



## Editorial

# Knowledge and sustained competitive advantage: How do services firms compete?



## Conocimiento y ventaja competitiva sostenida: ¿Cómo compiten las empresas de servicios?

In the today's competition, how firms create and sustain a competitive advantage has become an increasing field of interest for both scholars and practitioners. Firms are told to increase and improve their intangible-based elements to remain competitive, so they must pay particular attention to issues such as knowledge management, intellectual capital, intellectual property rights, core competences, dynamic capabilities or competitive intelligence.

Meanwhile, the theoretical foundations of research on competitive advantages have covered a variety of approaches. Some of them have used the Barney's (1991) discourse of sustained competitive advantage based on a combination of resources and capabilities. Some others have approached from the Grant's (1996) knowledge-based view of the firm that posit that firms holding a superior ability to use and deploy knowledge-based resources quicker and faster than competitors are those that will sustain a competitive advantage over time. Some others have approached from the premise that one cannot manage what cannot be measured, which in the end formed the strand of intellectual capital assessment: how to assess the hidden value of a firm. Some noticeable models arose in the early 90s. All of them yielded a diversity of business scorecards that varied depending on the hidden assets, resources and capabilities that contribute the most to value creation and hence performance.

However, some problems about conceptualization and operationalization of the SCA discourse exist (Kraaijenbrink, Spender, & Groen, 2010). According to the latter authors' review, one of the main concerns relates with the indeterminate nature of resource and value. A second type of critiques deals with the narrow conceptualization of a firm's competitive advantage under the "valuable, rare, inimitable and non-substitutable plus the organization is in a position to appropriate the rents generated – VRIN/O" principle that sources of SCA must comply with.

Moreover, these issues can be even harder to apply in the case of service industries in which its intangible nature plays a key role. Molloy, Chadwick, Ployhart, and Golden (2011) have provided interesting arguments regarding the differences between managing tangible and intangible elements. Manufacturing industries must deal with tangible elements of the firm such as raw material, throughput or machinery. For decades, managers in those industries have had to manage them under cost-efficiency principles: the more one uses a tangible element, the more it wears away. This has meant that managers have tried to protect tangible elements

from use in terms of efficiency. If this is applied to intangible elements, then it does not hold. Neither the use of intangible elements makes them depreciate nor does it make them to be less available for other users. In fact, managers are trained under the umbrella of efficiency, which is a valid framework when dealing with tangible elements. Under that framework, managers need to take care of selecting the best use of material assets and the like in order to get the highest return from them due to the problems of availability. However, that framework does not hold for managing intangible elements. Managing intangible elements such as knowledge-based assets means not protect them from uses that presumably yield low returns since those assets improve thanks to their use. In fact, knowledge-based assets increase its value for the organization if extensively used.

This latter argument implies that service industries must be managed under different managerial principles. These industries are quite frequently knowledge-intensive in nature, in which the principle "efficiency-of-use" gives way to the principle "availability-to-use". This implies that managers should emphasize availability instead of efficiency: the more one uses a knowledge-based asset, the more it increases the stock of valuable knowledge.

The overall problem in the RBV discourse on acquiring competitive advantages is more related with implementation rather than with how strategy should be designed. It is as simple as the firm must control a resource or capability that let it obtain an above normal profit in its industry (Kraaijenbrink et al., 2010). However, we know little about whether its implementation in knowledge-intensive services differs from that in manufacturing industries where efficiency and profitability seems to govern the board's decisions.

Hence this special issue has sought fresh and provoking perspectives in order to clarify how these firms competing in service industries may seize on their knowledge-based elements to achieve a competitive edge. Papers published in this SI address several of the mentioned above issues, from both theoretical and empirical perspectives and either qualitative or quantitative approaches. Yet we would like to launch some remaining open questions to scholars for future research:

- Is knowledge the key for achieving a SCA? Or is there any link missing in between?

- How can these firms achieve a knowledge-based competitive edge? How should they manage their intangible-based elements for this purpose in order to sustain a vantage that is so transient and fleeting?
- Do core competences mediate/moderate the impact of tangibles and intangibles on performance? Do service firms build their core competences in a different way as manufacturing firms do?
- Is competitive intelligence disregarded in the SCA discourse? How can (do) these firms incorporate it? How can we introduce the competitive intelligence concept into the SCA discourse from a KBV approach?
- Is the KBV an appropriate/suitable approach to SCA?
- How do service firms create value and for whom in order to achieve a competitive edge? Which is the concept of “value” that fit best in the SCA discourse?
- Is the ambidexterity between exploration-growth and exploitation-profit missing? Is it achievable in the case of service SMEs?
- Do we need a combination of transactions cost economics, RBV, KBV and SCA to make the VRIN workable? How is this addressed in the case of services firms?
- What is the value of knowledge-based resources and capabilities? Is there a method to measure it appropriately? Is there a market for knowledge-based resources and capabilities? If so, does it work fine, is it effective/efficient?

With these questions in mind, we are pleased to introduce the five articles included in this Special Issue.

Firstly, the article from Erickson and Rothberg opens this Special Issue by comparing services and non-services industries. They compare the level of development of knowledge assets between both types of industries over time. They used two multi-year, multi-industry datasets. As one could expect, they found that service industries reflect higher levels of intellectual capital. Yet the most relevant finding is that it was not the case a decade ago. Their longitudinal approach let them reach some answers and open up some other questions for future research. First, knowledge development is not static but it changes and evolves over time. A critical difference between services and non-services industries is that the former usually require more expertise and know-how from providers, especially modern services driven by information technology and associated data. On this issue, the last paper included in this Special Issue shed some light in what may be the challenge for the next decades: how to seize on outsourcing of information systems and whether firms will try to internalize this source of key knowledge. Erickson and Rothberg raise the issue of whether the consideration of knowledge assets as strategic elements may explain partly successful implementations of knowledge management systems, i.e. whether those firms that seek consciously a return from those systems are the only one that will succeed on achieving a knowledge-based competitive advantage.

Our second article from Durst, Mention and Poutanen provides a literature review on the intersection between service innovation and its impact on performance. Under the well-known premise that *what cannot be measured, cannot be managed*, they claim that the ability to monitor the service innovation process is a pre-condition to properly manage it. An underlying background here is the *servitization* of the economic activity, which implies that even manufacturing industries are competing by increasingly including services in their core products. Accordingly, it can be expected that the tomorrow's competition will be increasingly based on the service logic rather than on the dominant efficiency logic in manufacturing industries. Under this context, service innovation becomes a crucial source of competitive advantage. They analyze thirteen empirical studies published in peer-reviewed journals between 2006 and 2014. Past literature reviews had

synthesized what we know until 2006. Thus the low number of articles seems to imply that the field still lacks of a relevant body of empirical research. This is perhaps due to the lack of theoretical approaches and background to be applied, while calling for more theory-driven research in the field of service innovation and its performance. Furthermore, managers still lack of metrics that have been tested extensively in the service industries other than product innovation-based metrics. This will allow managing service innovation properly from a multidimensional and multilevel approach, i.e. trying to cover the diversity of viewpoints (managers in charge of innovation, suppliers, customers, variety of industries, variety of nationalities, etc.). All in all, more research is still needed in this promising field of service innovation as source of competitive advantage.

The third article from Cruz, Albuquerque, Kimura and Sumoyama provides a comparative analysis of the [Gu and Lev \(2011\)](#) methodology for the United States software and hardware sector. They reflect upon the impact of intangibles on value creation. In the RBV, a critical problem is the argumentation of value creation. This implies the problem of how and whether current models of accountability can catch the hidden value of intangible elements. While traditional balance sheets inform about the past, stakeholders are increasingly concerned about the future value of the company and how it creates value for each stakeholder. Intangible elements of the firm are expected to yield a higher future return than tangible elements can do. That difference is essentially due to the fact that tangible elements depreciate while intangible elements seem not to depreciate but appreciate across time. Authors of this article used the promising methodology of Gu and Lev to expand the latter authors' original hypotheses in two ways. First, Cruz and colleagues expand the original study towards the software and hardware sector in the USA. Second, they develop additional hypotheses regarding the contribution of intangible resources to value creation. A noteworthy contribution of this study is the comparison between service (software) and manufacturing (hardware) industries. Authors find relevant differences between those industries intangible indices. Authors also achieve disappointing results regarding explanatory power of the model that calls for further research on more complex samples that include several different sectors.

The fourth article from Ruizalba, Vallespín and Pérez-Aranda dig deeper on the impact of intangibles on the development of competitive advantages in the hotel industry. They reflect upon the particular case of internal market orientation as a key issue for managing knowledge in this industry. By means of a combined factor analysis and cluster analysis they reached relevant findings regarding the particular dimensions that inform competitive advantages based on intangible elements in the Spanish hotel industry. The internal communication is the crucial dimension in the internal market orientation while the creation of internal intelligence still receives marginal attention from managers. Therefore there is room from improvements in order to obtain a competitive edge based on the human dimension. Authors prove that internal market orientation has an impact on employees' satisfaction and commitment. These intangible elements have a final impact on perceived service quality. Accordingly, it seems that, in order to obtain a competitive advantage, excelling in managing the human factor could be a more required pre-condition in service than in manufacturing industries. We could then suggest that the assessment of performance should include metrics related with intangibles in service industries.

The fifth article we included is authored by González, Gascó and Llopis. The issue underlying in this article we would like to emphasize is the extent to what we will witness firms internalizing or outsourcing a critical core component in strategy decision making in the future: the information systems. According to authors,

international data shows that outsourcing of information systems has increased during recent years. Their longitudinal study over 12 years points out the preservation of the status quo in the configuration of this outsourcing. Authors find that Spanish firms develop a selective outsourcing in certain types of information services. The overall level of outsourcing increases from 2001 to 2006 and 2013 while in every of the three years the four activities most outsourced are the same. The evidence that this type of outsourcing is considered as strategic is shown by the strengthening of contracts and the lower number of different suppliers that firms seek now than earlier years. It seems that this type of outsourcing may lead these service firms to be a strategic, valuable tie for their customers' competitive advantages. Part of the explanation for the increasing level of this outsourcing may lie on flexibility and on the vertiginous advance of the hardware components. Perhaps the advantage of this service firms may lie on the specialization on core business related with big data. Undoubtedly, the outsourcing of information systems is a challenging field for both scholars and managers that will configure the way how multinationals and big corporations compete in the near future. Whether and how much this type of outsourcing affects the customer's performance and competitive advantage remains an unveiled story and deserves further attention from all of us.

Finally, we are in debt with reviewers (the hidden, intangible value of every scientific article), authors and editors. All of them have made this Special Issue possible so our big thanks and acknowledgement is for all of them.

As shown, the impact of intangible elements on service industries differs from that on manufacturing industries. We should mention that the firm's human capital—those individuals that contribute their most the value creation—are a usual starting point

when linking intangible issues such as organizational and relational capital (González-Loureiro & Dorrego, 2012). Accordingly, we believe that the art of managing business should be adapted to the different conditions of services industries, while we encourage scholars to challenge the validity of the SCA principles in these industries.

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Guest Editors

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