International Journal of Scientific and Management Research
Volume 5 Issue 4 (April) 2022
ISSN: 2581-6888
Page: 33-41

Intellectual Capital and Brands: Relationships between Two Kinds of Intangible Assets

Óscar Teixeira Ramada
Atlântico Business School, Porto, **Portugal**
DOI - http://doi.org/10.37502/IJSMR.2022.5403

Abstract

The aim of this research is to know what the relevant literature says about 2 assets, belonging to the same category of intangibles and what their relationships (if any) are: the intellectual capital and brands. Generally, what the literature on intellectual capital lists are other topics, all of a non-intangible nature, such as business performance, competitive advantages, innovation, in particular. From the analysis and interpretation carried out in the papers selected for the aforementioned literature review, this did not allow finding a value for the brand, because even with an adequate formula, its value in € is not known, since it is dependent to know, also in €, the value of intellectual capital. It is thus observed that, evaluating a brand is dependent on evaluating the intellectual capital. If this one cannot be evaluated, so will that one. It was noted in particular that the brands considered were inserted in activity sectors, in a generic way, not materializing in any one, in particular. On the other hand, the non-durable consumer goods sector and, in particular, the presence of the marketing aspect is completely omitted. This, in none of the cases is referred to as what concerns communication, communication models and even the principles of communication plans. In addition, brand functions and components, the creation and development of a brand, the identity prism and even storytelling, are not present, instead of what they should be, working as expressions of intellectual capital in the context of brands, goods and companies.

Keywords: Intellectual Capital, Intangible Assets, (Value) of Brands.

1. Introduction

The category of intangible assets takes several forms: copyright, other forms of intellectual property, image rights, brands and the like, and the so-called intellectual capital. It is this that, since very ancestral times, has, in recent decades, come to assume an increasing importance according to [6], [7], [9], [10] and [11].

In fact, this growing importance has been reflected, and especially in business life, in more and better competitive advantages (which lead to larger shares, being boosted in global markets), as argued by [12], [13] and [14].

One of the most important and fundamental aspects of intellectual capital, in general, is its definition, the ways to measure it and calculate the value it has as if it were a product and/or service. These 3 pillars are supported by various literature such as [15], [16], [17] and [18]. Namely.

Regarding to its definition, there is no consensus on what it consists of, what are its components and how many, as well as its meaning [15] and [16].
With regard to the ways to measure it, it should be noted that, if there is no consensus on its definition, therefore, there will also be no way to measure it. The same about its value. Thus, there are already 3 pillars whose notion does not gather broad or reduced consensus. But, despite this obstacle, or even gap, what is relevant for the purpose of this research is what the literature referring to intellectual capital and brands is. If we look with special care, we note that they are 2 types of intangible assets that, in principle, should be distinct despite belonging to the same category.Thus, we have the problem and the gap of knowing whether 2 intangible assets belonging to the same category are or exhibit similarities or differences and, more specifically, knowing what the specialized literature says, which is related to the 2. Thus, the research question is as follows**:** *given that the intellectual capital and trademarks are 2 assets of the same category, what does the literature on them say about? Does it refer to similarities or differences? And more concretely, between them, is there any special relationship that stands out in particular of another nature?*
It is to this question that we intend to give an answer and that constitutes the contribution of this research to scientific knowledge. Normally, much of the literature relates the intellectual capital with activity sectors, performance, competitive advantages and innovation, among others. Thus, it focuses on topics in which what is intangible and what is tangible is separated, as mentioned by authors, among which stand out [19], [20] and [21].
With regard to brands, the research carried out by the researcher allowed us to obtain authors, not very numerous. But among the few found are [1], [2], [3], [4] and [5].
This research is divided into 3 Sections: Introduction, in which a brief approach is made to the framing of intangible assets, the intellectual capital and its, possible relationship with brands, and the research question; Literature Review, which addresses 5 authors who have published research in which the intellectual capital and brands are in common, in the common denominator; Finally, we have the Conclusions that were reached and the References that were at the base of the elaboration of this same research.

2. Literature Review

[1], 2 authors focus on the relationship between the intellectual capital and brands (brand equity). Indeed, they start by saying that the intellectual capital encompasses all processes and assets that do not appear in the Financial Statements in a visible and tangible way, which includes brands (trademarks, patents and brands). In particular, the latter constitute a valuable resource that provides any company with an entity with sustainability and competitive advantages. The combination of intellectual capital and a company's brands point of view suggests ways to measure and exploit the intellectual capital in order to create brand value.
The information technology sector in India, since 2008, has experienced a paradoxical evolution: accentuated volatility with an environment of uncertainty and deceleration in reality. In fact, reality has led to problems of low productivity, low commitment and low performance and low brand value in India.
In simpler terms, the sample consisted of 205 workers from 4 different levels of management of companies in the information technology sector in India. In order to verify the relationship between the intellectual capital and the brand, the authors carried out a questionnaire to the

same workers to find out about the brand, which was divided into 4 terms: satisfaction with the brand, awareness of it, loyalty of the brand and its image. From the answers to this, they constructed the mean and the standard deviation. They resorted, as a translation of intellectual capital, to the components of social capital, human capital and relational capital. They tested econometric regressions in which the dependent variable was the brand (globally, in the 4 terms referred to) and the independent variables, the 3 components of intellectual capital.

In terms of conclusions, the results showed great value of companies with regard to human capital, in the face of workers with friendlier, competent and qualified attitudes. This proved to be a facilitating factor in the development of brand identity. Greater organization enables companies to improve operating efficiency and build better information systems. Having more intellectual capital, companies are better able to maintain better and closer relationships with customers who, in turn, provide feedback with more suggestions for improving products and/or services in the future. Customer referrals increase brand identity awareness. More intellectual capital makes companies provide better products and/or services, which satisfy customers more and reduce superfluous expenses. A strong brand in the information technology sector suggests that companies receive better evaluations from customers, in relation to the entire brand, which makes them remain permanently available to repurchase the products and/or services that, ultimately, improved performance.

[2], there are many other authors who carried out their research on the relevance of brand value, the intellectual capital and the intellectual capital management capability. It develops a conceptual framework that links (various) assets, their capabilities and business value. Thus, research, in particular, concerns 3 types of assets referred to base on the market and its capabilities.

From the standpoint of the statistical techniques used, data envelopment analysis, structural equation modeling and factor explanatory financial model stand out. The sample focuses on the activity sector of semiconductors in the USA, from 1990 to 2006. Overall, 116 companies were included, taken from the NYSE/AMEX/NASDAQ stock indices and the Financial Statements of the selected companies, in addition to the base of COMPUSTAT data companies from this sector are intensive in science and technology, have constant innovation and, due to the fact that the sector undergoes very rapid changes, it provides reasons to try to measure the intellectual capital and the intellectual capital management capability, as well as the heterogeneity of investment in the intellectual capital management capability within the companies that comprise it. In total, the sample comprises 806 observations.

As the main conclusions drawn by the authors, we have that information technologies proved to be useful in order to facilitate the creation and transfer of knowledge as well as its use. On the other hand, in the semiconductor sector in the USA, efficiency and productivity did not demonstrate to be correlated with the entrepreneurial dimension related to intellectual capital management. On the other hand, a curious fact was extracted: whoever leads large companies denoted signs of being less efficient than small ones, there being, therefore, evidence that companies are more efficient as their size decreases. It should be noted that, the positive effect of the intellectual capital management capability was not constant, but rather variable, depending on the value assumed by the ROA. The intellectual capital has been observed to have a positive impact on the intellectual capital management capability. To transfer the intellectual capital to the intellectual capital management capability, companies need to integrate the specialist knowledge of their workers, after which individual knowledge is expanded and justified within the companies, with knowledge being expanded through continuous dialogue between tacit and explicit knowledge held by workers and companies.

[3], there are 2 authors who approach the theme of the brand as something that is embedded in the heart of intellectual capital. More specifically, the brand, according to the authors, can be subdivided into brand identity and brand vision. What is the object of research is how these subdivisions can influence brand awareness, through brand awareness and brand image indicators. Next, the authors intend to know, how brand knowledge affects brand performance, which is measured by brand loyalty and the ability to obtain a premium in the price of products and/or services that are sold. Thus, the focus is placed on explaining the factors that enable managers to increase the value of the brands they manage.

In order to answer all the questions, the authors resort to research that has only one theoretical purpose and does not have an applied methodology or any other part of an empirical nature. Thus, in this context, they refer that managers must be sure that the brand vision is clear and that it is communicated consistently. Thus, it must be associated with the aforementioned brand vision, both its personality and its connection with its meaning, and these 2 characteristics are not possible to apply in practice unless people related to the brand communicate it. Vigorously and often. Personality takes a long time to build and change. What has reflections on the image? On the other hand, the creation of a brand identity, connoted with the name, logo and slogan, with prior consideration and balance, must be present, without fail. It is the brand identity that forms the core of brand communication efforts. Product names can rarely be changed and therefore should be well thought out. If supported with a logo and slogan, there is a meaning related to the products and/or services, and an advertisement that helps support their position, but without forgetting that consistency among other elements is the most important. It should also be noted that brand names cannot be changed, but logos can and slogans, equally, and even should be changed. If brands are modified, there are risks and costs, so these should be seen as decisions that have been taken definitively. Logos can be modified so that the meaning can be consistent with, inter alia, changes in strategies or to update the logo. Slogans, these should be modified to reflect the brand positioning and its modifications. The authors also argue that the vision underlying the brand should go beyond advertising to build brand awareness. Brand recognition and recall are very important goals and it is through advertising that they can be achieved.

The authors also refer to the question of the image that is (almost) everything. The creation of a great image, almost always constitutes an extension to the products and/or services, originating diversity, complementarity and strength of the brand image. If this feature is successful, it provides a consistent picture. Brand loyalty is seen as precious and precarious. It is a sine qua non condition and results from experience and which are substantiated in the promises that are made and kept. Customers must always be satisfied and see the products and/or services as sources of satisfaction. Even when they are satisfied, they can lead to success or failure, which can start with a simple incident. Finally, the premium in the price of products and/or services means not a high profit but a high value that is provided to customers. If so, the brand may provide a price premium. In conclusion, these authors refer to the particularities that the intellectual capital, understood as an intangible asset such as a brand, must have so that the intellectual capital is present and raises it, via brands, whether for products or services.

[4], these 2 authors focus their research on an empirical analysis of the competitive advantages of the brands of companies in the automobile sector (Chinese). This country has become strong in the sector under consideration among the large world producers, to the point that, at the time of the paper (2021), it is the third largest producer. Despite the fact that research on it is not enough, it is necessary to assess the competitive advantages of the brands of companies in this sector via a model called Analytic Hierarchy Process (AHP) and a regression method called Ordinary Least Squares (OLS).

This evaluation took into account 6 variables to formulate research hypotheses: enterprise scale, operational efficiency, R&D investment, innovation performance, export feature and growth potential.

The source of the quantitative information constituting the sample was the Financial Statements of companies listed in the Chinese Self-Brand Automobile Enterprise (2001-2006), in the China Automotive Industry Yearbook (2002-2005), and in the China Automobile Monthly Bulletin (November, 2006).

With regard to the analysis process, the authors used the main component analysis (PCA), in order to define the most adequate process for describing the competitive advantages of the selected companies. In this way, each of the 6 variables mentioned to create the research hypotheses, were based on main factors, and the authors found that 85% of the total variation was due to these factors (variables). With regard to the OLS method, the effects of the enterprise scale, operational efficiency, R&D investment, innovation performance and export feature and growth potential were analyzed, with ROA being the performance of each automobile enterprise.

In terms of the major conclusions drawn by the authors, they found that, as a whole, the companies considered in the activity sector referred to, denoted an unequal development in the 6 variables considered. Thus, the R&D investment was weak and the export feature and growth potential weak. The competitive advantages of commercial vehicles showed a deep polarization: in the production of buses and trucks, they proved to be strong but with a low in R&D investment and operational efficiency; from the point of view of entrepreneurship scale and low innovation performance, the production of buses and lorries proved to be low; on the other hand, they proved to be strong in the operational efficiency and export feature and that had as effects, an also strong performance (ROA). In industry-leading companies, the authors found high competitive advantages compared to non-leaders.

[5], finally, this author, in his research, relates the value that brands have with the intellectual capital. One of the goals is to evaluate brands. In particular, the author analyzes, in depth, Coca-Cola and Kellog's. He says that, in recent years, much has been said about the value of the intellectual capital of companies: However, they are very descriptive and there is a long way to go to obtain a quantitative assessment. Therefore, the author underlines the fact that, in this context, it is not known what the intellectual capital is, much less if the intention is to evaluate the brands of companies and their intellectual capital, separately.

The methods proposed and used have the goal of presenting a series of limitations for the purposes of evaluating brands and the intellectual capital, stipulating guidelines for the creation of value, and a scheme to identify brand value drivers is proposed, that is, the parameters influencing the brand's value. There are several methods of valuation of brands: they can by the market value of the shares, by the difference between the market value and the book value of a company, with regard to the shares, the same but subtracted from the intellectual capital expertise of the team of management, the current value of historical investments made in marketing and promotion, estimation of the investment required in marketing in order to reach the present level of recognition, among others.

However, there are other perspectives of evaluating a brand. It covers the perspective of knowing for whom and for what purpose.

If it is whom, it is different if it is for the company that owns the brand or for another that competes with the brand or for another that is present in the activity sector but does not compete directly with the brand.

If it is what purpose, insofar as it has to be distinguished whether it is to sell or collect property rights or whether it is to facilitate the management of the brand or even capitalize on the value it has.

In general, the author defends the idea that the value of a brand is more concretely defined as the ratio of price to sales. However, there are drivers that constitute parameters that influence the value of a brand. The parameters are 3: flow differential, required return and communication. With regard to the flow differential, we can have the differential in the expectations of returns and the differential in the expectations of growth. In relation to the required return, we can have the risk-free interest rate, the market risk premium, the operational risk differential and the financial risk differential. Finally, in communication, we have quality perceived and offered.

With regard to the main factors that influence the differential in return expectations, we have the period of competitive advantage, the asset differential used, the margin differential on sales, that is, the difference between the price and cost differential, the regulation and protection of brands, consumer loyalty, lastly, emotional benefits. With regard to the factors that influence the differential in growth expectations, the relationships between the consumer and the brand, barriers to entry, acquisitions and divestments, leadership, the competitive structure of the activity sector, are worth mentioning, products and new businesses, technological progress and real growth options. The main ones that affect the operational risk differential are to highlight legislation, the internationalization of the brand, the purchase and buyable brand, the risk perceived by the market, the financing of the company. Regarding the financial risk differential, the influencing factors are the liquidity of the company or the brand, the size of the companies, and risk control. The evaluation of a company's product brands is interested in increasing information about the brand and how it should be developed and, therefore, how it should be developed as a management tool for creating value. A good brand evaluation process is a tool that helps maintain strategic consistency over time and consistently impacts marketing resources.

According to this author, and in accordance, specifically, with the intellectual capital, the value of companies in this regard, realizes that they are very descriptive in nature, and there is still a long way to go in terms of their valuation in euros.

One of the authors that stood out the most, according to the author of the research, are Roo et al. (1997), in which they show that the value of a brand is equal to the following formula: Brand Value = Level of Use × (Replacement Value + Intellectual Capital).

It is a step forward from other methods of evaluating a brand. For this reason, assessing the intellectual capital is an area in which there is little research carried out, and it is not clear what the company's intellectual capital is, let alone whether the goal is to enhance the company's brand or the intellectual capital separately (things if not distinct, they present some distinctions).

3. Conclusions

Throughout this research, in particular, with regard to the literature review, the goal behind it was to get to know a little about what it refers to in its relations between the intellectual capital and brands (2 intangible assets). One of the great conclusions that the researcher drew was that there is a relationship, in the sense the intellectual capital → brand, that is, it is interpreted as being, the first that creates the second and not the reciprocal, in a univocal relationship. On the other hand, it is also inferred that both concepts are at the base of value creation, and what distinguishes them is, in the first, various ways of creating competitive advantages, performance and innovation and greater Well-Being, while the second appears more confined to the idea of identity, which identifies something, be it a company, institution, product and/or service.

However, sometimes, in its most diverse facets, the borders that define and delimit the 2 are not always well defined as their characteristics sometimes converge (when they point to the same end – the intellectual capital was in the basis of the design of a product, but the way to identify and distinguish it from others is up to the brand), and at other times, they are divergent (when the intellectual capital has relationships that are in strict connection not with the brand, but with ways of evolution of the products. products over time, better properties and a greater degree of consumer satisfaction, especially when the range of needs it satisfies is expanded).

In the brief review carried out, it appears that the relationships between the 2 are confined to the telecommunications, semiconductor and automobile sectors, that is, consumer goods that can be considered durable, not affecting non-durable consumer goods. If that were the case, one could have a more short-term viewpoint, in the existing relationship, especially since, as indicated by [3], brand names cannot be changed, logos may be changed, slogans can and should be changed. This change is not considered in this author, much less its effects, namely, with regard to intellectual capital. The conceptions used by the authors are static and like a state instead of being dynamic and like a process, which would be more convergent with the notion of brand. This follows operating guidelines that are different from that of intellectual capital.

The limitations of the study are evident in the scarce bibliography found for the literature review (and totally silent on the relationship between 2 assets of an intangible nature). The consumer goods sectors are more suitable for having incident research that could not be found for proper treatment.

The most notable implications are that they have a short or no impact on knowledge in the domain, which does not contribute to the expansion of scientific knowledge.

In future avenues for scientific development, it should be noted that case studies would be scientifically more promising, to know more in detail not in a broad and generalized way, but specifically where knowledge would be more concentrated, allowing for a better understanding of this relationship. The idea would be to study relationships such as, v. g., Coca-Cola (brand) and the associated intellectual capital, in a country and even in more than one, in order to know if there are inter-country differences or similarities and what they are.

Finally, with regard to the research question, the relevant literature consulted proved to be scarce and of little depth and coverage in the 2 topics. More specifically, it shows more divergence and sometimes not even relationships between them. No special relationship stands out, in particular, other than multidirectionality rather than unidirectionality.

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