Research Article

Value Drivers: Scientific Knowledge Advances and Research Avenues

Anelise Krauspenhar Pinto Figari[1]
Gilmarques Agapito Costa[1]
Henrique Portulhak[1]
Sayuri Unoki de Azevedo[1]

[1] Universidade Federal do Paraná, Curitiba, PR, Brazil

ABSTRACT

This research analyzed the bibliometric characteristics of articles published in the qualified international literature on value drivers, considering the growing academic interest in the subject, the indications about the fragmentation of its discussion, and academic search for the best indicators. Bibliometric analysis based on 14 indicators was performed on 292 articles published between 1997 and 2021 to identify the most influential authors, journals, institutions and countries, the collaboration networks, and the main topics in the research field. A qualitative approach was applied to reveal the main contributions of these articles and to build an agenda for future research. Results confirm the discussion fragmentation due to the identification of six thematic clusters and the debate dispersion across several countries, institutions, researchers, and journals. The 'intellectual capital' theme, through intangible assets analysis and covering discussions on trust and organizational reputation, is emphasized. Main contributions highlight the relationship of value drivers with intellectual capital, intangible assets, corporate social responsibility, and sustainability, which indicates the relevance of these themes in identifying elements that can contribute to organizational value.

INTRODUCTION

Changes in the institutional environment, such as globalization, technological development (Young & O'Byrne, 2003), high competitiveness, and economic crises (Russo & Parisi, 2017), cause a culture of wealth creation for investors, which has contributed to organizational continuity (Assaf Neto, 2014; Russo & Parisi, 2017). Value-based management (VBM) has been a prominent model in the academic literature on shareholder wealth creation (Figari et al., 2021) that maximizes company value to shareholders, increasing the economic value to the investor (Kumar, 2015; Russo & Parisi, 2017).

MacDiarmid et al. (2017) emphasize the importance of identifying value drivers, as they contribute to financial strategies definition for shareholder value creation. Value drivers are understood as "... any factor that enhances the total created value by the business model" (Visnjic et al., 2017, p. 171). Thus, identifying value drivers is crucial for maintaining organizational competitive advantages (Marr, 2005).

Microsoft Academic search engine shows an increased interest in this topic in the academic literature in the last decade, both in publications and citations (Microsoft Academic, 2021). Although these publications explore and recommend several performance measures, such as revenues, earnings, EBITDA, and equity, there is no conclusion about the best value drivers (Yooyanyong et al., 2020).

Furthermore, the value drivers discussion in business valuation literature is fragmented, making it difficult to identify a unified approach for its classification and investigation (Kazlauskienė & Christauskas, 2008; Tiwari & Kumar, 2015).

The growing academic interest in the topic, its discussion fragmentation, and the searching for the main indicators become interesting to perform an academic literature review of value drivers. Therefore, this investigation aims at identifying the bibliometric characteristics of articles published in the qualified international literature on the topic of value drivers.

Bibliometric approach is a quantitative strategy conducted in several areas, including management. It is considered useful to assess the state of the art, the most influential studies, main areas of interest, and main trends in a given research topic (Lafont et al., 2020). This unprecedented integrative review can contribute by synthesizing the discussions on the topic, offering the main contributions of these articles, as well as a future research agenda.

Similar bibliometric studies are identified in the literature, as Lafont et al. (2020), which comprise the bibliometric approach to value creation in listed companies, and Saha et al. (2020) and Shah et al. (2021), who performed bibliometric analysis on value co-creation. However, this investigation fills a theoretical gap as it differs from these three investigations regarding the focus on value drivers and differs from Lafont et al. (2020) regarding the scope, not limited to the capital market.

THEORETICAL FRAMEWORK

The theme 'value' has attracted researchers and economists, being considered the best organizational performance indicator (Kumar, 2015). 'Value' has different meanings in the management field. In accounting, its traditional approach has been criticized for not including 'value' in its performance metrics (Angonese et al., 2011). In finance, the term corresponds to an organization's value, which consists of the core value – based on the present value of expected cash flows – and shareholder value – company's value minus its obligations to third parties (Kumar, 2015).

Organizations create value through capital investments that ensure a greater rate of return than capital cost. A value creation model must translate a link between strategy and shareholder value. It is necessary to know the sources of creation or destruction to maximize it (Kumar, 2015). Creating organizational value goes beyond covering the explicit costs identified in sales, and the value of the opportunity cost of the invested capital must be incorporated (Assaf, 2014).

Several indicators presented in the literature aim at measuring economic value creation, such as Economic Value Added (EVA®) and Shareholder Value Added (SVA). Chari (2009) highlights that EVA is the most popular indicator to measure value creation to shareholders in organizations, as it is based on the net result and because it is considered simple, while SVA is based on the company's cash flow and it is considered more suitable for performance evaluation as it is free from accounting distortions.

Value creation discussion demands the establishment of a relationship between organizations and the operational environments. Environmental changes lead to a growing culture of wealth creation for shareholders due to "… globalization and deregulation of capital markets, the end of capital and exchange controls, advances in information technology and more liquid securities markets …" (Young & O'Byrne, 2003, p. 6).

VBM aims at maximizing organization's shareholder value, increasing the economic value added to the investor (Kumar, 2015; Russo & Parisi, 2017). VBM can be used to assess and guide business operations performance, making essential to know how and to what extent value creation occurs, as well as understanding what its drivers are and how they should be operated to maximize economic value (Copeland et al., 2002).

According to Assaf (2014), VBM intends to create shareholder wealth, which occurs when the return rate is greater than the opportunity cost of equity, and when the value for each organization is conditioned to the capacity and intrinsic potential of providing above-average returns. Thus, organizations no longer use a conventional model of evaluating management through metrics focused on profit and profitability but instead use management focused on shareholder wealth (Araújo & Assaf, 2003).

Young and O'Byrne (2003) report an increasing pressure on managers to provide results that create shareholder value. To the authors, the fundamental VBM idea that shareholder value creation should be the focus of management initially suffered widespread resistance in the sense

that this approach did not consider other stakeholders. However, subsequent research has shown that shareholder value creation, as the holder of the organization's residual value, only occurs when value is created for other stakeholders (Young & O'Byrne, 2003).

Copeland et al. (2002) affirm that "the central question is not whether companies have special programs called value-based management; in contrast, the value results from a set of interconnected activities that most companies already have." (p. 96). They add that two dimensions must be developed to maximize organizational value: the value mindset and the value measures dimensions. Furthermore, Assaf (2014) states that VBM must provide variables that determine business value creation, which corresponds to the value drivers.

Value drivers arise from the approach called "shareholder value analysis method," developed in the seminal study of Alfred Rappaport in the 1980s (Kazlauskienė & Christauskas, 2008, 24). Rappaport's study and subsequent research depart from a finance field stream started by Ball and Brown (1968), who showed that financial statements are relevant decision-making instruments as they impact stock prices, which culminated in many empirical studies analyzing the relationship between economic-financial variables (an accounting information proxy) and stock prices (a capital markets proxy).

Value drivers' definition is an important step in business assessment, as variables thus have a significant influence on a company's value (Kumar, 2015; Rappaport, 2001). An accurate value drivers' choice benefits the company by helping managers understand how value is created and how it can be maximized, guiding the resource allocation and aligning all employees' efforts to a common priority (Copeland et al., 2002).

Several value drivers' classifications can be found in academic literature: macro drivers versus micro value drivers (Rappaport, 2001), financial drivers versus non-financial drivers (Young & O'Byrne, 2003), differentiating capabilities drivers versus financial strategy drivers (Assaf, 2014). By analyzing the academic literature, Figari et al. (2021) identified qualitative and quantitative empirical research on value drivers, mostly quantitative research applied to public non-financial companies that aim at identifying value drivers and analyzing their relationship with business value.

No previous bibliometric reviews that dealt with value drivers were found. Similar studies have recently been published by addressing value creation (Lafont et al., 2020) and value co-creation (Saha et al., 2020; Shah et al., 2021), indicating a growing academic interest in this field.

Lafont et al. (2020) analyzed the value creation field in listed companies, using the Web of Science database and covering the 1900-2018 period. A total of 213 articles were identified. Results showed that value creation research is incipient. However, there was an increase in the annual citations count from 2015, which denotes an interest growing in the subject. China has the most productive and influential authors, and there is a growing interest from institutions based in the USA, UK, and Romania.

Saha et al. (2020) examine the academic literature evolution on value co-creation based on 458 articles published by 156 journals between 2004 and July 2018. Results indicated three significant areas that emerge as prominent themes in the value co-creation literature: customer service, branding, and service marketing through the adoption of service logic. This research also revealed the USA as the most influential nation by the absolute citation count. As a future research agenda, the authors direct value co-creation analysis beyond business and management disciplines, indicating periodic bibliometric analysis and using other analysis techniques.

Shah et al. (2021) investigated the value co-creation topic through 1,210 publications extracted from the Web of Science database. Findings indicated an increase in the growth rate of publications on the subject from 2013, research prevalence in business and management fields, and the leading role of USA, England, Australia, Finland, and Nordic institutions in publications count and influence. The 20 main vehicles (conference proceedings and journals) concentrated 45.34% of publications. Thematic analysis identified five research clusters, from which significant relationships among value creation and themes such as shared economy, open innovation, and sustainability are identified.

METHODOLOGY

Bibliometric analysis investigates bibliographic material from a quantitative perspective (Broadus, 1987), making it possible to objectively interpret results (Baker et al., 2020). The method is recognized and applied in several disciplines (Merigó et al., 2015), including in the management area (Lafont et al., 2020; Zupic & Čater, 2015). Bibliometric analysis helps synthesize previous research characteristics, enabling to delineate a scientific field, the topics of growing interest, and networks that structure scientific production (Zupic & Čater, 2015).

The bibliographic survey was limited to articles indexed in Scopus. This choice is justified considering its large abstracts and citations database (Bamel et al., 2020; Lamboglia et al., 2020) and its reach of journals and academic papers, especially in social sciences (Cortés-Sanchez, 2020). Data collection occurred in April 2021 by searching for the term 'value driver' in the title, abstract, or keywords of scientific articles published in business, management, and accounting area. The following syntax was applied:

TITLE-ABS-KEY ("value driver") AND (LIMIT-TO (DOCTYPE, "ar")) AND (LIMIT-TO (SUBJAREA, "BUSI"))

Between 1997 and 2021, 292 published articles were identified. Table 1 details bibliometric analysis characteristics performed in this investigation.

Table 1

Bibliometric analysis protocol

Objective	Analysis	References
Analyze productivity and volume of publications	Publications per year	Bamel et al. (2020); Merigó et al. (2015)
	Publications by institution	
	Publications by country	
Assess the influence of articles and journals	Most influential articles	Lafont et al. (2020); Lamboglia et al. (2020)
	Most influential authors	
	Most influential journals	
Check collaboration characteristics in publications	Number of co-authors per article	Ezenwoke et al. (2019); Soares et al. (2018)
	Author collaboration networks	Bamel et al. (2020); Soares et al. (2018)
	Country collaboration networks	Baker et al. (2020); Shah et al. (2021)
Identify the thematic characteristics of publications	Most frequent keywords	Baker et al. (2020); Lamboglia et al. (2020)
	Keyword co-occurrence	Baker et al. (2020); Shah et al. (2021)
	Conceptual structure map and factorial map	Lamboglia et al. (2020); Zupic & Čater (2015)
	Most cited studies by cluster	Baker et al. (2020); Lamboglia et al. (2020)
	Strategic diagram of themes	Bamel et al. (2020); Della Corte et al. (2019)

Source: Elaborated by the author.

Bibliometric information was analyzed in the bibliometrix package of RStudio software by Aria and Cuccurullo (2017), employed in recent bibliometric studies (Bamel et al., 2020). VOSviewer software, by Eck and Waltman (2010), was here applied for authors and countries network analysis and for keyword co-occurrence, which was also done in recent bibliometric studies (Shah et al., 2021). Keywords were summarized in Microsoft Excel, grouping terms with differences of up to two characters and hyphenated and/or plural words, without modifying the word meaning.

This review also indicates the articles' main contributions from the clusters identified in keyword co-occurrence and the conceptual structure map. The following criteria were applied: articles responsible for cluster formation, articles in the cluster with the highest number of citations, and the three most cited recent articles (published in the last five years).

Furthermore, a future research agenda was developed based on the main contribution criteria and the strategic diagram of themes. Future research agenda was based on the most recent articles, published in 2020 and 2021. In this absence, the two most recent articles with specific recommendations for future studies were considered, regardless of the publication year.

RESULTS AND DISCUSSION

Bibliometric characteristics

To assess productivity, the analysis was initiated by the publication count per year, as shown in Figure 1. It was found an evolution in publication amount between 1997 and 2020, which demonstrates a growth trend in publications on the subject.
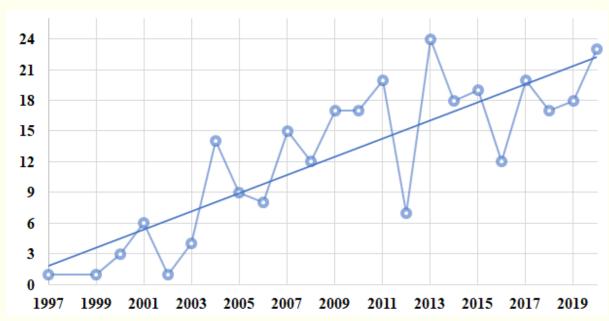
Figure 1. Publications per year.
Source: Elaborated by the author.

Figure 1 highlights the five years with the highest number of publications: 2011, 2013, 2015, 2017, and 2020 with 20, 24, 19, 20, and 23 publications, respectively. The year 2021 was excluded from this analysis as it was not complete. The greater publications amount in the last decade and the growing trend are consistent with the findings of Lafont et al. (2020), Saha et al. (2020), and Shah et al. (2021). However, a more constant annual growth behavior was identified in those studies.

The article's influence on the citation count in the Scopus database was assessed. Table 2 shows the ten publications with the greatest impact considering absolute citations, which concentrate 35.9% of total citations.

Table 2

Most influential articles

Article	Citations	Citations/Year
Ittner et al. (2003)	562	31.22
Lapierre (2000)	395	18.81
Ulaga (2003)	357	19.83
Turel et al. (2010)	262	23.82
Faleye et al. (2011)	255	25.50
Marr et al. (2004)	216	12.71
Richards & Jones (2008)	208	16.00
Bukh et al. (2005)	195	12.19
Green & Peloza (2011)	182	18.20
Desarbo et al. (2001)	159	7.95

Note. Source: Elaborated by the author.

Notably, the 292 articles had an average of 26.5 citations. Fifteen articles (5.14%) had more than 100 citations up to the data collection and 42 (14.4%) received no citations. This finding indicates an expressive similarity with that of Saha et al. (2020), in which 5.2% of the publications obtained more than 100 citations. Lafont et al. (2020) noticed that less than 1% of the 237 articles analyzed reached more than 100 citations.

Table 3 shows the most influential authors on the topic. About the authors unlisted in the Table 3, 26 produced two articles, while 607 only published one article. Among the authors indicated in Table 3, five were linked to Italian institutions, three of which were affiliated to University of Cassino and Southern Lazio and with partnerships only among themselves. It differs from Lafont et al. (2020), in which the most prolific authors obtained at most three publications, and four of the five most influential are Chinese.

Table 3

Most influential authors

Author	Publications	Citations
Marr B. a	6	425
Grimaldi M.	6	142
Cricelli L.	5	131
Lueg R.	4	68
Schiuma G.	3	248
Figge F.	3	98
Greco M.	3	82
Lerro A.	3	23
Hall J. H.	3	10

Note. Source: Elaborated by the author.

Co-authorship analysis points out that most articles were produced by two (34.9%) or three (31.2%) authors. Of these, 21% was prepared individually and 11.6% had four authors. A total of 642 authors were identified in the 292 articles, a similar behavior observed by Saha et al. (2020), in which 1,037 authors produced 458 articles.

The authorship is shown in Figure 2, in which Bernard Marr built the influence network with the largest number of connections.
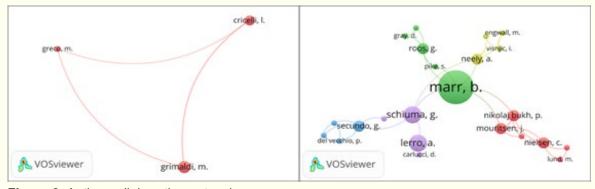

Figure 2. Author collaboration networks.
Source: Based on metadata files downloaded from Scopus.

Figure 2 shows two distinct collaboration networks. The first is formed by Cricelli, Greco, and Grimaldi, already indicated in Table 3, building an isolated cluster in which the research falls on the intellectual capital theme and its value drivers. The second collaboration network is formed by 23 authors, with five clusters, and has Marr as the central author. His first partnership with Mouritsen and Bukh started the first cluster with articles related to intellectual capital. After Marr's partnership with Pike and Roos, the second cluster appears with production versed in intangible assets. Finally, the collaboration on intangible assets and intellectual capital (Marr et al., 2004) led to a break in the theme, in which Schiuma created branches related to intellectual capital and Neely turned to services analysis and supply chains.

Although Figure 2 shows two distinct networks, even without collaboration between them, both intellectual capital and intangible assets themes stand out. Regarding the most influential journals, Table 4 shows six journals with four or more publications, representing 14.73% of the total publications and accumulating 27.6% of citations.

Table 4

Most influential journals

Journal	Publications	Citations	Citations/Publication
Journal of Intellectual Capital	20	923	46,2
Industrial Marketing Management	7	706	100,9
European Management Journal	4	357	89,3
Measuring Business Excellence	4	85	21,3
Journal of Business Research	4	43	10,8
International Journal of Productivity and Performance Management	4	20	5,0

Note. Source: Elaborated by the author.

Journal of Intellectual Capital represents 11.99% of the total citations. However, *Industrial Marketing Management* and *European Management Journal* have a greater impact in terms of citations per publication. The three journals prove to be relevant for publications on the subject. *Industrial Marketing Management*, in addition to being relevant in value drivers, is also relevant to the theme of value co-creation, as indicated by Saha et al. (2020) and Shah et al. (2021). This latest study also ranks the *Journal of Business Research* among the most influential journals.

A total of 292 articles were published in 208 different journals. The ten most influential journals concentrated 18.8% of publications. There is a greater dispersion in the publication on value drivers between different vehicles compared to what was observed by Saha et al. (2020), in which 458 articles were published in 156 journals, and Shah et al. (2021), in which 1,210 articles were published in 391 different places and the ten main vehicles concentrated 32.64% of the publications.

Institutions and countries linked to the articles were also analyzed. Table 5 shows the institutions with at least four publications and their respective countries.

Of the 642 authors, only eight did not report an institutional affiliation, resulting in 384 institutions. Of these, 314 institutions supported only one publication. It indicates that the theme has been studied in different regions of the world, with no predominant research center in a particular institution or country. However, Table 5 suggests a domain by European institutions.

Table 5

Authorships by institution and respective countries

Institution	Countries	Publications
Cranfield University	United Kingdom	7
Aarhus University	Denmark	6
University of Basilicata	Italy	6
University of Cassino and Southern Lazio	Italy	6
Copenhagen Business School	Denmark	5
Aalto University	Finland	4
Maastricht University	Netherlands	4
Macquarie University	Australia	4
New York University	USA	4
Tor Vergata University of Rome	Italy	4
University of Roma Tre	Italy	4
University of Salento	Italy	4
University of Zurich	Switzerland	4

Note. Source: Elaborated by the author.

Notably, five Italian institutions contributed to 24 publications. This emphasis by Italian institutions clashes with that of Saha et al. (2020), in which the Nordic and Australian institutions stand out. Shah et al. (2021) indicated only one Italian institution among the 20 most influential, while only Aalto University coincides with their results. Lafont et al. (2020) highlight influential institutions from countries that did not appear in Table 5: two Chinese institutions, one Romanian and one Iranian.

Regarding countries, authors from 52 countries located on five continents were identified, a similar amount observed by Saha et al. (2020), who identified 57 countries contributing to the theme of value co-creation, and lower than indicated by Shah et al. (2021), who identified 72 different countries. All these findings suggest that 'value' has attracted attention in several locations.

Regarding collaboration count in publications on value drivers, the ten most influential countries were: USA (79 authors), Italy (51), United Kingdom (43), Germany (27), India (26), Australia (25), Denmark (22), Finland (21), Spain (20), and Sweden (18). These countries represent 66.14% of publications. Concerning the distribution by continent, Europe stands out (274 authorships; 54.58%), followed by America (108; 21.51%) and Asia (84; 16.73%). This analysis reinforces the perception that there is a leading role of European institutions in the value drivers debate. These results are similar to those of Saha et al. (2020) and Shah et al. (2021), in which the United Kingdom and the USA also appear among the most influential countries.
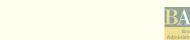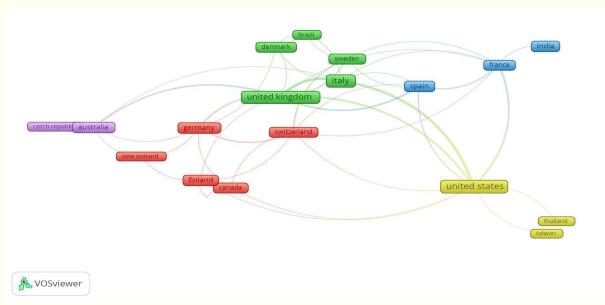
Regarding collaboration networks by countries, five clusters were identified, with 43 connections and with a strength of 65% among them, as shown in Figure 3.

Figure 3

Collaboration networks among countries

Source: Based on metadata files downloaded from Scopus.

Figure 3 shows the United Kingdom as a central country in terms of partnerships, establishing connections with all clusters and showing a strong connection with Italy. There is also a strong connection between Italy and the USA. The relevance of the United Kingdom, the USA, and Italy in the formation of networks corroborates the importance of these countries, already identified with the higher number of authorships.

Thematic characteristics

Frequency and co-occurrence of keywords were initially analyzed to identify the thematic characteristics of the publications. A total of 1,343 keywords were found in 261 articles, with 924 distinct terms being identified. Of these articles, 31 did not have keywords. The 11 most frequent were: value driver (51 appearances), intellectual capital (38), intangible asset (19), value-creation (14), shareholder value (11), value (10), value-based management (10), real options (9), brand (8), business model (8), and disclosure (8).

Toward the keywords network based on the co-occurrence, 20 keywords form six clusters with 40 connections and 79% strength of connection, as shown in Figure 4.
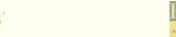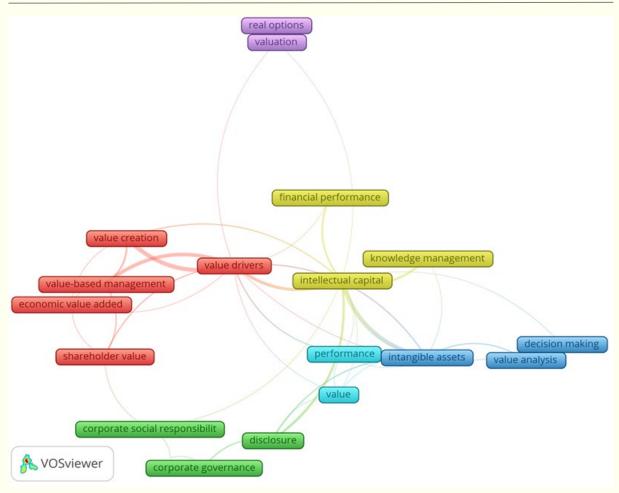
Figure 4. Co-occurrence of keywords
Source: Based on metadata files downloaded from Scopus.

The co-occurrence analysis revealed six thematic clusters, identified in different colors. For a better understanding of its characteristics, a conceptual structure analysis and a keywords factorial map were performed, as shown in Figure 5.
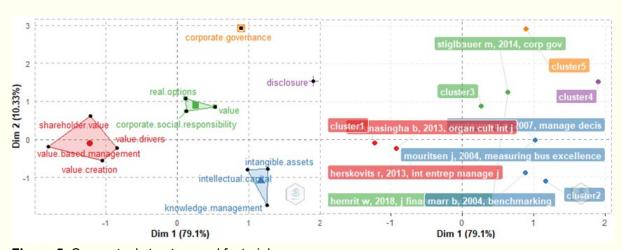

Figure 5. Conceptual structure and factorial map.
Source: Based on metadata files downloaded from Scopus.

In a joint analysis of the results presented in Figures 4 and 5, the first cluster (red) shows five reference keywords: economic value-added, shareholder value, value-creation, value driver, value-based management. The main article of this cluster is that of Herskovits et al. (2013), who developed a model to analyze the value creation process from innovation in corporations, demonstrating the relationship between organizational structure and performance.

Among the most influential articles in the red cluster, Enders et al. (2008) showed that information technology companies' revenues are mainly based on transactions, in which the main revenue creator is consumer confidence. Figge and Hahn (2013) proposed a new approach to value drivers based on the optimal use of environmental resources sustainably and how it impacts the value creation for the company.

Recent studies in the red cluster have brought additional contributions to this research field. Visnjic et al. (2017), identifying the value drivers in the results-based contract context, revealed an additional category called 'responsibility value.' Spieth et al. (2019), when investigating the value drivers in social businesses through the emphasis on the combination of well-being and commercial value, identified the interdependence of social and economic benefits in terms of profit as a way of creating social value. Angelis and Silva (2019) provided a method to ascertain the firm's value aligned with organizational strategy, using the main characteristics of blockchain technology. The implementation of this technology can ensure that the value provided to the organizational strategy is the most adequate.

Four keywords form the second cluster (green): corporate governance, corporate social responsibility, disclosure, firm value. The reference article in this cluster is that of Stiglbauer and Velte (2014), who found no evidence that compliance disclosure acts as a main value creation factor for companies in the German stock market.

Among the most influential articles in the green cluster, Faleye et al. (2011), based on the assumption that the acquisition action and corporate innovation are important value drivers, revealed that the intense monitoring of directors inhibits a better performance of the firm, reducing innovation and performance in acquisitions. Green and Peloza (2011) contributed by identifying that consumers observe three factors related to corporate social responsibility (CSR) (emotional, social, and functional), and the value for the consumer fluctuates according to the CSR's response to these factors.

Regarding recent studies in this cluster, Lueg et al. (2016) examined how integrated reporting (IR) is implemented in an environment with established CSR practices, finding evidence that CSR practices are useful for strategic planning and control. Lozano et al. (2016), when studying the ownership structure as a corporate governance mechanism, concluded that conflicts among majority and minority shareholders are weaker in companies with greater investor protection and young family companies. According to Nielsen et al. (2017), identifying value creators and key performance indicators (KPI) provides support in the elaboration of IR, and internal management disclosure demands more precise foundations for value creation than those offered by current structures.

The third cluster (dark blue) is formed by four keywords: decision-making, intangible assets, sustainability, value analysis. The reference article in this cluster is that of Marr (2004), who operationalized how organizations can identify their main tangible and intangible resources, how these resources are related, and how they can add value to the company.

Among the most influential studies, Vergauwen et al. (2007) identified that intellectual capital elements and their disclosure are relevant value drivers for organizations. Steenkamp and Kashyap (2010) concluded that intangible assets such as customer satisfaction and loyalty, the reputation of the company and its products, are important value drivers for small and medium-sized enterprises (SME).

According to recent studies in this field, Rubio et al. (2016) proposed a model to determine the flow and corresponding strength of a given brand and to measure its value according to the accounting standards requirements. Yan (2018) developed a model for airline companies that allows managers to test strategies and learn from simulated decisions in a designed learning environment.

Schmaltz et al. (2019) described a VBM model with seven drivers for the banking sector and found that companies using this model have greater valuation and identified greater valuation potential due to the model implementation when analyzing the annual reports.

The fourth cluster (yellow) is formed by three keywords: financial performance, intellectual capital, knowledge management. Marr et al. (2004) is appointed as the most important article to the cluster development. The authors demonstrated, through a value creation map, the importance of visual representation of strategic intentions to understand how an organization's resources, especially intangible assets and intellectual capital, are useful to create value.

Among the most cited articles in the yellow cluster, Kianto et al. (2010) indicated the need to change the intellectual capital approach and management in companies that are reorganizing to become 'solution providers.' Nimtrakoon (2015) found that Southeast Asian countries, facing an economic focus shift from agriculture to innovative manufacturing, are increasing awareness of using intellectual capital to improve their financial performance and market value.

Concerning recent studies in the yellow cluster, Skarmeas et al. (2016) revealed that companies develop business relationships from a value-based perspective, demonstrating that the value of the relationship results in insensitivity to competitors' offers and future expansion of purchases. Simeone et al. (2018) provide a better understanding of how value drivers are affected using art forms and design methods as a means of management. Xu and Li (2019) revealed a significant difference in the value-added intellectual coefficient (VAIC) among Chinese manufacturing SMEs, in addition to a positive relationship between intellectual capital and financial performance in these companies, with more favorable results in high-tech companies.

The fifth cluster (purple) is formed by the words 'real options' and 'valuation.' Demers and Lev (2001) are responsible for cluster formation. They explored the value drivers of business-to-

consumer companies and found that investors of these companies could capitalize on research and development variables and marketing expenses when the market was more optimistic.

Regarding the most influential studies of this cluster, Dowling (2006) explained how reputation creates organizational value, demonstrating the relationship between positive reputation and financial performance. Hofmann and Locker (2009), based on the packaging industry supply chain, showed that VBM demonstrates a connection between the chain's operations and the shareholder value creation measured by EVA.

Concerning recent studies in this field, Schramade (2016) demonstrated how the ESG (environmental, sustainability, governance) concept can integrate valuation models and help in investment decisions, enabling a clearer view of risk and better-informed decisions. Choi et al. (2018), applying the real options model with a focus on uncertainty and flexibility, indicated that outsourcing contracts provide a channel for sequential decision-making, providing companies with the required flexibility to adjust or withdraw in adverse scenarios with limited cost. Valentin and O'Neill (2019) provide strategic tools for hotel management in the aspect of location assessment, providing means to quantify the market value differential based on geographic differences.

Finally, the light blue cluster concentrates the words 'performance' and 'value.' As the reference article, Lapierre (2000) demonstrated the perceived value of the information technology sector consumer, revealing that flexibility and responsiveness are two benefits related to information technology services.

In this cluster, Turel et al. (2010) and Ng et al. (2013) are influential articles. Turel et al. (2010) revealed value drivers for hedonic digital artifacts, which, when measured in the context of cell phone ringtones, were evaluated for non-instrumental utilities and for their cost, elements that make up the general assessment of the artifact's value. Ng et al. (2013) investigated the relationships between relational assets and contract performance, revealing that behavioral and informational alignments are important factors to achieve results, whereas perceived control and empowerment mediated the relationship between partnership inputs and alignments guided by value.

Regarding the prominent studies, Carasuk et al. (2016) analyzed organizational values, change and impediments drivers, and enabling factors that influenced the behavior of 24 New Zealand companies accredited in responsible tourism, revealing that altruistic motivations were related to greater commitment and investment in responsible tourism initiatives. Badri et al. (2017) developed a value-based linear programming model for a closed-loop supply chain network, in which supply chain costs, sales growth, working capital, and fixed assets correspond to the main value drivers. Uvet (2020) demonstrated a strong relationship between performance-based contracts and supply chain operational improvement, developing reliable measurement instruments.

Future research agenda

The future research agenda considered the keywords co-occurrence network shown in Figure 4 and the strategic diagram presented in Figure 6, based on interconnection by centrality and relevance by density.
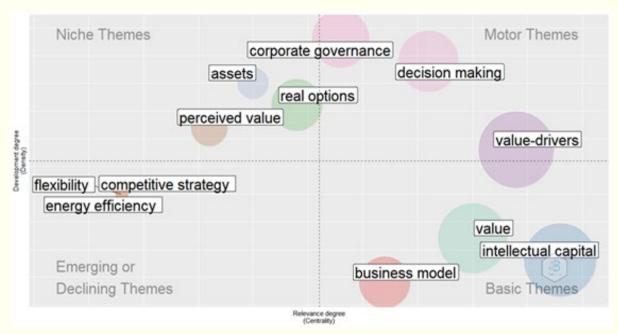

Figure 6. Strategic diagram.
Source: Based on metadata files downloaded from Scopus.

Bamel et al. (2020) Bamel et al. (2020) describe the strategic diagram composed of the following quadrants: motor themes (upper right), which can be considered well developed, central, and important in the analyzed set; peripheral or niche themes (upper left), focused themes in the field with a weak relationship with motor themes; themes that are appearing and/or disappearing (lower left); and basic themes (lower right), considered important and consolidated in the research field.

The term 'value drivers' appears in the red cluster (Figure 4) and emerges as a driving theme, with emphasis on centrality. In this theme, Dierkes and Schäfer (2021) and Yooyanyong et al. (2020) propose the development of new indicators that can improve the value drivers estimation and indicate that the choice for multinational companies can affect the value driver identification due to differences in the operational and financial risk degree.

Corporate governance is related to the green cluster (Figure 4) and is represented as a driving theme (Figure 6), with high development. In this theme, Eugster and Wagner (2020) propose to advance research toward the real decision-making from managers in the presence or absence of value reports. Lozano et al. (2016), when relating corporate governance, ownership structure, and company value, suggest considering the interactions between more than two shareholders and whether the relationship between them leads to minority shareholders expropriation.
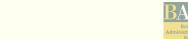
CSR is also related to the green cluster and is strongly linked to corporate governance. Chowdhury et al. (2019) recommend investigating companies' legal and political attributes that can demonstrate differences and similarities of CSR value indicators. Magnanelli and Izzo (2017) propose to clarify the relationship between CSR, corporate social performance, and cost of debt, as well as to understand how market agents react to CSR initiatives at the firm level.

In the dark blue cluster, the term 'decision-making' stands out as a motor theme. Yan (2018) recommends that the cloud computing technique can be incorporated to identify decision-making related drivers. Nielsen et al. (2017) suggest validating the proposed value drivers platform through qualitative studies that assess different KPIs and business models.

'Intellectual capital' is a transversal theme, and 'assets' appears as a peripheral theme, and both are linked to the yellow cluster. On intellectual capital, Uslu (2020) suggests applying alternative techniques to VAIC to capture intellectual capital value drivers. Xu and Li (2019) encourage the analysis of long-term effects of intellectual capital and the inclusion of factors such as gross domestic product and price indices.

On assets, Panda and Gopalaswamy (2020) propose using primary data to provide additional information about assets and to better measure the decision uncertainty when investing in projects. Nenonen and Storbacka (2016), in a shareholder value creation approach, suggest investigating the implementation of the client's longitudinal asset management activities beyond normal industrial cycles.

In the purple cluster, 'real options' is shown as a peripheral theme and is associated with the valuation theme. Pöyry et al. (2021) encourage studies on value calculator usage in controlled experimental setups and suggest a longitudinal approach at the sales negotiation process to understand how the use of a value calculator affects negotiations and their outcome. Martínez-Romero et al. (2020) suggest evaluating whether the value created can be influenced by environmental factors or market forces. Vrbka (2020) recommends evaluating whether a company's location choice interferes with its value creation.

The term 'value' is in the light blue cluster and presents itself as a transversal term. Iacoviello et al. (2019) propose a theoretical framework for intellectual capital management in higher education and suggest its application to assess whether its characteristics are compatible with the university context. Kleczek (2018), when evaluating if corporate efforts influence value drivers, suggests further research on the mechanisms that impact financial value drivers and the duration of financial effects.

'Business model' has connections with all clusters in Figure 4 and appears as a transversal theme. Mili and Arfa (2020) encourage reinventing the value proposition of organic food companies, also seeking new and complementary relationships between the different components of the business model, and indicate new research that evaluates the business model as a mechanism capable of creating revenue and transactions. Elia et al. (2020), when identifying value drivers related to collaborative actions in sustainability, recommend unraveling the relationship

dynamics between crowdsourcing and sustainable development, considering the crowdfunding trend toward sustainability goals.

The diagram also shows 'perceived value' as a peripheral theme, which is not present in any cluster in Figure 4. Rajkumar et al. (2020) propose a qualitative study to expand the perceived value drivers inventory that can be associated with the in-person purchases modality. Prodanova et al. (2019) suggest replicating the model proposed in their article, which assessed the value perceived by mobile bank users, in a random sampling.

In general terms, future research recommendations that link value drivers and intellectual capital propose an aggregated approach to financial and non-financial performance indicators. In the context of future research on value drivers, sector diversification and the application of moderating variables are suggested, as well as new research approaches such as case studies, field research, and event studies. Several authors have reported the need for further investigation or for extending the interval of analysis to validate the findings. Others suggested that the sample size and/or sectorization would have impacted their results, recommending further research that would allow generalizing findings. Furthermore, authors emphasize that the models developed in their research may undergo adaptations, due to organizational size or segment, which leads to new research opportunities.

CONCLUSION

Findings are consistent with arguments regarding the growing academic interest in the subject and about the fragmentation of the discussion in the research field. Analysis indicated a publication increase recently, and more recent studies have shown a significant academic impact on terms of citations per year. These findings confirm the growing perception in academic debates on the subject and suggest the same trend for the next years, as observed in recent bibliometric studies that addressed the topic of value.
The discussion fragmentation is confirmed by identifying a high diversification in keywords, the formation of six research clusters and branching into distinct lines of research, such as intangible assets, intellectual capital, and supply chain. All clusters derive from Marr's studies, highlighted here as the most influential author on the topic.

Despite this highlight, authorship was scattered. Dispersion is also observed in journal publishing on the subject and the diversification of institutions from several countries that have contributed to the topic. Such evidence converges to the discussion that the topic of value drivers remains fragmented and has recently drawn the attention of several researchers, institutions, countries, and scientific journals.

However, regarding prominent authors and studies that form the collaborative networks, Marr et al. (2004) is the article with the greatest number of connections. The main articles that form collaboration networks relate intellectual capital and intangible assets with value drivers. Besides, *Journal of Intellectual Capital* is the most influential journal on value drivers. Research that relates

value drivers and intellectual capital is considered promising for future scientific developments in the search for the best indicators.

Keywords analysis, thematic clusters, and the contributions of the main articles on value drivers also corroborate the highlight of the theme of intellectual capital, touching on studies of intangible assets and covering discussions on trust and organizational reputation. Moreover, contributions that relate value drivers to CSR and sustainability issues stand out, which indicates that these issues are currently considered important to identify elements that can contribute to organizational value. It was noted that contributions emerged from research in technology and innovation companies, in the banking sector and dealing with the supply chain, suggesting that these are relevant fields for future empirical investigation of value drivers.

Another trend observed from the recent production points to a greater concentration of the debate on value drivers in the European continent. There is also a subtle prominence of institutions in the United Kingdom, Italy, and the USA, with greater emphasis on Italian universities. These countries also appear with the highest number of collaborations in the network analysis among countries, especially the United Kingdom. This result suggests that international partnerships have benefited the value drivers debate and this is a recommended path for future developments.

Recommendations for future research indicate an opportunity to apply new approaches to deepen the theme, as well as expand the analysis to other fields and samples that allow generalizing findings, adapting developed models, and promoting longitudinal studies for value drivers' validation. Given the elements identified in this review, it is recommended, as a future research agenda, the prioritizing of research that deepens the investigation of intellectual capital, intangible assets, and CSR as value drivers from different methodological approaches. This analysis indicates that these are promising themes for identifying value creation sources in companies and converge to reduce the fragmentation of discussions in the field.

REFERENCES

Angelis, J. & Silva, E. R. (2019). Blockchain adoption: A value driver perspective. *Business Horizons*, *62*(3), 307-314. https://doi.org/10.1016/j.bushor.2018.12.001

Angonese, R., Santos, P. S. A., & Lavarda, C. E. F. (2011). Valor econômico agregado (VEA) e estrutura de capital em empresas do IBRX 100. *ConTexto*, *11*(20), 7-17. https://www.seer.ufrgs.br/ConTexto/article/view/17647

Araujo, A. M. P., & Assaf, A. Neto (2003). A contabilidade tradicional e a contabilidade baseada em valor. *Revista Contabilidade & Finanças*, *14*(33), 16-32. https://doi.org/10.1590/S1519-70772003000300002

Aria, M. & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, *11*(4), 959-975. https://doi.org/10.1016/j.joi.2017.08.007

Assaf Neto, A. (2014). *Finanças corporativas e valor* (7th ed.). Atlas.

Badri, H., Ghomi, S. M. T. F., & Hejazi, T. (2017). A two-stage stochastic programming approach for value-based closed-loop supply chain network design. *Transportation Research Part E*, *105*, 1-17. https://doi.org/10.1016/j.tre.2017.06.012

Baker, H. K., Kumar, S., & Pandey, N. (2020). A bibliometric analysis of managerial finance: a retrospective. *Managerial Finance Journal*, *46*(11), 1495-1517. https://doi.org/10.1108/MF-06-2019-0277

Ball, R. & Brown, P. (1968). An empirical evaluation of accounting income numbers. *Journal of Accounting Research*, *6*(2), 159-178. https://doi.org/10.2307/2490232

Bamel, U., Pereira, V., Del Giudice, M., & Temouri, Y. (2020). The extent and impact of intellectual capital research: A two decade analysis. *Journal of Intellectual Capital*, *23*(2) https://doi.org/10.1108/JIC-05-2020-0142

Broadus, R. N. (1987). Toward a definition of Bibliometrics. *Scientometrics*, *12*, 373–379. https://doi.org/10.1007/BF02016680

Bukh, P. N., Nielsen, C., Gormsen, P., & Mouritsen, J. (2005). Disclosure of information on intellectual capital in Danish IPO prospectuses. *Accounting, Auditing & Accountability Journal*, *18*(6), 713-732. https://doi.org/10.1108/09513570510627685

Carasuk, R., Becken, S., & Hughey, K. F. D. (2016). Exploring values, drivers and barriers and antecedents of implementing responsible tourism. *Journal of Hospitality & Tourism Research*, *40*(1), 9-36. https://doi.org/10.1177%2F1096348013491607

Chari, L. (2009). Measuring value enhancement through economic value added: Evidence from literature. *IUP Journal of Applied Finance*, *15*(9), 46-63. https://www.iupindia.in/909/IJAF_Measuring_Value_Enhancement_46.html

Choi, J. J., Ju, M., Kotabe, M., Trigeorgis, L., & Zhang, X. T. (2018). Flexibility as firm value driver: Evidence from offshore outsourcing. *Global Strategy Journal*, *8*(2), 351–376. https://doi.org/10.1002/gsj.1181

Chowdhury, R. H., Choi, S., Ennis, S., & Chung, D. (2019). Which dimension of corporate social responsibility is a value driver in the oil and gas industry? *Canadian Journal of Administrative Sciences*, *36*(2), 260-272. https://onlinelibrary.wiley.com/journal/19364490

Copeland, T., Koller, T., & Murrin, J. (2002). *Avaliação de empresas – Valuation: Calculando e gerenciando o valor das empresas* (3rd ed.). Makron Books.

Cortés-Sánchez, J. D. (2020). A bibliometric outlook of the most cited documents in business, management and accounting in Ibero-America. *European Research on Management and Business Economics*, *26*(1), 1-8. https://doi.org/10.1016/j.iedeen.2019.12.003

Della Corte, V., Del Gaudio, G., Sepe, F., & Sciarelli, F. (2019). Sustainable tourism in the open innovation realm: A bibliometric analysis. *Sustainability*, *11*(21), 1-18. https://doi.org/10.3390/su11216114

Demers, L. & Lev, B. (2001). A rude awakening: Internet shakeout in 2000. *Review of Accounting Studies*, *6*(2), 331–359. https://doi.org/10.1023/A:1011675227890

Desarbo, W., Jedidi, K., & Sinha, I. (2001). Customer value analysis in a heterogeneous market. *Strategic Management Journal*, *22*(9), 845-857. https://doi.org/10.1002/smj.191

Dierkes, S. & Schafer, U. (2021). Valuation of firms with multiple business units. *Journal of Business Economics*, *91*, 401-432. https://doi.org/10.1007/s11573-020-01010-z

Dowling, G. (2006). How good corporate reputations create corporate value. *Corporate Reputation Review*, *9*(2), 134-143. https://doi.org/10.1057/palgrave.crr.1550017

Elia, G., Margherita, A., & Petti, C. (2020). Building responses to sustainable development challenges: A multistakeholder collaboration framework and application to climate change. *Business Strategy and Environment*, *29*(6), 2465-2478. https://doi.org/10.1002/bse.2514

Enders, A., Hungenberg, H., Denker, H., & Mauch, S. (2008). The long tail of social networking: Revenue models of social networking sites. *European Management Journal*, *26*(3), 199-211. https://doi.org/10.1016/j.emj.2008.02.002

Eugster, F. & Wagner, A. F. (2020). Value reporting and firm performance. *Journal of International Accounting, Auditing and Taxation*, *40*, 100319. https://doi.org/10.1016/j.intaccaudtax.2020.100319

Ezenwoke, O. A., Ezenwoke, A., Eluyela, F. D., & Olusanmi, O. (2019). A bibliometric study of accounting information systems research from 1975-2017. *Asian Journal of Scientific Research*, *12*(2), 167-178. https://dx.doi.org/10.3923/ajsr.2019.167.178

Faleye, O., Hoitash, R., & Hoitash, U. (2011). The costs of intense board monitoring. *Journal of Financial Economics*, *101*(1), 160-181. https://doi.org/10.1016/j.jfineco.2011.02.010

Figari, A. K. P., Lima, F. G., Gatsios, R. C., & Magnani, V. M. (2021). Economic value drivers for Brazilian agricultural cooperatives. *BASE - Revista de Administração e Contabilidade da UNISINOS*, *18*(1), 56-77. https://doi.org/10.4013/base.2021.181.03

Figge, F. & Hahn, T. (2013). Value drivers of corporate eco-efficiency: Management accounting information for the efficient use of environmental resources. *Management Accounting Research*, *24*(4), 387-400. https://doi.org/10.1016/j.mar.2013.06.009

Green, T. & Peloza, J. (2011). How does corporate social responsibility create value for consumers? *Journal of Consumer Marketing*, *28*(1), 48-56. https://doi.org/10.1108/07363761111101949

Herskovits, R., Grijalbo, M., & Tafur, J. (2013). Understanding the main drivers of value creation in an open innovation program. *International Entrepreneurship and Management Journal*, *9*, 631–640. https://doi.org/10.1007/s11365-013-0267-2

Hofmann, E. & Locker, A. (2009). Value-based performance measurement in supply chains: A case study from the packaging industry. *Production Planning & Control*, *20*(1), 68-81. https://doi.org/10.1080/09537280802685272

Iacoviello, G., Bruno, E., & Cappiello, A. (2019). A theoretical framework for managing intellectual capital in higher education. *International Journal of Educational Management*, *33*(5), 919-938. https://doi.org/10.1108/IJEM-02-2018-0080

Ittner, C., Larcker, D., & Randall, T. (2003). Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society*, *28*(7), 715-741. https://doi.org/10.1016/S0361-3682(03)00033-3

Kazlauskiene, V. & Christaukas, C. (2008). Business valuation model based on the analysis of business value drivers. *Engineering Economics*, *57*(2), 23-31. https://www.inzeko.ktu.lt/index.php/EE/article/view/11526

Kleczek, R. (2018). Company actions and value drivers: Manager reports from Polish firms. *Journal of Management and Business Administration: Central Europe*, *26*(1), 13-26. https://doi.org/10.7206/jmba.ce.2450-7814.217

Kianto, A., Hurmelinna-Laukkanen, P., & Ritala, P. (2010). Intellectual capital in service- and product oriented companies. *Journal of Intellectual Capital*, *11*(3), 305-325. https://doi.org/10.1108/14691931011064563

Kumar, R. (2015). *Valuation: Theories and concepts*. Academic Press.

Lafont, J., Ruiz, F., Gil-Gómez, H., & Oltra-Badenes, R. (2020). Value creation in listed companies: A bibliometric approach. *Journal of Business Research*, *115*, 428-434. https://doi.org/10.1016/j.jbusres.2020.01.012

Lamboglia, R., Lavorato, D., Scornavacca, E., & Za, S. (2020). Exploring the relationship between audit and technology. A bibliometric analysis. *Meditari Accountancy Research*, *29*(5). https://doi.org/10.1108/MEDAR-03-2020-0836

Lapierre, J. (2000). Customer-perceived value in industrial contexts. *Journal of Business & Industrial Marketing*, *15*(2-3), 122-145. https://doi.org/10.1108/08858620010316831

Lozano, M. B., Martínez, B., & Pindado, J. (2016). Corporate governance, ownership and firm value: Drivers of ownership as a good corporate governance mechanism. *International Business Review*, *25*(6), 1333-1343. https://doi.org/10.1016/j.ibusrev.2016.04.005

Lueg, K., Lueg, R., Andersen, K., & Dancianu, V. (2016). Integrated reporting with CSR practices: A pragmatic constructivist case study in a Danish cultural setting. *Corporate Communications: An International Journal*, *21*(1), 20-35. https://doi.org/10.1108/CCIJ-08-2014-0053

MacDiarmid, J., Tholana, T., & Musingwini, C. (2017). Analysis of key value drivers for major mining companies for the period 2006–2015. *Resources Policy*, *56*, 16-30. https://doi.org/10.1016/j.resourpol.2017.09.008

Magnanelli, B. S. & Izzo, M. F. (2017). Corporate social performance and cost of debt: The relationship. *Social Responsibility Journal*, *13*(2), 250-265. https://doi.org/10.1108/SRJ-06-2016-0103

Marr, B. (2004). Mapping the dynamics of how intangible create value. *International Journal of Learning and Intellectual Capital*, *1*(3), 358-369. https://dx.doi.org/10.1504/IJLIC.2004.005708

Marr, B. (2005). Strategic management of intangible value drivers. *Handbook of Business Strategy*, *6*(1), 147-154. https://doi.org/10.1108/08944310510557161

Marr, B., Schiuma, G., & Neely, A. (2004). The dynamics of value creation: Mapping your intellectual performance drivers. *Journal of Intellectual Capital*, *5*(2), 312-325. https://doi.org/10.1108/14691930410533722

Martínez-Romero, M. J., Rojo-Ramírez, A. A., & Casado-Belmonte, M. P. (2020). Value creation in privately held family businesses: The moderating role of socioemotional wealth. *Canadian Journal of Administrative Sciences*, *37*(3), 283–299. https://doi.org/10.1002/cjas.1540

Merigó, J. M., Mas-Tur, A., Roig-Tierno, N., & Ribeiro-Soriano, D. (2015). A bibliometric overview of the Journal of Business Research between 1973 and 2014. *Journal of Business Research*, *68*(12), 2645-2653. https://doi.org/10.1016/j.jbusres.2015.04.006

Microsoft Academic. (2021). *Value drivers*. Retrieved April 7, 2021, from https://academic.microsoft.com/topic/2994536479/publication/search?q=Value%20drivers&qe=And(Composite(F.FId%253D2994536479)%252CTy%253D%270%27)&f=&orderBy=0

Mili, S. & Arfa, I. (2020). Uncovering value creation factors in organic food supply chains. *International Journal on Food System Dynamics*, *11*(5), 503-521. https://doi.org/10.18461/ijfsd.v11i5.70

Nenonen, S. & Storbacka, K. (2016). Driving shareholder value with customer asset management: Moving beyond customer lifetime value. *Industrial Marketing Management*, *52*, 140–150. https://doi.org/10.1016/j.indmarman.2015.05.019

Ng, I. C. L., Ding, D. X., & Yip, N. (2013). Outcome-based contracts as new business model: The role of partnership and value-driven relational assets. *Industrial Marketing Management*, *42*(5), 730-743. https://doi.org/10.1016/j.indmarman.2013.05.009

Nielsen, C., Lund, M., & Thomsen, P. (2017). Killing the balanced scorecard to improve internal disclosure. *Journal of Intellectual Capital*, *18*(1), 45-62. https://doi.org/10.1108/JIC-02-2016-0027

Nimtrakoon, S. (2015). The relationship between intellectual capital, firms' market value and financial performance: Empirical evidence from the ASEAN. *Journal of Intellectual Capital*, *16*(3), 587-618. https://doi.org/10.1108/JIC-09-2014-0104

Panda, S. N. & Gopalaswamy, A. K. (2020). An analysis of timing decision in venture capital staged financing: Evidence from India. *Management Research Review*, *43*(12), 1517-1531. https://doi.org/10.1108/MRR-09-2019-0424

Poyry, E., Parvinen, P., & Martens, J. (2021). Effectiveness of value calculators in B2B sales work – Challenges at the sales-call level. *Journal of Business Research*, *126*, 350-360. https://doi.org/10.1016/j.jbusres.2020.12.047

Prodanova, J., Ciunova-Shuleska, A., & Palamidovska-Sterjadovska, N. (2019). Enriching m-banking perceived value to achieve reuse intention. *Marketing Intelligence & Planning*, *37*(6), 617-630. https://doi.org/10.1108/MIP-11-2018-0508
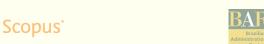
Rajkumar, N., Vishwakarma, P., & Gangwani, K. K. (2020). Investigating consumers' path to showrooming: A perceived value-based perspective. *International Journal of Retail & Distribution Management*, *49*(2), 299-316. https://doi.org/10.1108/IJRDM-05-2020-0184

Rappaport, A. (2001). *Gerando valor para o acionista: um guia para administradores e investidores*. Atlas.

Richards, K. & Jones, E. (2008). Customer relationship management: Finding value drivers. *Industrial Marketing Management*, *37*(2), 120-130. https://doi.org/10.1016/j.indmarman.2006.08.005

Rubio, G., Manuel, C. M., & Pérez-Hernández, F. (2016). Valuing brands under royalty relief methodology according to international accounting and valuation standards. *European Journal of Management and Business Economics*, *25*(2), 76-87. https://doi.org/10.1016/j.redeen.2016.03.001

Russo, P. T. & Parisi, C. (2017). Melhoria de desempenho em segmentos altamente competitivos: A gestão baseada em valor (GBV) na indústria têxtil brasileira. *Future Studies Research Journal*, *9*(1), 149-164. https://doi.org/10.24023/FutureJournal/2175-5825/2017.v9i1.276

Saha, V., Mani, V., & Goyal, P. (2020). Emerging trends in the literature of value co-creation: a bibliometric analysis. *Benchmarking: An International Journal*, *27*(3), 981-1002. https://doi.org/10.1108/BIJ-07-2019-0342

Schmaltz, C., Lueg, R., Agerholm, J., & Wittrup, K. (2019). Value-based management in banking: The effects on shareholder returns. *International Journal of Business Science and Applied Management*, *14*(1), 35-50. https://www.econstor.eu/handle/10419/261640

Schramade, W. (2016). Integrating ESG into valuation models and investment decisions: the value-driver adjustment approach. *Journal of Sustainable Finance & Investment*, *6*(2), 95-111. https://doi.org/10.1080/20430795.2016.1176425

Simeone, L., Secundo, G., & Schiuma, G. (2018). Arts and design as translational mechanisms for academic entrepreneurship: The metaLAB at Harvard case study. *Journal of Business Research, 85*(1), 434-443. https://doi.org/10.1016/j.jbusres.2017.10.021

Shah, S. H. H., Noor, S., Ahmad, A. B., Butt, A. S., & Lei, S. (2021). Retrospective view and thematic analysis of value co-creation through bibliometric analysis. *Total Quality Management & Business Excellence*, *33*(7-8), 752-776. https://doi.org/10.1080/14783363.2021.1890017

Skarmeas, D., Zeriti, A., & Baltas, G. (2016). Relationship value: Drivers and outcomes in international marketing channels. *Journal of International Marketing*, *24*(1), 22-40. https://doi.org/10.1509%2Fjim.15.0065

Soares, S. V., Picolli, I. R. A., & Casagrande, J. L. (2018). Pesquisa bibliográfica, pesquisa bibliométrica, artigo de revisão e ensaio teórico em administração e contabilidade. *Administração: Ensino e Pesquisa*, *19*(2), 308-339. https://doi.org/10.13058/raep.2018.v19n2.970

Spieth, P., Schneider, S., Clauß, T., & Eichenberg, D. (2019). Value drivers of social businesses: A business model perspective. *Long Range Planning*, *52*(3), 427-444. https://doi.org/10.1016/j.lrp.2018.04.004

Steenkamp, N. & Kashyap, V. (2010). Importance and contribution of intangible assets: SME managers' perceptions. *Journal of Intellectual Capital*, *11*(3), 368-390. https://doi.org/10.1108/14691931011064590

Stiglbauer, M. & Velte, P. (2014). Impact of soft law regulation by corporate governance codes on firm valuation: The case of Germany. *Corporate Governance*, *14*(3), 395-406. https://doi.org/10.1108/CG-05-2012-0043

Tiwari, R. & Kumar, B. (2015). Drivers of firm's value: Panel data evidence from Indian manufacturing industry. *Asian Journal of Finance & Accounting*, *7*(2), 1-22. https://doi.org/10.5296/ajfa.v7i2.7243

Turel, O., Serenko, A., & Bontis, N. (2010). User acceptance of hedonic digital artifacts: A theory of consumption values perspective. *Information & Management*, *47*(1), 53-59. https://doi.org/10.1016/j.im.2009.10.002

Ulaga, W. (2003). Capturing value creation in business relationships: A customer perspective. *Industrial Marketing Management*, *32*(8), 677-693. https://doi.org/10.1016/j.indmarman.2003.06.008

Uslu, H. (2020). The role of intellectual capital in financial development: Evidence from the banking sector of Turkey. *Competitiveness Review: An International Business Journal*, *32*(2). https://doi.org/10.1108/CR-06-2020-0084

Uvet, H. (2020). Supply chain collaboration in performance-based contracting: an empirical study. *International Journal of Productivity and Performance Management*, *70*(4), 769-788. https://doi.org/10.1108/IJPPM-01-2019-0008

Valentin, M. & O'Neil, J. W. (2019). The value of location for urban hotel. *Cornell Hospitality Quarterly*, *60*(1), 1-20. https://doi.org/10.1177%2F1938965518777725

van Eck, N. J. & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, *84*(1), 523–538. https://doi.org/10.1007/s11192-009-0146-3

Vergauwen, P., Bollen, L., & Oirbans, E. (2007). Intellectual capital disclosure and intangible value drivers: An empirical study. *Management Decision*, *45*(7), 1163-1180. https://doi.org/10.1108/00251740710773961

Visnjic, I., Jovanovic, M., Neely, A., & Engwall, M. (2017). What brings the value to outcome-based contract providers? Value drivers in outcome business models. *International Journal of Production Economics*, *192*, 169-181. https://doi.org/10.1016/j.ijpe.2016.12.008

Vrbka, J. (2020). The use of neural networks to determine value based drivers for SMEs operating in the rural areas of the Czech Republic. *Oeconomia Copernicana*, *11*(2), 325-346. https://doi.org/10.24136/oc.2020.014

Xu, J. & Li, J. (2019). The impact of intellectual capital on SMEs' performance in China: Empirical evidence from non-high-tech vs. high-tech SMEs. *Journal of Intellectual Capital*, *20*(4), 488-509. https://doi.org/10.1108/JIC-04-2018-0074

Yan, M. (2018). Improving entrepreneurial knowledge and business innovations by simulation-based strategic decision support system. *Knowledge Management Research & Practice*, *16*(2), 173-182. https://doi.org/10.1080/14778238.2018.1442994

Yooyanyong, P., Suwanragsa, I., & Tangjitprom, N. (2020). The accuracy of various value drivers of price multiple method in determining equity price. *Journal of Asian Finance, Economics and Business*, *7*(1), 29-36. https://doi.org/10.13106/jafeb.2020.vol7.no1.29

Young, S.D. & O'Byrne, S.F. (2003). *EVA e gestão baseada em valor: Guia prático para implementação.* Bookman.

Zupic, I. & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, *18*(3), 429-472. https://doi.org/10.1177%2F1094428114562629

Authors' contributions

1st author: conceptualization (lead), data curation (equal), formal analysis (equal), investigation (equal), methodology (equal), project administration (lead), software (supporting), supervision (lead), validation (equal), visualization (equal), writing – original draft (equal), writing – review & editing (equal).

2nd author: conceptualization (supporting), data curation (lead), formal analysis (equal), investigation (equal), methodology (equal), software (lead), validation (equal), visualization (equal), writing – original draft (equal), writing – review & editing (equal).

3rd author: conceptualization (equal), data curation (equal), formal analysis (equal), investigation (equal), methodology (equal), project administration (equal), software (equal), supervision (equal), validation (equal), visualization (equal), writing – original draft (equal), writing – review & editing (equal).

4th author: conceptualization (equal), data curation (equal), funding acquisition (equal), investigation (equal), methodology (equal), resources (equal), software (equal), validation (equal), visualization (equal), writing – original draft (equal), writing – review & editing (equal).

Authors

Anelise Krauspenhar Pinto Figari
Universidade Federal do Paraná, Programa de Pós-graduação em Contabilidade
Av. Prefeito Lothario Meissner, n. 632, Jardim Botânico, 80210-170, Curitiba, PR, Brazil
figari@ufpr.br
https://orcid.org/0000-0002-9209-5873

Gilmarques Agapito Costa
Universidade Federal do Paraná, Programa de Pós-graduação em Contabilidade
Av. Prefeito Lothario Meissner, n. 632, Jardim Botânico, 80210-170, Curitiba, PR, Brazil
gilmarques@ufpr.br
https://orcid.org/0000-0002-2996-1943

Henrique Portulhak*
Universidade Federal do Paraná, Programa de Pós-graduação em Contabilidade
Av. Prefeito Lothario Meissner, n. 632, Jardim Botânico, 80210-170, Curitiba, PR, Brazil
henrique.portulhak@ufpr.br
https://orcid.org/0000-0002-9097-2481

Sayuri Unoki de Azevedo
Universidade Federal do Paraná, Programa de Pós-graduação em Contabilidade
Av. Prefeito Lothario Meissner, n. 632, Jardim Botânico, 80210-170, Curitiba, PR, Brazil
sayuri.unoki@ufpr.br
https://orcid.org/0000-0001-9676-9938

* Corresponding author