.

According to [33], intellectual capital possesses the following characteristics:

1 Non-rivalrous, i.e., these resources can be used sustainably by multiple users in different areas and at the same time without competition.
2 Increasing Return, which is capable of generating an improvement in profit margin per incremental investment unit.
3 Because this resource is co-dependent in value generation, it is not additive, meaning that the value created cannot be expanded indefinitely without depleting the resource's core component.

Meanwhile, according to Agustina (2007), the characteristics of intellectual capital are as follows:

1 The company's strengths on the market, such as trademarks, client loyalty, and repeat business.
2 Patents, trademarks, copyrights, and other intellectual property-based assets.
3 Assets that provide the corporation with internal strength, such as corporate culture, business management and processes, and the power provided by information technology systems, among others.
4 Individual contributions to the organization, such as their understanding of competencies, networking abilities, etc.

According to a contemporary consensus, intellectual capital can be divided into three categories: human, structural, and relational. Numerous classifications have contributed to this present consensus [8]. The three components of intellectual capital identified by [41] are human capital, structural capital, and relational capital. Human capital, structural capital, and relational capital make up the link between an organization and its environment, respectively. Following is a more detailed discussion of these elements.

1 Human Capital

According to [8], human capital is a source of innovation and strategic renewal. [11] described it as a combination of employees' knowledge, skills, and competencies to fulfill their jobs. Meanwhile, it is the foundation for the development of the other two categories of intellectual capital, according to [14].

Human capital is essential for the creation of intellectual capital. Innovation and improvement come from this, although it's hard to pin down exactly what it is. One of the most important assets of every business is its people, who are an endless supply of knowledge, expertise and compensation [23]. As a measure, human capital shows how well a company's employees can pool their total expertise to come up with the best possible solutions. If an organization is able to put its employees' knowledge to use, its Human Capital will increase [17]. It is possible to assess a person's potential and personality by looking at their education and training history and credentials as well as their work experience and training.

2 Structural Capital

It is a term that [11] associated with organizational capacity, which includes both tangible and intangible elements. According to [11] they are organizational mechanisms and structures that help achieve optimal intellectual performance and, therefore, the general performance of the business. On the other hand, for [14] it is structured knowledge, on which the effectiveness and internal efficiency of the company depend.

For example, a company's operational system, manufacturing processes, organizational culture, management philosophy, and all forms of intellectual property are all examples of "structural capital" that an organization can use to support its employees' efforts to produce optimal intellectual performance and overall business performance. Incorporation owns [20]. Even if an individual has a high intellectual level, a company's intellectual capital will be squandered if its methods and procedures are flawed.

3 Relational Capital

According to [8], it is understood as a marketing channel and consumer relations. It is a set of maintained relationships with the outside world, according to [14]. Relational capital is defined as the sum of all the relationships that an organization builds with consumers and suppliers via business development [10].

This is a facet of intellectual capital that can be converted into actual currency. The company and its partners own the harmonious relationship and association network that constitutes rational capital. Rational capital is derived not only from dependable and high-quality suppliers, but also from the company's relationships with the government and the community in the immediate area. The value that an organization can derive from its relationship capital can originate from a wide variety of sources that are located outside the immediate vicinity of the company [16].

B. Intellectual Capital Measurement

The value added intellectual coefficient is a way for calculating intellectual capital (VAIC). Pulic invented this approach in 1997. The VAIC technique is intended to offer information regarding the efficiency with which the company's tangible and intangible assets create value. The VAIC method assesses the effectiveness of intellectual capital and capital used in creating value by examining the link between three major components: human capital, capital employed, and structural capital [41].

The ability of the company to develop value added is the starting point for measurement (VA). Value added is the most objective metric of business performance because it demonstrates the company's ability to produce value. The difference between output and input is used to determine VA. Output (OUT) symbolizes revenue and comprises all market products and services, whereas input (IN) includes all expenses incurred in order to earn income.

The value added intellectual coefficient (VAIC) is used to calculate intellectual capital and consists of three major components, namely [41]:

1 VACA is an abbreviation for Value Added Capital Employed. Employee value added capital measures the VA produced by a single unit of physical capital. This ratio illustrates the contribution of each unit of CE to the value contributed of the organization. VACA, or value added, indicates the amount of value added by the company's capital expenditures.

2 VAHU stands for Human Capital with Added Value. This ratio illustrates the connection between VA and HC (Human Capital). Value Added Human Capital (VAHU) quantifies the amount of value added that can be produced using labor funds. The connection between VA and HC demonstrates HC's potential to offer value to the organization. Consistent with the views expressed by other IC contributors. Indicative of the company's HC is the sum of salaries and labor costs.

3 STVA is the abbreviation for Structural Capital Value Added. The structural capital coefficient (STVA) measures the contribution of structural capital (SC) to the creation of value. STVA computes the amount of SC necessary to generate one rupiah of VA and demonstrates how effective SC is in generating value. SC, in contrast to HC, is not an independent metric; it is not affected by value generation. In other words, the more HC's contribution to wealth generation, the less SC's function.

C. Intellectual Capital and competitive advantage

For the purpose of the relationship between intellectual capital and competitive advantage, it can be said that the variables have a meeting point. Both are considered very important for the organization and are supported by the theory of resources and capabilities. Argued that intellectual capital enables organizations to generate competitive advantage. As Iswati (2007) points out where the evidence found shows that having a higher intellectual capital index is a relevant variable that positively affects the level of competitive advantage, in the same way as determined by [43] intellectual capital is a power factor. company competitiveness. The uniqueness of the intellectual assets contained in an organization can put the organization in a better competitive position.

Talking about assets that generate competitive advantage, in the same sense [29] mentions that it is the ability of organizations to innovate and improve. That is, the basis of competition has changed, increasingly to the creation and assimilation of knowledge, from this perspective suggesting that organizations that have managed to excel around the world, use strategies that differ from each other in all aspects [29].

However, it must be noted that organizations are dynamic and to be competitive they need to constantly change according to emerging needs. In dynamic capability theory, which allows companies to create, implement, and protect intangible assets that support superior business performance in the long term, taking into account sustainable organizational change.

1 Human Capital and Competitive Advantage

For the purpose of describing the elements of intellectual capital, in terms of human capital and its relation to competitive advantage, [12] mentions that there is a positive relationship between these variables, where skills developed under training or improvement you find it will be key. for the establishment of competitive advantage in the organization. Correspondingly, [17] argues that the specificity of human capital makes its transfer difficult, because its value decreases when it becomes part of another company, such that tacit know-how is completely non-negotiable [35].

Talking about abilities – skills that people have – namely human capital, IPB University is a clear example of how to educate people with an entrepreneurial vision, as well as trained employees. It should be noted that this institution aims to be the cradle of entrepreneurs in Indonesia, in such a way that training entrepreneurs is its competitive advantage, connecting with graduates and financial campaigns, thereby promoting their relational capital and thereby increasing the impact, prestige and strength of collaboration between them and towards Academy.

In this sense, seeking to stand out in a market dominated by endless competition, it is important to have resources, a strategy that is difficult to imitate, as noted by [22], who argued with their theory of organizational knowledge creation, the Japanese way of organization. using tacit knowledge compared to American organizations based on explicit, for example Honda, with the motto man to the maximum, machine to the minimum, namely the organization cannot create knowledge without personnel initiative, for this the importance of intangible assets in generating competitive advantage.

2 Structural Capital and Competitive Advantage

Talking about the influential relationship of structural capital with competitive advantage, [2] states that the importance of structural capital depends on the extent to which it contributes to the creation of competitive differentiation. Resource and capability theory suggests that firms gain competitive advantage when they possess organizational-specific assets that competitors cannot imitate. Thus, when the idiosyncratic nature of structural capital increases, the organization has a greater competitive advantage. Therefore, adequate technology, processes and methods must be included to generate performance in organizations that achieve competitive advantage [24].

An example of the relationship between these variables is the situation experienced by the company Uber, whose losses amounted to more than 700 million dollars and represented not only economic losses, but also loss of prospective employees and the positive image of the company. stated by [28], which is caused because the company is facing a transformation of its organizational culture and management structure, therefore competitive advantage is influenced by its structural capital.

3 Relational Capital and Competitive Advantage

For its part, relational capital is associated with competitive advantage, as it enables organizational profitability and will be strengthened due to increased organizational capacity [24]. Likewise with major companies such as; Toyota, IBM and General Motors take into account the way competition is changing, therefore, they focus on customer satisfaction as a distinctive corporate goal, with the aim of being competitive, generating a corporate image and retaining customers.

Recalling the previous argument, it is assumed that organizations possessing a unique accumulation of resources, which are intangible, generate competitive advantage. The central element for capacity building in organizations, is knowledge, which occurs through this process of tacit transferability to explicit assets, where the process denotes knowledge management, where, they coincide with the importance of the asset, and mentions that it is owned by employees and can only be by the person who owns it.

IV. Conclusion

It may be stated that intellectual capital plays an essential role in providing organizations with a competitive advantage. Intellectual capital serves as the foundation for future competitiveness, allowing firms to exploit resources and competencies as sources of competitive advantage. A variable firm sought efficiency in the ability to completely apply information to resource use. Because we live in an era of uncertainty, where organizations are saturated with competition, and this position argues for the idea that the only source of competitive advantage is knowledge, this position emphasizes the importance of knowledge in terms of using the resources an organization has as part of its competitive advantage. Intellectual capital is viewed as a resource that is difficult to copy; as a result, it produces a competitive advantage for enterprises that is tough to match and permits the discovery of today's organizations' competitive advantages. A comprehensive empirical study of the elements that comprise intellectual capital (human, structural, and relational) in relation to the effect it has on organizations in terms of sustainable competitive advantage is proposed for future research, in order to investigate the ways in which the organization manages and incorporates those assets.

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