

The role of KIBS on digital transformation and technological changes in the Spanish publishing industry

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ABSTRACT

The present study, employing survey research design, analyzes the role of Knowledge-Intensive Business Services (KIBS) in the processes of digital transformation and technological changes of publishing companies in Spain. The overall objective of this study is to gauge the scope and depth of the impact of KIBS on Spanish publishers; specifically to identify the drivers of this collaboration through the Transaction Costs Theory; and to determine the degree of support in their transition to new business models. An online survey was administered to the 992 publishers belonging to DILVE, the Internet-based platform that facilitates the management and distribution of bibliographic data, and marketing information of books published in Spain. A total of 310 publishing companies responded to the survey questionnaire, giving a response rate of 31.3 percent. Findings suggested that KIBS are not seen as a threat - neither in the evolution and progress of the publishing sector nor in its digital transformation, modernization, and competitive improvement - but as an opportunity instead as KIBS allow accessing all those innovations that, otherwise, would be difficult for Spanish publishers to achieve in isolation.

Keywords: Knowledge-Intensive Business Services; Transaction costs; Publishing industry; Book publishing, Publishing business model.

INTRODUCTION

The publishing industry, like other creative industries, is experiencing a significant process of technological change (Carreiro 2010). It is undergoing a profound transformation as a result of its transition to the digital world (Martin and Tian 2016) throughout the entire value chain; from the very conception of what we call 'book' to its forms of production and distribution (Magadán 2017).

The Transaction Cost Theory (Coase 1937; Williamson 2008) constitutes the theoretical framework that allows knowing the moment in which publishing companies must internalize or, on the contrary, to outsource several processes through outsourcing (Anderson, Glenn and Sedatole 2000), to those suppliers that have competitive advantages, despite being subject to limited rationality and opportunist behavior (Klein, Frazier and Roth 1990).

The value chain analysis of a publishing company allows identifying the associated transaction costs (Magadán 2017) on: (a) the production side, transaction costs appear in the author-publisher relationship (or agent-publisher, if this one acts on behalf of the

author) and in the printer-publisher relationship; and (b) the distribution and marketing side of paper books, transaction costs originate in the publisher-distributor relationship and the distributor-bookseller relationship. In the case of the distribution and commercialization of e-books, transaction costs take place in the digital publisher-distributor relation, in the digital publisher-platform relation, and the digital distributor-bookseller relationship.

In this entire process of transformation and change within the publishing industry, there has been an absence in academic literature on the role of the Knowledge-Intensive Business Services (KIBS) as innovation sources or facilitators. The few existing studies have focused on the consequences of innovation and technology (Benghozi and Salvador 2015; Magadán 2017; Magadán and Rivas 2018a), concluding that publishing companies are generally known for their limited bets on investment in innovation, and underlining that most research and development (R&D), and innovation take place outside the publishing industry and comes mainly from the technology industry.

The present study analyzes the function of KIBS on the processes of digital transformation and technological change of publishing companies. The purpose of this study is to explore the effects of publishing companies in interacting with KIBS as facilitators, bearers, and generators of innovation. Specifically the objectives are: (a) to determine the role of transaction costs as drivers of the outsourcing of knowledge management systems through KIBS; and (b) to understand how the interaction of publishers with KIBS promotes in those the introduction of new business models. This study focused on the Spanish publishing industry due to the transformation processes that cultural industries are undergoing in recent years, caused both by technological innovations and by changes in consumer habits (Magadán and Rivas 2018a).

THEORETICAL FRAMEWORK

Business Models

A business model defines how organizations create and deliver value to their clients (Amit and Zott 2001; Teece 2010) and articulate the market in which an organization operates, placing itself within a valuable network of suppliers, wholesalers, retailers, and customers. In short, a business model represents the operational architecture behind both the value and supply chains of a product and eases the understanding and response by companies to markets and their needs (Chesbrough 2010; Øiestad and Bugge 2014).

Publishers see the phenomenon of digitization as one of the threats that are shaping both the publishing industry value chain and company business models (Magadán and Rivas 2019a). Publishing companies increasingly react to ever-changing customer demands concerning digital content and formats. Digital transformation and technological change in the publishing sector not only promotes new ways of presenting their contents (Shatzkin 2008) but also favors the development of new business models (Peng 2016), among which can be highlighted: the fragmented content model, the payment for consumption or content on-demand, the subscription model, membership, crowdfunding, gamification, direct sales and self-publishing (Magadán 2017; Magadán and Rivas 2018a). Besides, crowdfunding campaigns in the publishing industry open up their business models to customers, co-creating together with them value propositions (Magadán and Rivas 2019b; Zott and Amit 2010).

Empirically, several studies have analyzed the impact of digital transformation over publishing business models, considering the disruption of e-books (Carreiro 2010; Ferreira, Miranda and Moras 2018; Katan, Mustafa and Adnan 2018; Magadán and Rivas 2018a), reflecting econometrically about the dilemma between diversification and specialization (Mangani and Tarrini 2017), or focusing on the scholarly publishing sector (Magadán and Rivas 2019b), among others.

In short, business models must be built on a logical plan to bring a product to market and make a profit (Magadán and Rivas 2018a). Accordingly, companies must innovate in their respective business models with new ways of creating and capturing value for their stakeholders (Magadán and Rivas 2018b).

Knowledge and Innovation

Knowledge and innovation are decisive pieces for today's organizations since they represent the essence of their competitive advantage and foster changes in business models for better adaptation to the market environment (Branstetter 2006; Magadán 2017).

The implementation of knowledge management systems within organizations allow them to: (a) increase the value-added of their products; (b) boost the organization's value; and (c) identify and develop new competitive advantages. Nevertheless, given the scale and capital limitations of some organizations, not all of them can generate and accumulate the knowledge they need (Chun-Yao, Da and Chi-Hsia 2011). In these cases, companies have no other option than to rely on external sources of knowledge (Leonard-Barton and Sinha 1993).

One of those external sources any organization can access is the derivative of the 'overflow effect' of knowledge that, in turn, can be horizontal-inter and intra-enterprise-, or vertical-interindustry (Chun-Yao, Da and Chi-Hsia 2011). The other external source is related to the search of other organizations specialized in the generation and management of knowledge (Miles 2005).

Knowledge and innovation in the publishing sector depend, increasingly, on technologies and rules external to this one, what will promote in publishing companies the searching for open innovation, as much via overflow of the knowledge as via agreements with specialized organizations (Benghozi and Salvador 2016; Fleischmann, Daniel and Welters 2017; Magadán 2017).

The academic literature has empirically analyzed the linkages between knowledge management and entrepreneurship (Davari and Majd 2016; Chikwelu, Shyam and Chakrabarti 2018), the relationship among international competitiveness, knowledge, and innovation (Huang and Tian 2014), the role of information systems on publishing industry (Lim 1999; Tiwana and Ramesh 2001) and of publishing industry within the knowledge economy (Peng 2017), among others.

Knowledge-Intensive Business Services (KIBS)

A particular case of outsourcing is related to KIBS, whose purpose is to respond to the growth in outsourcing of activities and services requiring specific knowledge in technology and market. KIBS offer highly qualified services of high added value for the contracting companies and provide complementary services to productive processes of the organizations for which developed knowledge, advanced technologies and innovative

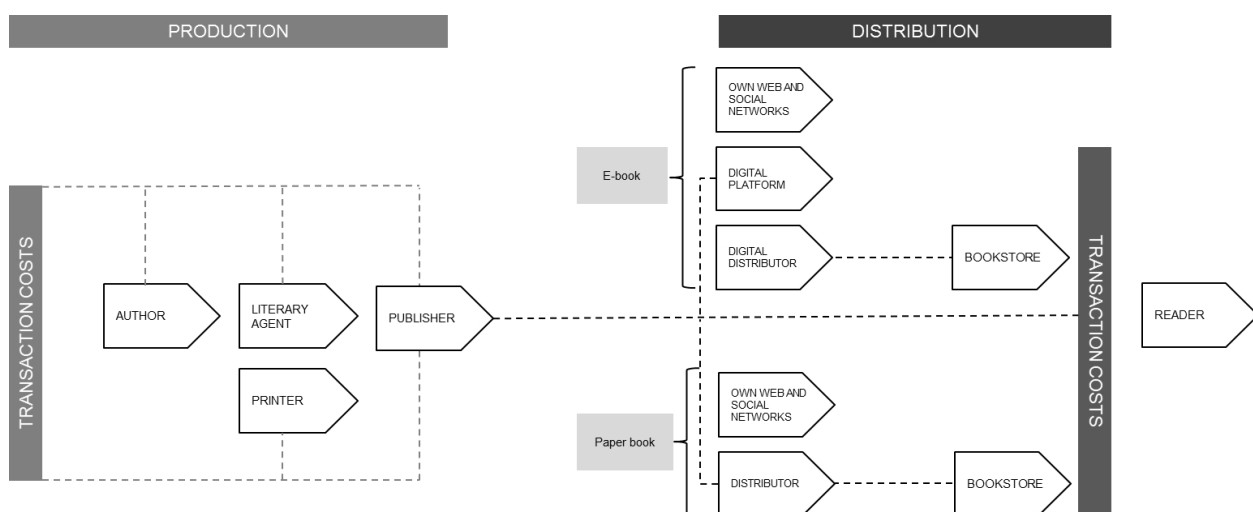
strategies are required (Miles 2005; Miozzo and Grimshaw 2005). This industry, characterized by its high intensity of knowledge and high skill levels, mainly produces services used as intermediate inputs by businesses.

The most significant feature of KIBS innovation is to satisfy the specific demands of the clients (Miles 2005). Nonetheless, KIBS not only play the role of external knowledge sources for their clients, but also participate independently in innovative activities (Chun-Yao, Da and Chi-Hsia 2011).

KIBS have, at least, three roles within innovation systems: (a) as facilitators of innovation when supporting their clients' businesses in their innovation processes, in case these do not originate in those; (b) as innovation carriers, when transferring the existing knowledge at inter-firm or inter-industry level (from a company or industry to another one), and (c) as generators (sources) of innovation when playing a decisive role in the start and development of it in a client company (Gallouj 2002; He and Wong 2009).

Transaction Costs

The production process of the book, following the value chain of a standard publishing company, leads to different movements being possible, outsourcing processes and activities to third companies or, conversely, vertically integrating them into the firm (Magadán 2017; Magadán and Rivas 2018b). Among all the links in the book production chain mediate written contracts - inevitably incomplete - which, by definition, cannot include all possible contingencies and, therefore, carry a risk of conflict as to who should do what, when, and by what (Magadán 2017). As seen, the development of publishing activities requires proofreaders, layout designers, printers, distributors, and bookstores. All these processes must be interconnected in the best possible way, trying to minimize the associated transaction costs (Magadán 2017). Accordingly, this framework will enable to identify the organizational strategy of publishing companies and to determine when these companies should internalize or, on the contrary, outsourcing some processes (Klein, Frazier and Roth 1990). Figure 1 shows the linkages associated with transaction costs in the value chain of a standard publishing company (Magadán 2017).



Source: Magadán (2017).

Figure 1: Transaction Costs in the Value Chain of a Standard Publishing Company

On the production side, transaction costs appear in the author-publisher relationship (or literary agent-publisher, whether an agent negotiates on behalf of the author) and in the printer-publisher relationship. Firstly, in the author-publisher relationship, arise the search and evaluation costs (Robins 1987; Williamson 2005) of the author and his/her work to ensure that both suit the publishing line (Magadán 2017). Whether the author comes to the publisher spontaneously - either directly or through a literary agent - the search cost disappears (Berthon et al. 2003), but the evaluation cost is maintained. Secondly, once the overcoming of the publishing filter, the negotiation of the publishing contract begins, which implies the emergence of negotiation costs to agree with the terms of the contract that will govern the author-publisher relationship. Afterward, the harmonization of positions, the document, and legal formalization of the agreement (publishing contract) are required, involving the emergence of contracting costs. Finally, publishers must verify the fulfillment of all the agreed, which also implies the arising of the control and guarantee costs.

In the printer-publisher relationship, the process is similar that of the author-publisher. The publishing company, depending on the technical characteristics of the work, will be forced to look for the printing press that best suits the pre-set requirements, as well as the budget assigned to it (search costs). After the search costs, the negotiation costs emerge with the printing presses candidates to carry out the work. Once the publisher has decided which printing company will get the task, the budget will serve as a timely contract for said work. In this sense, unlike what happens in the author-publisher relationship, there are no contracting costs since the negotiation revolves around a budget that, if accepted, does not require more formalities. Once the agreed budget, the publisher must verify that the agreement reached is fulfilled under the agreed conditions, such as the delivery time and the quality of the work performed (control and guarantee costs).

On the distribution and the commercialization side of the paper book, the transaction costs originate in the publisher-distributor relationship and the distributor-bookseller relationship. In the case of the distribution and commercialization of the e-book, the transaction costs take place in the digital publisher-distributor relationship, in the digital publisher-platform relationship, and the digital distributor-bookseller relationship. In both cases - paper book and e-book - transaction costs are the same: search, negotiation, contracting, control, and guarantee (Alchian and Woodward 1988; Magadán 2017; Robins 1987; Williamson 1985), and each of the transaction costs linked with the different relationships in the value chain of any publishing company has associated key attributes: frequency of the transaction, degree, and type of uncertainty, small numbers, asymmetry of information and the condition of specificity of the asset required (Kulkarni and Heriot 1999).

To summarize, outsourcing in the publishing sector appears as a solution to the inefficiencies derived from the vertical integration of several processes. Therefore publishers can go to outsourcing in search not only for a more efficient way of running some of those transactions, but also for innovation and knowledge creation (Dyer and Nobeoka 2000; Hagedoorn 1990), in such a way that this trend is causing an increase in the number of KIBS collaborating with publishing companies in developed countries (Miles 2005; Miozzo and Grimshaw 2005).

OBJECTIVE AND METHOD

The purpose of this research is gauge the scope and depth of the impact of KIBS on Spanish publishers, with the specific objectives to (a) identify the drivers of this collaboration through the Transaction Costs Theory; and (b) determine the degree of support in their transition to new business models. The following research questions are posed:

(a) What are the transaction costs driving the outsourcing of knowledge management systems through KIBS?

(b) Where are KIBS located within the value chain of a publishing company?

(c) Are KIBS promoting the emergence of new business models in the Spanish publishing sector?

This research applied the survey research design, administered to the 992 publishers belonging to DILVE (<https://web.dilve.es/>), the Internet-based platform that facilitates the management and distribution of bibliographic data, and marketing information of books published in Spain. This platform is an efficient and agile way to exchange bibliographic information among the different agents in the Spanish publishing industry.

The researchers used a semi-structured questionnaire with open and close-ended questions. The survey questionnaire (see Appendix) was distributed by e-mail using the SurveyMonkey platform, which simplifies the data collection and its subsequent treatment, thus avoiding possible errors in the handling of the data. The duration of data collection was from January 10th to February 10th, 2019. On January 10th the survey was sent to 992 publishers by e-mail with a request to answer the questionnaire online through SurveyMonkey, obtaining 103 responses. On January 20th, a reminder was sent by e-mail, receiving 127 more responses. On February 2nd, another reminder was sent by e-mail, receiving 80 more responses. Once the survey was closed on February 11th, the researchers sent a thank you message to all the respondents for their participation. A total of 310 publishing companies responded, giving a response rate of 31.3 percent. An Excel spreadsheet was exclusively used for the analysis of statistical data, and graphic representation of results. The collected empirical data were relevant to obtain statistically valid results, within the confidence level and sampling error indicated, allowing to answer the questions raised in this study. Table 1 presents the administrative data of the survey.

Table 1: The Survey Administrative Data

Population	992 publishing companies from DILVE
Initial sample	992 publishing companies
Response rate	31.3%
Final sample	310 publishing companies
Sampling error	±4.6%
Confidence level	95%
Survey	Semi-structured questionnaire
Timing	From January, the 10th to February, the 10th (2019)

In addition to general inquiries of identification and ones oriented to various aspects of publishing activity for the companies interviewed (see Appendix A), 14 major questions developed for this study are presented in Table 2. The respondents, once informed about the several transaction costs that are potentially implicated in their outsourcing activities, will chose those option considered more significant for them. Table 3 presents the meaning of the terms associated with transaction costs used in the survey questionnaire.

Table 2: Major Questions Developed for the Study

Question	Type of answer
Describe the production process of a book in paper format.	Open
Describe the production process of a book in electronic format.	Open
Describe the distribution process of a book in paper format.	Open
Describe the distribution process of a book in electronic format.	Open
Is the printing of the books on paper format outsourced? a. Yes b. No	Closed
If you answered "yes" the above question, what has motivated such outsourcing? (*)	Open
Is the distribution of the books on paper format outsourced? a. Yes. b. No.	Closed
If you answered "yes" the above question, what has motivated such outsourcing? (*)	Open
Do you publish e-books? a. Yes. b. No	Closed
Does the distribution of the e-books have been outsourced? a. Yes. b. No	Closed
If you answered "yes" the above question, what has motivated such outsourcing? (*)	Open
Do you think that information technologies are modifying the business models of publishers? a. Yes. b. No	Closed
Indicate whether you use some of the following business models: a. Crowdfunding. b. Fragmented content. c. Payment for consumption. d. Subscription. e. Open access.	Closed
If you have marked some business models of the above question, please indicate the way you develop them: a. Through its own website. b. Through external platforms.	Closed

Source: own elaboration. (*) Respondents, besides their arguments for outsourcing several activities, had the possibility to mark on an additional table the transaction costs implicated in their decisions.

Table 3: Meaning of the Terms Associated with Transaction Costs used in the Survey Questionnaire

Searching costs	Searching costs are those that must be incurred to find out with whom the outsource is going to be carried out.
Negotiation costs	Negotiation costs are those that relate to the process of approximation of bids between the parties who wish to reach an agreement, with the subsequent drafting of a contract.
Control and guarantee costs	Control and guarantee costs are those that are incurred to control that the contract is fulfilled.
Limited rationality	Not all key information about suppliers is available.
Uncertainty	Lack of knowledge about the possibility of outsourcing a service.
Opportunistic behavior	Taking advantage from a power imbalance in negotiation.
Small numbers	Existence of small number of suppliers.
Asymmetry of information	Taking advantage from information imbalance in negotiation.
Frequency of occurrence of the transaction	Number of times a service has to be outsourced.
Degree of uncertainty to which the transaction is subject	Lack of control about the possibility of reaching an agreement.
Specificity of assets	Very specific and expensive machinery or technology in hands of few suppliers

RESULTS AND DISCUSSION

This section provides the findings obtained from the survey for the following objectives on:

- (a) The effects the collaboration with KIBS have on publishing companies to facilitate the incorporation of new services into their respective offers;
- (b) The role of transaction costs as drivers of the outsourcing of knowledge management systems through KIBS; and
- (c) The extent the interaction publishers-KIBS drives in those the introduction of new business models.

Business Models

Concerning publishing business models, 95.16 percent (295) of the publishers surveyed indicate that the arrival of information technologies has modified their publishing business model (Figure 2). Nonetheless, most of the publishers surveyed (73.22%, 227) admitted the coexistence in their business models of both products, digital and print.

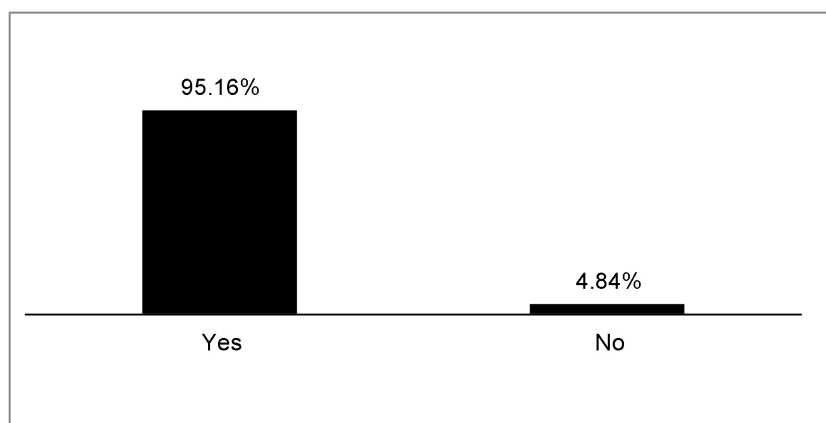


Figure 2: Publishing Business Model Modification

The publishing companies studied reported merely selling digital versions of their best-seller books (in paper format) on digital distribution platforms in an attempt to minimize risks. This phenomenon is called retro-digitization (Evans and Mathur 2018). This strategic decision eases, at least in the short term, to technology companies - with enough financial resources and specialized knowledge - the leading control of distribution and sale of e-books.

Regarding the new business models emerging from the digitization of the book industry, between 70.96 and 99.03 percent publishing companies choose to develop them with the external support of technology-based companies that facilitate access to different models emerging markets: subscription (99.03%, 307), fragmented content (91.29%, 283), payment for consumption (97.74%, 303), open access (81.29%, 252) and crowdfunding (70.96, 220). On the contrary, publishers that try to internalize the innovation to develop their adaptations of these different models barely reach 30 percent (Figure 3).

KIBS innovation is usually tied to satisfying the specific demands of their clients (Miles 2005), mainly by (a) playing the role of external knowledge sources for these, and (b) collaborating independently in innovative activities (Chun-Yao, Da and Chi-Hsia 2011). Furthermore, publishers see KIBS as facilitators of innovation, innovation carriers, and generators (sources) of innovation (Gallouj 2002; He and Wong 2009).

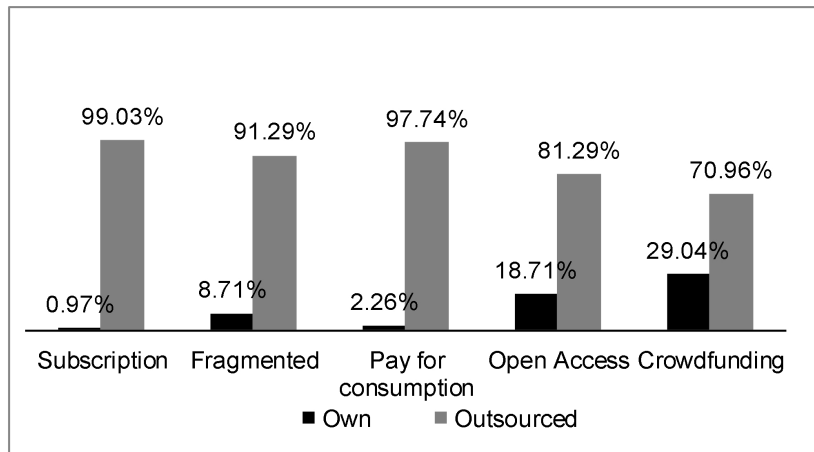


Figure 3: Publishing Business Models

In the value system derived from the relations between the publisher and the different agents that link their value chains with one another, KIBS have found two clearly defined spaces of interaction, both in the production stage and in the distribution stage (Figure 4).

The Spanish publishing industry is facing new technological challenges through the outsourcing of their innovation processes (Magadán 2017). The presence of KIBS in the development of crowdfunding platforms is evident, specially oriented to paper book production and the development of digital distribution of e-books through digital platforms (Magadán and Rivas 2018b).

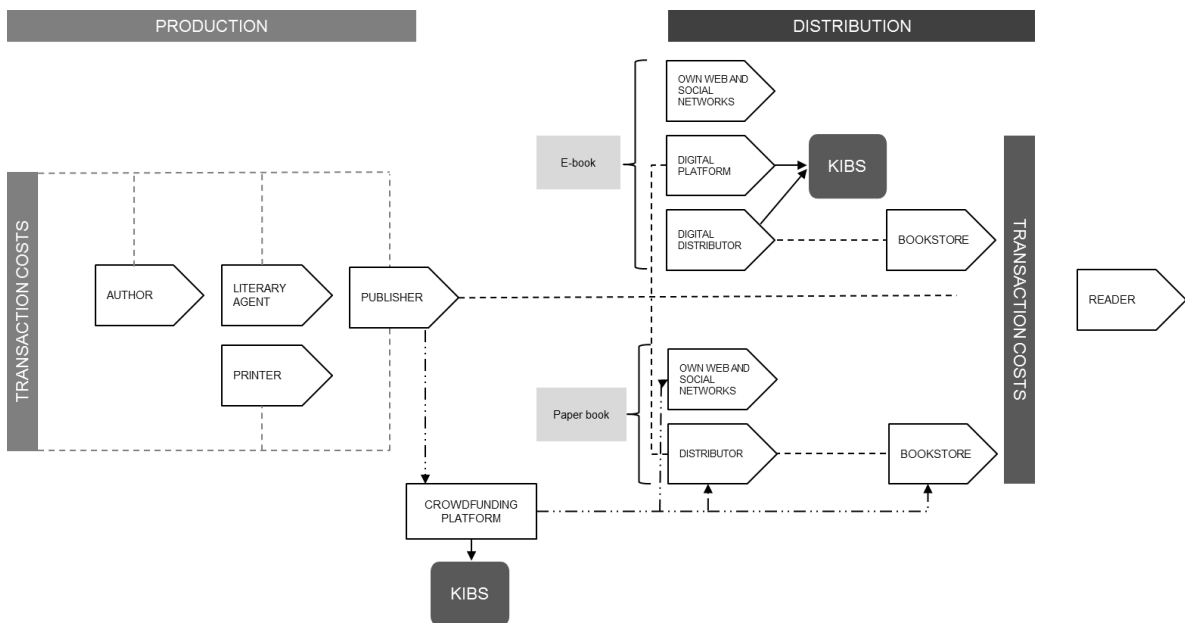


Figure 4: KIBS Within the Publishing Value System

Knowledge, Innovation and Transaction Costs

Knowledge and innovation are indispensable pieces for any organization, both shape their competitive advantage and encourage the review of their business models for a better fit to the market environment (Branstetter 2006; Magadán 2017).

One of the outsourced production activities in paper book production is related to printing: 94.19 percent (292) of the surveyed companies claim to have outsourced printing services, compared to 5.81 percent (18) that still maintain such services vertically integrated (Figure 5).

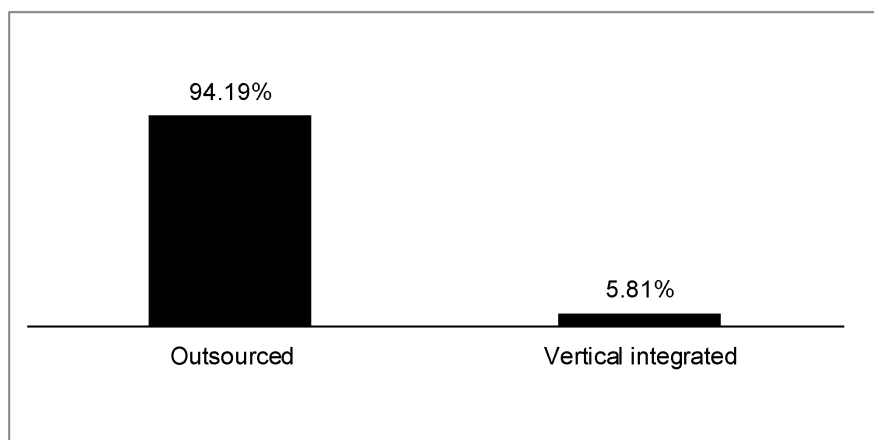


Figure 5: Outsourcing of Printing Services

From the responses provided in the open-ended question regarding the motivations of outsourcing, it follows that the transaction costs associated with the outsourcing of printing services (Table 3) are significantly lower for publishers when compared with the option of their vertical integration 'up-stream'.

Table 3: Transaction Costs Associated with the Outsourcing of Printing Services

		Transaction costs	Number of respondents (*) / (Percentage)
Printer-publisher	Searching	Limited rationality	25 (8.06%)
		Uncertainty	12(3.87%)
	Negotiation	Opportunistic behavior	47 (15.16%)
		Asymmetry of information	63 (20.32%)
		Frequency of occurrence of the transaction	170 (54.83%)
		Degree of uncertainty to which the transaction is subject	35 (11.29%)
		Specificity of assets	221 (71.29%)
	Control and guarantee	Opportunistic behavior	16 (5.16%)
		Asymmetry of information	20 (6.45%)

Source: own elaboration. (*) Respondents can choose from none to more than one transaction cost.

In the case of the printer-publisher relationship, the transaction costs to which the editors pay the most attention are those associated with the negotiation. Ultimately, the publishers surveyed prefer to outsource the production process of paper books to printers rather than integrating this process vertically.

Publishers have several options to market the book: firstly, using the long channel (publisher-distributor-bookstore-client); secondly, through the short channel (publisher-bookstore-client); and finally, through the direct channel (publisher-client), either through their commercial structures or through new technologies and resources offered by the Internet. Regarding the distribution of paper books among the publishers surveyed, the most widespread distribution channel is the long channel (93.22%, 289), thus reinforcing

the idea of the survival of the traditional value chain of the paper book. Laterally, other channels such as the direct (35.16%, 109) and the short channel (31.29%, 97) complement the marketing channels of the paper book (Figure 6).

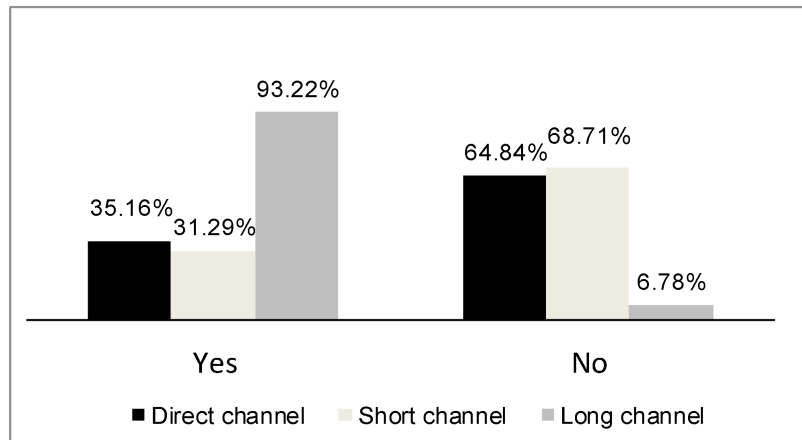


Figure 6: Distribution Channels Commonly used by Publishers

The open-ended question regarding the motivations of outsourcing the distribution of the paper-based book sees that the transaction costs associated with the outsourcing of distribution services (Table 4) are relatively low for publishers when compared with the option of its vertical integration 'down-stream'. In the case of the publisher-paper book distributor relationship, the transaction costs to which publishers devote most attention are those related to control and guarantee.

Table 4: Transaction Costs Associated with the Outsourcing of Paper Book Distribution

Transaction costs			Number of respondents (*) / (Percentage)
Publisher-paper book distributor	Searching	Limited rationality	21 (6.77%)
		Uncertainty	9 (2.90%)
		Small numbers	16 (5.16%)
	Negotiation	Opportunistic behavior	32(10.32%)
		Asymmetry of information	52(16.77%)
		Frequency of occurrence of the transaction	98(31.61%)
		Degree of uncertainty to which the transaction is subject	29(9.35%)
	Control and guarantee	Opportunistic behavior	189(60.96%)
		Asymmetry of information	217(70%)

Source: own elaboration. (*) Respondents can choose from none to more than one transaction cost.

Regarding the distribution of e-books, the process begins when the publisher receives the digital file in the indicated format, according to the service platform used (digital distributor, digital platform, or own platform). The distribution of e-books passes through three elements: the content supplier (the publisher), the platform service, and the reading device. Finding showed that 73.22 percent (227) of the publishers publish e-books (Figure 7).

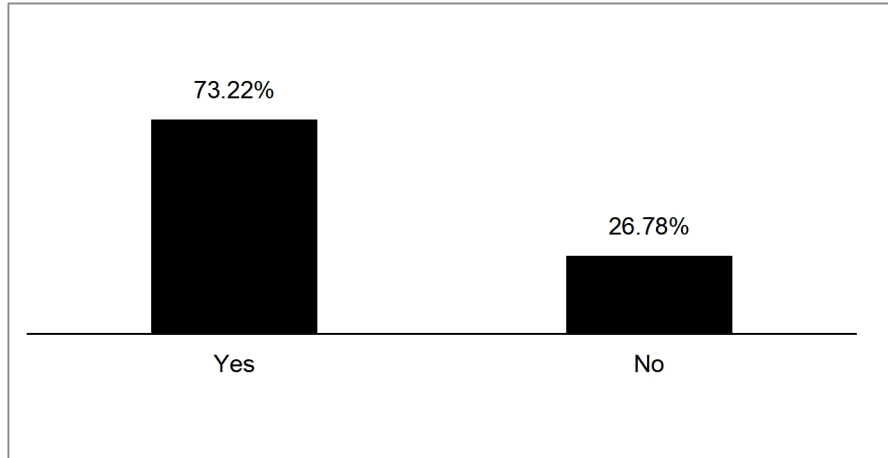


Figure 7: E-Books Within the Publishers' Portfolio of Products

The majority of the publishers (82.25%, 255) distribute e-books mainly through specific platforms of digital distribution (e-distributors), external to the publisher, and that, generally, they are organizations linked to the technology industry (Figure 8).

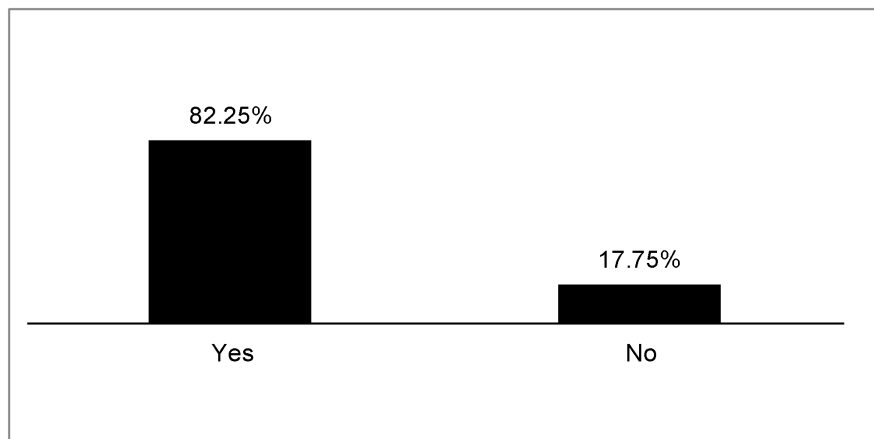


Figure 8: E-Book Distribution via E-Distributors

On the motivations for the outsourcing of the e-book distribution, the transaction costs associated with the outsourcing of the distribution services via digital platforms (Table 5) are significantly lower for publishers when comparing them with the alternative of their vertical integration 'down-stream'.

The publishers have been acquiring digital knowledge and have tried to position themselves to be able to respond to the changes in markets and technologies, nevertheless publishers still see digital products as secondary to the 'analogical' book. The distribution systems developed around the e-book replicate the traditional chain of the paper book.

Table 5: Transaction Costs Associated with the Outsourcing of the E-Book Distribution

Transaction costs			Number of respondents (*) (Percentage)
Publisher-E-distribution	Searching	Limited rationality	63 (20.32%)
		Uncertainty	44 (14.19%)
		Small numbers	207 (66.77%)
	Negotiation	Opportunistic behavior	47 (15.16%)
		Asymmetry of information	61 (19.67%)
		Frequency of occurrence of the transaction	101 (32.58%)
		Degree of uncertainty to which the transaction is subject	36 (11.61%)
	Control and guarantee	Specificity of assets	243 (78.38%)
		Opportunistic behavior	295 (95.16%)
		Asymmetry of information	300 (96.77%)

(*) Respondents can choose from none to more than one transaction cost.

CONCLUSIONS

The Spanish publishers in this study do not see the role of KIBS as a threat but as an opportunity to access all those innovations that would, otherwise, be difficult for publishers to achieve in isolation. The study makes a theoretical contribution in (a) the detailed knowledge about how transaction costs operate in the decision-making of Spanish publishing companies to outsource processes and not assume their vertical integration; (b) the detection of KIBS as new players in the Spanish publishing sector that extend their scope of action on different significant points of the value chain of publishing organizations analyzed; and (c) the role of KIBS as drivers of change in traditional business models existing in the Spanish publishing sector.

The results obtained in this research may help both publishing companies and KIBS to deepen their strategic relationships by co-creating innovation and useful knowledge for the progress of the Spanish publishing sector. Future research should further investigate and explain the relationship of KIBS, servitization, and new business models, emerged in the Spanish publishing industry, together with the extent these three variables can affect the outcomes of the Spanish publishing companies in terms of added value. Also, both the role of value co-creation between KIBS and the Spanish publishing companies, and the amplifying factor of this value co-creation by the new business models should be analyzed.

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APPENDIX

Dear publisher,

Please take a few minutes to complete this short survey. The information you provide will be useful to analyze the impact of KIBS on Spanish publishers.

Your answers will be treated confidentially and will not be used for any purpose other than the research carried out by Marta Magadán and Jesús Rivas, professors at the Faculty of Business and Communication at the International University of La Rioja. The study is part of the line of research we are carrying out on digitization and its effects on the publishing sector in Spain. The completion of the survey takes approximately 5 minutes.

Your participation will allow us to know in detail the publishing sector, and, therefore, we hope to count on your collaboration. We sincerely appreciate the effort this represents.

For any questions, do not hesitate to contact us or if you want to comment on it.

marta.magadan@unir.net
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Survey

1. Publishing company/Publisher:	
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2. Location:	
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3. Activity start year:	
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4. Legal form:	
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5. Your publishing company is part of a group of companies	YES	NO
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6. Turnover range (check the one that applies)	
< 0,3 million euros	
Between 0,3 y 0,6 million euros	
Between 0,6 y 1,5 million euros	
Between 1,5 y 3 million euros	
Between 3 y 6 million euros	
More than 6 million euros	

7. Describe the process of paper book production.

8. Do you outsource the paper book production?	YES	NO
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9. If your answer is yes, what has motivated such outsourcing?

10. Use the on-demand publishing	YES	NO
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11. What percentage of your paper book supply is on-demand?	
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12. Do you publish e-book?	YES	NO
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13. What percentage of your book supply is in digital format?	
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14. What is the format that you use the most in e-books?	PDF	EPUB	Otros
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15. Describe the process of e-book production.

16. Have you outsourced the e-book production?	YES	NO
--	-----	----

17. If your answer is yes, what has motivated such outsourcing?

18. Describe the process of paper book distribution.

19. Have you outsourced the paper book distribution?	YES	NO
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20. If your answer is yes, what has motivated such outsourcing?

21. Describe the process of e-book distribution

22. Have you outsourced the e-book distribution?	YES	NO
--	-----	----

The Role of KIBS on Digital Transformation and Technological Changes in the Publishing Industry

23. If your answer is yes, what has motivated such outsourcing?		

24. Would you be willing to invest in creating your own digital platform?	YES	NO
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25. You would invest in a digital platform (answer only if in the previous one you answered affirmatively)		
Alone, without other partners		
Together with other partners		
adapting an existing platform		
your publishing company together with a technology company		
your publishing company together with a book distributor		
No Answer/Do not know		

26. Do you think that information technologies are changing the publishing business models?	YES	NO
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27. Point out if your publishing company apply any of the following business models (check the one that applies)		
Crowdfunding		
Fragmented content		
Pay per use		
Subscription		
Open access		

28. If you pointed out some business models from the previous question, please indicate how you develop them:		
Through your own website.		
Through external (outsourced) platforms.		