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Integrated Reporting and Value Creation: the Semantics of the Fundamental Concept of Integrated Reporting

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Abstract

The objective of this research is to build the semantics of the concept of value creation based on the existing literature, delimited to the Integrated Reporting (IR) proposal. It is a descriptive, bibliographic and documentary study, developed with use of content analysis. Sixteen articles, three books and one document were analyzed, based on the "Value Creation – Background Paper" (International Integrated Reporting Council, 2013a), as well as on the semantic classification proposed by Ilari and Geraldi (1985). The results show that the semantics of the concept of value creation is that the organization carries out actions of values (capitals) created directly or indirectly, considering only their positive effect on society and the environment. Negative actions cause value destruction for shareholders and stakeholders, and they are not reported when expected to be. Financial value is relevant, but not enough to create value. The absence of explanations on the subject makes it possible the non-adoption of the real purpose in the construction of the connectivity of financial and non-financial information, consequently damaging the credibility of this new corporate disclosure format. The research encourages discussions to fill gaps and counter criticisms, especially international ones. It contributes to the interpretation of the concept of value creation for future IR disclosures, clearly elucidating what would be the organization's value creation and accountability to society, in view of the difficulty in applying this concept in public consultations (2013 and 2017), as revealed by preparers. This research also contributes to advancing the discussion in the literature in the value creation context.

Keywords: integrated reporting; value creation; concept of value creation; capitals.

Introduction

The Integrated Reporting (IR) Framework 1.0 was prepared in 2013 by the International Integrated Reporting Council (IIRC), consisting of three matters: (a) fundamental concepts (value creation process, capitals, value creation for the organization, among others); (b) guiding principles, and (c) IR content elements. Regarding these three matters, the focus is on the fundamental concepts of value creation and capitals, as they support and consolidate the application of guiding principles and content elements (Druckman, 2016), besides being interdependent for the value creation to be reached in the period (net effect) (IIRC, 2014).

Before the publication of Framework 1.0, the draft named Framework 1.0 "Towards Integrated Reporting – Communicating Value in the 21st Century" (IIRC, 2011) opened up the discussion about the existence of doubts over the understanding of value creation in IR. In response to questions from users, in 2013 the IIRC created a technical collaboration group and published the document "Value Creation – Background Paper" (IIRC, 2013a), in order to reflect the views of those involved on this topic. Subsequently, in 2013 and 2017, public consultations were held, in which questioning regarding the concept of value creation remained. In the last public consultation, held in 2017, IR users requested clarification of the meaning and use of this concept, as well as presentation of examples (IIRC, 2017). In view of this, the IIRC (2017) recommended that new studies should be developed, aiming at improving the understanding of value creation, in order to assist IR preparers and users.

The lack of clear definitions of fundamental concepts is an obstacle to the success of IR (Feng, Cummings, & Tweedie, 2017); for example, the guidelines on value creation are fragile and therefore allow different interpretations (Chaidali & Jones, 2017; Flower, 2015; Gokten & Gokten, 2017; Slack & Tsalavoutas, 2016; Dumay, Bernardi, Guthrie, & La Torre, 2017; International Federation of Accountants, 2015). According to the Integrated Reporting Committee of South Africa (Ircosa) (2014), researchers defend the value creation due to its relevance to the IR adoption, but they say that the topic still needs to be discussed. In this regard, previous studies have investigated: (a) the way in which developers can use value creation to communicate; (b) clarification of short-, medium- and long-term scope, and (c) that IR purpose does not portray genuine sustainability (Thomson, 2014; De Beer, 2014; Dumitru, Guşe, Feleagă, Mangiuc, & Feldioreanu, 2015; Flower, 2015; Haller, 2016; Gokten and Gokten, 2017; Adams, 2017). Regarding capitals, which are the theoretical basis of the concept of value creation, research was identified only on intellectual capital (Beattie & Smith, 2013; Melloni, 2015) and the capital metaphor (Coulson, Adams, Nugent & Haynes, 2015).

As a result of the discussions and public consultations carried out, the IIRC evaluated examples of value creation, and it became evident that in the published IRs this concept is not sufficiently developed to be used as benchmarking (Adams, 2015). In other words, the definition is not clear both theoretically and practically, even for users (Feng et al., 2017). It is also considered that an organization may take time to mature and assimilate the understanding of its value creation and the most appropriate way to report such information (Chen & Perrin, 2018). Nevertheless, for Dumay and Dai (2017), the concept of value creation is a rhetorical argument of Framework 1.0, as there is no real evidence of its existence. According to Haller (2016), the IIRC does not delimit on which foundation(s) the concept of value creation was based, nor how it can be incorporated, since this concept is not formally defined and clearly understood by the IIRC itself (Feng et al, 2017). Therefore, Gokten and Gokten (2017) criticized the value creation process as philosophical, because as it is, the process is considered inadequate to make IR viable.

Such arguments reinforce that the concept of value creation is obscure from the point of view of IR preparers, who demand clarification. In addition, the IIRC (2017) itself recommends studies that propose improvements in the understanding of the topic, with conceptual, theoretical and practical examples, thus making it the opportune gap that justifies this research. Therefore, the objective is to build the semantics of the concept of value creation based on the existing literature, delimited to the Integrated Report proposal. Based on the document "Value Creation – Background Paper" (IIRC, 2013a) and the semantic classification proposed by Ilari and Geraldi (1985), content analysis (Bardin, 2016) was used to analyze the concept of value creation in the literature on IR.

The main results reveal that value creation in IR is not exclusive to the financial context and uses the Triple Bottom Line (TBL) to achieve net value in the short, medium and long term. Put differently, the concept defines that a company creates financial and non-financial, tangible and intangible value, and considers the positive impact on society and the environment. This research contributes to the reflection on the concept of value creation in IR, providing users and researchers with an interpretation of the topic studied. For society and companies, it improves the IR structure, in order to support a company's communication of value creation along with accountability to society.

Integrated reporting and value creation

The IR, whose purpose is to integrate concisely and holistically financial and non-financial information (De Villiers & Sharma, 2017), was a voluntary corporate disclosure structure in the Brazilian context until 2020, and from 2021 onwards this disclosure became mandatory, as established by Resolution No. 14 of the Securities Commission (CMV) for companies listed on the B3 stock exchange. It is a proposal for corporate reports to be worked together, presenting information on activities, financial, social, environmental and governance interactions and implications (Abeysekera, 2013; Dumitru et al., 2015; Simnett & Huggins, 2015). Furthermore, it benefits both shareholders and stakeholders in understanding an organization's ability to create value over time (IIRC, 2014). For that purpose, IR is supported by fundamental concepts (value creation process, capitals), which support and solidify the basic principles and content elements proposed by Framework 1.0.

It is not the objective of IR to quantify or monetize the company's value at a given time, nor the effects on capitals (Coulson et al., 2015). The inclusion of the Key Performance Indicator (KPIs) tool and monetized metrics as part of a descriptive explanation capable of connecting quantitative and qualitative information should be included when it is feasible and relevant to explain how an organization creates value and how it uses and affects different capitals (IIRC, 2014). However, Framework 1.0 does not indicate any of these specificities, since IR is not intended to measure the company's value (Flower, 2015), leaving an organization's top management and governance responsible for the value creation process (IFAC, 2015).

For this reason, Framework 1.0 is formed by basic guiding principles and elements that, in turn, define the content for the communication of the value creation process. To meet the IR proposal, the organization's management have to report to the value creation process system, as defined in Framework 1.0: the value created occurs through the organization's business model, composed of activities, relationships, products and services, and it is, therefore, influenced by the external (legal, economic, social, environmental, and political context) and internal (interaction with financial, manufactured, intellectual, human, social and relationship, and natural capitals) environments in which the organization operates, producing in the short, medium and long term, value creation or destruction for the organization, its stakeholders, and society (IIRC, 2013a). Figure 1 demonstrates this system.

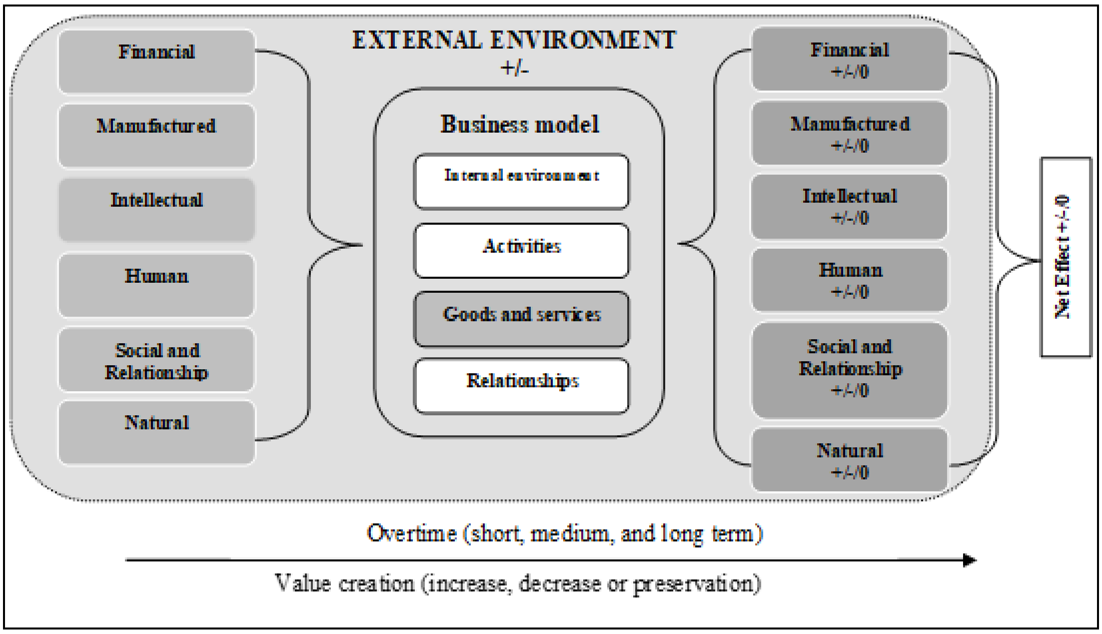

Figure 1. Framework 1.0 value creation process

Source: Elaborated by authors from IIRC (2014).

Capitals are used as inputs in the organization's activities, becoming products – outputs – such as goods and services. Over time, capitals increase (+), decrease (-), or are transformed (0). The net effect of the evidenced period of all capitals can be increase, decrease, or preservation (+/-/0) (IIRC, 2014), depending on the company's point of view (Figure 1). The value created has positive or negative influences on the external environment, causing a net increase or net decrease in capitals, since the company is subject to risks and opportunities arising from it.

Framework 1.0 points out that it is rare to maximize just one capital to the detriment of the others – trade-offs –, such as maximizing financial capital (profit) at the expense of human capital (inadequate human resources policies and practices) with the aim of increasing the value for the company in the long term. Therefore, the process of IR elaboration is called 'integrated thinking,' as it intends to expose the capitals relevant to the organization's past, present and future performance, since they depend on how the organization uses these capitals, and its impact on them (Eccles et al., 2015). The structuring proposed by Framework 1.0 is shown in Figure 2.

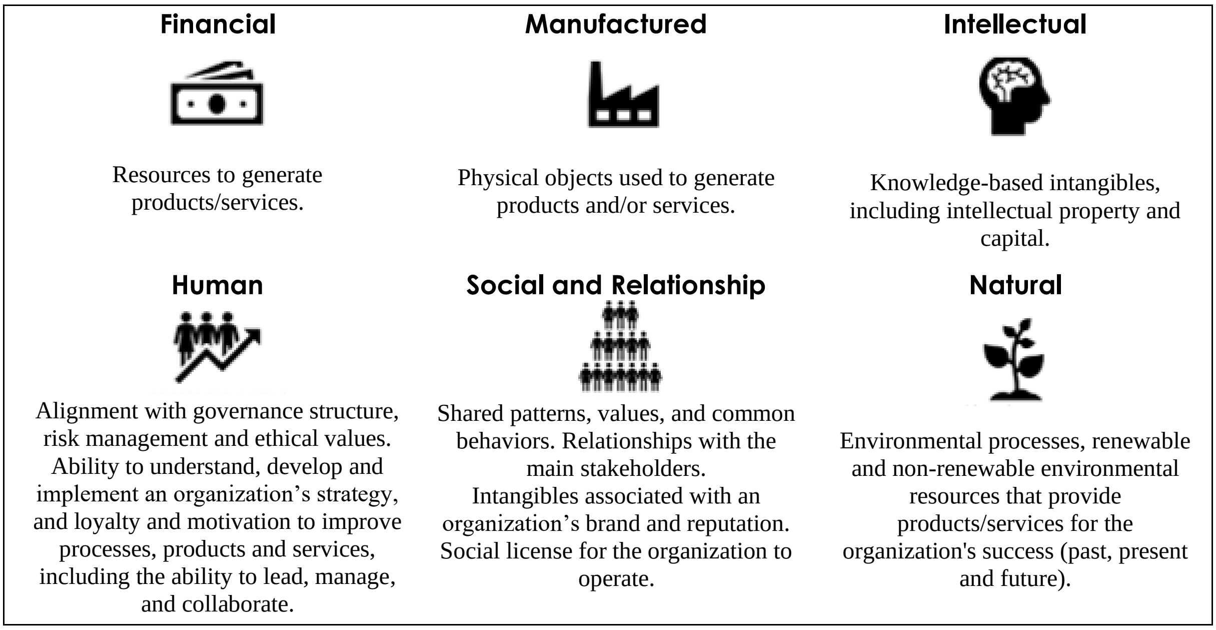

Figure 2. Capitals proposed by Framework 1.0

Source: Adapted from IIRC (2014).

Framework 1.0 does not oblige organizations to adopt these capital categories and their compositions. However, it is a recommendation of theoretical support for the concept of value creation and should serve as a guideline to ensure that organizations take into account all forms of capital used or affected by them (Flower, 2015). Furthermore, not all are applicable or relevant to all organizations, as some interactions may be relatively indirect or insignificant, and then there is no need to report them in IR (Flower, 2015; IIRC, 2014). In addition, the intention of capitals is to allow the creation of an interdependence of short-, medium-, and long-term horizons of a company's operations (Perego, Kennedy, & Whiteman, 2016).

According to Coulson et al. (2015), the concept of multiple capitals encourages organizations to pursue sustainable development. To this end, the IIRC recognized that used studies such as the Forum for the Future (2009) and The Sigma Project (2003) as a basis to develop the Framework 1.0. Both projects have similar characteristics and are based on the TBL approach in five capitals (natural, social, human, manufactured and financial) in order for organizations to improve their accountability to society. Subsequently, the IIRC added the intellectual capital, and they now totalize six capitals. In view of this, a public consultation was carried out to determine whether users agreed or not with this approach, and 70% of respondents agreed with the terminologies incorporated.

On the other hand, Marc van Weede, from Aegon insurance group, criticized the terminology of capitals, citing that it is not always intuitive, since human capital is understandable by its characteristics, but natural capital is difficult to be applied. He points out that, normally, the activity in which he works (office) does not have a direct impact on the environment, despite having a portfolio of investments in large companies and having the potential for impact, which are not in the company's control (Chen & Perrin, 2018).

In this sense, through the IIRC Consultation Questions (2013b), Flower (2015) suggested that capitals should be categorized into internal and external, to be evidenced as under the company's control or not (Adams, 2015). Adams agrees with Flower's position, that is, capitals have limited disclosure requirements, and it is difficult to imagine achieving them completely, due to the underdevelopment of such accounts. Similarly, accountants, researchers and sustainability professionals criticized the reduced importance given to the possibility of elaborating a multiple capital model. Furthermore, Adams stated that the IIRC's capital technical team sought innovative examples for the disclosure of capitals and it was clear that the communication of the value creation narrative was not yet sufficiently developed to be able to judge the best practices.

As discussed in this topic, the ability to generate value is directed towards the organization, its stakeholders and the environment, and it is interrelated with business acts and results, that is, the company's business model. However, understanding what value creation is in the context of IR and how capital contributes to it is not clear. In view of this, the next section deals with the concept of value creation in IR.

Value creation

The term 'value creation' mentioned in Framework 1.0 has several unidentified meanings regarding its source of reasoning, thus this fact may be related to the questioning by IR users about its definition and use (IIRC, 2017). The only supporting document on what value creation is the "Value creation – Background Paper" (IIRC, 2013a), which was also a guide for this research. This document had the participation of professionals and entities from different countries, with the purpose of demonstrating the participants' collective perception of the subject.

However, "Value creation – Background Paper" (IIRC, 2013a) did not present a concise definition of the term or the way in which the value creation should be evidenced. Besides, it was considered that the term 'value creation' can have a negative connotation, that is, it can also be interpreted as the destruction or depletion of the value created. Despite not having a concise definition of the concept, 10 topics were addressed in the paper, not exhaustive and based on the literature, which express the Framework 1.0 value creation proposal (Table 1).

Table 1

Value Creation – Background Paper

Synthesis	Context	Category
1. The value creation occurs within a context	Value is created from a set of interactions, activities, relationships, causes and effects, which occur within the context of the regulatory, societal and natural market in which the organization operates. It considers society's expectations about what the company's value creation symbolizes.	Market Regulatory Societal Natural
2. Financial value is relevant, but not sufficient, for assessing value creation	It is created through the utility in satisfying human needs, whose assessment is linked to three items: functional utility (what the product/service does), economic utility (how much it costs), and emotional utility (how it makes the customer feel).	Functional utility Economic utility Emotional utility
3. Value is created from tangible and intangible assets	In addition to tangible assets, intangible assets also contribute to value creation, and are increasingly in evidence.	Tangible and intangible assets
4. Value is created from private and public resources	In some cases, common global, natural or social resources are used in a company's business model, and transformed into products or results. Thus, transparency, information, and common language are needed.	Natural Resources Social Resources
5. Value is created for an organization and for others	In IR, value should be addressed to a wide range of stakeholders, as an organization's value is created and captured by a wide range of stakeholders.	Organization Stakeholders
6. Value is created from the connectivity between a wide range of factors	Value assessment is based on a vector composed of qualitative, ethical, social, and practical factors, the way they relate to each other and present results to various stakeholders.	Qualitative Ethical Social Practical
7. Value creation manifests itself in outcomes	The connections and interdependencies between different factors collaborate to value creation, as it achieves different results for different stakeholders, since the activities can affect a company' future potential.	Connections Interdependences
8. Innovation is fundamental to value creation	A company's value is created/maximized with the help of innovation, enabling organizations to recognize their strategic sources and devise mechanisms to create a lasting or sustainable force.	Innovations
9. Values play a role in 'how' and 'what type' of value is created	The existence or absence of values is sometimes expressed in codes of business conduct, and can play a role in determining the extent to which an organization creates and protects value.	Codes of conduct
10. Measures of value creation are evolving	Measures of value, such as economic value added, Balanced Scorecard, company value, total contribution, have being used as a way of expressing value creation.	Measures of value

Source: Elaborated by authors from IIRC (2013a).

After addressing these topics, the "Value Creation – Background Paper" (IIRC, 2013a) pointed out that value creation or destruction for IR purposes in the short, medium, and long term is related to the results obtained directly and indirectly by the organization through the business model, whose effects are positive or negative, individual or collective, for providers of financial capital, society, and the environment. However, an organization's business model is influenced by the external environment and by the interaction with capitals (actions of value), to create value in the short, medium and long term, simultaneously for the organization and for stakeholders and the environment (Abeysekera, 2013; Adams & Simnett, 2011; Busco, Frigo, Quattrone, & Riccaboni, 2014). In this way, with the disclosure based on the IR proposal, it is possible to assess the company's behavior over time, thus obtaining a global perception (financial, social, and environmental) of the business operations that directly and indirectly influence an organization's capacity to create value over time (IIRC, 2017).

Topics 1, 2, 4, 5, 6 and 9 (Table 1) present biases with regard to the concept of sustainability (or sustainable development), as they are in synergy with the arguments of Thomson (2014), Coulson et al. (2015), Flower (2015), and Adams (2015) when reporting that IR incorporates the concept of sustainability in value creation. However, the concepts described are expressed in a diversified way, without concrete examples and not clearly related to the proposed capitals of the Framework 1.0, which are the basis of the theoretical concept of value creation. Such arguments reinforce the fragility of the Framework 1.0 by not revealing value creation to stakeholders in a precise way, besides not defining the interest groups (Santos, Favato, & Neumann, 2021). As much as value creation is the IR support, Alves, Kassai, Lucas and Ferreira (2017) find companies that mention the term only once.

According to the Institute for Family Business (2012), sustainability is related to long-term situations that often have no financial counterpart, but have a material impact on an organization's performance when creating value. The concept of sustainability comes from the Brundtland Report (1987) t, in which the definition for sustainable development was established: it is necessary to meet the present generations' needs, but without compromising the future generations' ability to satisfy their own needs (Flower, 2015). Thus, for mastermind Elkington (2012), sustainable development is achieved if the three elements – economic, social and environmental – are met equitably.

For Haller (2016), value creation, in this case the value in IR, is in line with the concept of shared value by Porter and Kramer (2011; 2013), in which specifically the sense of value is co-created over time between the organization and others. In this sense, Gokten and Gokten (2017) concluded that profit is the result of creating value in the short term; medium-term value would be the fair value expected by investors for equity; and long-term value is the value represented to society.

For Flower (2015), the IIRC adopted the basic principles of socio-environmental accounting, in which a company portrays the use of non-renewable resources and their impacts on the environment and society. The concept of capitals has this direction in Framework 1.0 because it encourages the company to report its resources and relationships, and its continuity depends on its synergy with society, that is, there is interdependence between the value a company creates and the value it creates for shareholders and stakeholders (Flower, 2015). However, Milne and Gray (2013), Thomson (2014), Brown and Dillard (2014) and Flower (2015) agree with the IR value creation proposal, but criticize the concept due to its weaknesses regarding its definition in Framework 1.0.

On the one hand, Flower (2015), Adams (2015), and Thomson (2014) state that IR should not focus on financial capital providers; on the contrary, it should adopt the broad concept of value, as for society. For Flower, investors only express an interest in the value for society if their business has negative externalities. On the other hand, Feng et al. (2017), and Brown and Dillard (2014) argue that there is no problem with the idea that relationships between business, stakeholders, and society can be mutually beneficial, as businesses cannot ignore climate change, resource depletion, and change in social expectations. In fact, it is unethical to create value without having good relationships with funders, suppliers, regulators, customers, employees, society, and other stakeholders. In this way, IR can leverage profit maximization with a focus on the well-being of society and the environment (Adams, 2015).

Flower (2015) also criticizes the concept of value, because the IIRC (2014) does not guide organizations to report damages to external entities (such as the environment), regardless of the impact on the financial aspect. As a result, this concept of value is aimed at investors and not at society. In addition, the IIRC (2014) states that a company does not need to report indirect or insignificant capitals. For this reason, the author also argues that the IIRC abandoned sustainability, because by incorporating the concepts of sustainability, organizations would have to reveal negative aspects of their relationships, interactions, and activities. For this reason, Flower criticizes Framework 1.0; there is no strengthening of sustainability in organizations. It is interesting to note that in IIRC discussion papers the word 'sustainability' is presented repeatedly, while in Framework 1.0 it is mentioned only once (Flower, 2015).

Thomson (2014) reinforces the criticism of Flower (2015) with regard to IR not being considered a reliable format that reports sustainability. For this author, it is difficult to understand how unregulated communication guarantees transforming business into sustainable practices. In addition, Framework 1.0 itself argues that IR emerged as a stimulus to provide financial stability and sustainability (IIRC, 2014). In this way, "It is much easier to understand how Integrated Reporting could silence the radical elements of the sustainability and potentially reframe unsustainable corporate practices as sustainable" (Thomson, 2014, p. 4). For sustainable change to take place, it depends on how integrated thinking and integrated accounting can deinstitutionalize non-integrated thinking. Brown and Dillard (2014) agree with Thomson (2014) by stating that IR offers a limited and one-sided approach to assessing and reporting sustainability issues.

As much as IR is a tool for integrating sustainability into business, it has not achieved this purpose (Brown & Dillard, 2014). Until now it does not clearly present the change it wants, that is, to ensure financial and sustainable stability, being "remarkably regressive" (Milne & Gray, 2013, p. 25), and it is unlikely that it will reduce significantly the unsustainable consequences of corporate actions (Flower, 2015). Therefore, implicitly, it does not prioritize innovations aimed at fostering social justice and sustainability (Feng et al., 2017; Milne & Gray, 2013). Thomson (2014) suggested that the IIRC should expand its understanding of sustainability to include case examples for business and sustainable accounting practices, as existing evidence reinforces that the IIRC was wrong to want to achieve a sustainable future (Flower, 2015).

According to the above, the purpose of the concept of value creation of IR is to narrate sustainability in a company. However, Adams (2015) points out that the main objective of IR is not to exclusively address sustainability, although the author agrees that material impacts on the subject should be mandatory. In this way, the IIRC does not have any instruments or tools that can support the narrative of value creation, since the Framework 1.0 is composed of fundamental concepts, basic principles, and content elements. Therefore, it becomes susceptible to misinterpretations of the proposal to be an integrated report, and the literature is also silent in this regard (Haller & Staden, 2014).

One of the accounting instruments that could help developers to communicate value creation in IR is the Value-Added Statement (VAS), because its purpose is similar to the capitals suggested in Framework 1.0, thus favoring IR usefulness (Haller & Staden, 2014). This accounting statement seeks to highlight and identify the wealth created by a company, and with whom this value created was shared, in this case, shareholders, employees, funders, government, and society. Therefore, it is a means of communicating a company's monetary value creation, also showing the destination of the value created in the period. The data obtained from a VAS can be mentioned in IR capitals as a source of evidence of past and present financial value creation. Nevertheless, one of the aspects of IR is also to highlight possible future value creations; according to Mckinsey & Company (2010), the meaning of financial value creation is a punctual measure between present value and future expected cash flows.

The financial value is not enough to represent a company's value potential, thus, the non-financial information about these assets is essential to explain a company's value creation. Tangible assets support other values created, such as relational capital and intangible assets. Tangible assets aim to improve the efficiency and effectiveness of value creation processes (Bowman & Ambrosini, 2003). However, the representation of book value in the market is equivalent, on average, to 30% of the company's total, and intangible assets to the remaining portion (70%); in most cases this representation of intangible assets is not reflected in the financial reports, as they do not meet the recognition and measurement criteria of international accounting standards (Maniora, 2015; IIRC, 2013).

Beattie and Smith (2013) understand that intellectual capital – in this case the intangibles of Framework 1.0 – can be classified into three categories: structural, human and relational. The structural capital involves organizational routines, procedures, systems, cultures and databases (intellectual capital); the human capital includes people's knowledge and skills (human capital); and relational capital consists of resources linked to external relationships with customers, suppliers, and research and development partners (social and relationship). Besides, intellectual elements usually require combination with tangible assets (manufactured capital). Therefore, it is inferred that the aforementioned intangibles can be related to human, social and relationship and manufactured capitals to create value over time.

It is noted that there is a lack of studies that explore the concept of value creation, which is in line with Dumay, Bernardi, Guthrie and Demartini (2016), who claim that there is a lack of studies that criticize the rhetoric and practice of IR regarding the application of the concept of value creation. Based on the statements, IR is an opportunity for companies to clarify their value created, at the same time highlighting the financial strategies to keep this value in line with sustainability practices. Therefore, it demonstrates the chain of interdependence with stakeholders and the environment to achieve sustainable value over time.

In order not to consider IR as a fragile tool, value creation would be faithfully represented for its purpose if the external environment (social, natural, political, legal and commercial) and, mainly, the relationships, interactions and activities with the social and relationship and natural capitals were evidenced. This would provide the revelation of positive and negative aspects, given that businesses depend on society and the environment to create value, as well as other capitals, if any (financial, manufactured, intellectual, and human), if they significantly affect an organization's capacity to create value over time.

Methodological procedures

To meet the objective, this research is classified as descriptive, bibliographic and documentary, and was performed using analysis of content (Bardin, 2016) present in articles, books and documents that compose the study sample. The articles were obtained based on surveys carried out using the criteria established in Tables 2 to 6. The terms 'Integrated Reporting' and 'Value Creation' were considered combined in the title or keyword on the research bases, without temporal delimitation.

Table 2
Collection of 'Integrated Reporting' and 'Value Creation' sample

Bases accessed	**Terms**	**Quantity of articles***		
Period of collection		**April/2018**	**April/2020**	**December/2021**
CAPES		**12**	12	7
Emerald Insight	Integrated Reporting	0	0	**2**
Jstor (Social Sciences)		0	0	**0**
Scielo (Web of Science)	Value Creation	3	3	**6**
Scienc Direct		5	5	**8**
Scopus		9	15	**30**
Wiley		1	1	**2**

* Period of research development, maturation and updating.
Note: There is a difference in the number of findings due to the renewal or not of content indexed on the CAPES system (Coordination for the Improvement of Higher Education Personnel) accessed by the Federated Academic Community (CAFe).
Source: Elaborated by authors.

According to articles from the bases accessed, no national (Brazilian) research was found including the terms 'Integrated Reporting' and 'Value Creation.' Results and selection criteria are shown in Table 3.

Table 3

Selection of 'Integrated Reporting' and 'Value Creation' sample

	CAPES	***Emerald***	***Jstor***	***SciELO***	***ScienceD.***	***Scopus***	***Wiley***	**Total**
Articles found	**12**	**2**	**0**	**6**	**8**	**30**	**2**	**60**
(-) Total articles excluded	(11)	-	-	(5)	(5)	(21)	(2)	(44)
a) (-) Articles with no access/language	(5)	-	-	(1)	-	(3)	-	(9)
b) (-) Duplicate articles	-	-	-	(4)	-	(6)	(2)	(12)
c) (-) Not related to the concept of value creation	(6)	-	-	-	(5)	(12)	-	(23)
Research sample	1	2	0	1	3	9	0	16

Source: Elaborated by authors.

Regarding 60 articles found (appendix), 44 were excluded according to the established criteria, resulting in a sample of 16 articles. It is necessary to mention with regard to (Item c – Table 3) that companies in the studies disclosed IR (empirical research) showing whether there was compliance with the Framework 1.0 or whether they did not explore the topic. As a consequence, these studies were excluded, because there was no discussion about the concept of value creation in Integrated Reporting. In addition, three books, a document and an article cited by "Value Creation – Background Paper" (IIRC, 2013a) were selected for analysis. Therefore, this research analyzed 20 pieces of work.

The data obtained was examined using content analysis (Bardin, 2016), with employment of the thematic/category technique. Table 4 presents the topics and analysis system used in this research.

Table 4

Analysis of content carried out in three stages

1st Pre-analysis	1) Floating reading, which was the first contact with articles and documents in data collection; 2) Choice of documents, when the corpus of analysis was defined; 3) Formulation of the research objective; 4) Preparation of the material, aiming at alignment with the language (PT-BR); 5) Organization of indices and elaboration of indicators, when the text was divided into comparable units (categorization), and data recording (coding) was determined.
2nd Exploration of the Material	It was addressed in the systemic administration of the decisions taken.
3rd Treatment of the results obtained (inference and interpretation)	The analysis was conducted manually, since, according to Bardin (2016), it is feasible to use software when performing a large analysis or counting words. The interpretation and inference was carried out based on the literature review, Framework Integrated Reporting and "Value Creation – Background paper" (IIRC, 2013a).

Source: Adapted from Bardin (2016).

It should be noted that for coding, item 5 of the 1st stage, it was necessary to define the following: (a) the cut-out (recording and context units) and (b) classification and aggregation (categorization) (Table 5).

Table 5

Determination of the codification

Choice of units (recording and context unit)	The semantics units (themes) were chosen as registration units and the context unit was limited to one paragraph.
Classification and aggregation (categorization)	Semantics was used (thematic categories).

Source: Adapted from Bardin (2016).

To identify the meanings of value creation, semantics of Ilari and Geraldi (1985) was used, with five classifications (Table 6).

Table 6

Semantics: source of oppositions, relationships and implicit meanings

1. Paraphrase	- Words have the same meaning (synonyms) and syntactic constructions are preserved.
2. Synonymy	- For two words to be synonymous, it is not enough that they have the same extension (another way can say the same thing); - For words to be synonymous, they have to make, in all their uses, the same contribution to the meaning of the sentence; - Two words are synonymous whenever they can be substituted in the context of the sentence, without the sentence changing from false to true, or vice versa.
3. Antonymy	- Two sentences have meanings that are incompatible with the same situation; - Two opposing expressions rarely are in equality at the moment; - There is no combination of contradictory information that does not resist a motivated effort at interpretation.
4. Hyponymy	- Meaning relations between set pairs (which occur between expressions with a more specific meaning and generic expressions).
5. Duplicity of meaning	- They share the quality of being ambiguous, that is, of admitting alternative interpretations.

Source: Adapted from Ilari and Geraldi (1985).

Table 6 shows the classifications regarding the semantics used in this research: paraphrase, synonymy, antonymy, hyponymy and duplicity of meaning (source of oppositions, relationships and implicit meanings); these expressions supported the analysis of meanings of value creation for the literature of the terms ‘Integrated Reporting’ and ‘Value Creation’ (Table 7), presented in the next section as a research result.

In short, to carry out this research, in each article one searched for an excerpt from a paragraph that contemplated the ideology of value creation, guided by “Value Creation –

Background paper" (IIRC, 2013a), as categorized in Table 1. First, the abstract was analyzed in order to verify whether the document explored specifically value creation in the Integrated Reporting context. Then, a floating reading was performed to obtain an overview of the document, with search for the term 'Value Creation.' Consequently, there was a relationship between the Framework 1.0 and the type of semantics and those excerpts selected, (with the application of categories): source of oppositions, relationships and implicit meanings. As for the documents, articles and books cited by "Value Creation – Background Paper" (IIRC, 2013a), only categories and semantics relationships were applied.

Data presentation and discussion

Research result

Results of the content analysis were structured in order to meet the objective of building the semantics of the concept of value creation based on the existing literature, delimited to the IR proposal. In order to supply the semantics of the concept defined in Framework 1.0, articles, documents and books – referred to as pieces of work – were analyzed following the classification of what capitals (C) (Figure 2) underlie the concept and their net effect of creating or destroying value (Figure 1) of Framework 1.0. Additionally, there was correlation with the value creation understanding (VCU) suggested by the IIRC (Table 1), as well as the identification of semantics (S) (Table 6). The results obtained are summarized in Tables 7 and 8:

Table 7

Results of the meanings of value creation for the literature 'integrated reporting' and 'value creation'

Authorship	Concept	Framework	Value creation understanding	Semantics
1 - Bowman e Ambrosini (2003) Article mentioned by "Value Creation – Background Paper"	The **fixed assets of the firm** like buildings and machinery are enduring inert use values. Once a firm is a going concern **additional forms of capital can be created**.	MC IC	3	5
2 - Crowther and Aras (2008) Book mentioned by "Value Creation – Background Paper"	They comprise all Activities of **Corporate Social Responsibility** - **CSR**. They are the following: Sustainability, Accountability and Transparency.	EE SRC NC	4	2 and 5
3 - Mckinsey & Company (2010) Book mentioned by "Value Creation – Background Paper"	Terms 'value' and 'value creation.' In its purest form, **value** is the **sum of the present values of future expected cash flows** - a **point-in-time measure**. Value creation is the change in value due to company **performance**.	FC NE	5	5

4 - Institute for Family Business (2012) Document mentioned by “Value Creation – Background Paper”	**Sustainability** deals with **long-term issues** that often **have no financial counterpart**, but which can have a **material impact on the ability of an organisation to create long-term valu**e.	EE SRC NC	1 and 4	4
5 - Beattie and Smith (2013) Article	Intellectual capital is **bundled up in the processes and resources** that are capabilities and competences that can (especially if **difficult to imitate**) generate competitive advantage and hence create value.	IC	3	3
6 - Kuzina (2014) Article	IR core idea is that company value is not created alone and value can vary over time, influenced by external factors, environment, stakeholder relationships, and interdependent on access to diverse resources. Therefore, IR should focus on: **1- external environment that affects a company; 2- resources and relationships used and affected by a company; 3 - how the company interacts with the external environment and capitals to create value in the short, medium and long term.**	EE FC MC IC HC SRC NC	1 to 9	2
7 – Dumitru et al. (2015) Article	The **value added (VA)** offers information and reflect the **connections** between the financial capital (dividends’ distribution, interests registered), human capital (salaries and other benefits), social capital (taxes, donations, sponsorships) and the manufactured capital (goods purchased, the depreciation)	FC MC HC SRC	10	4
8 - Adams (2015) Article	The meaning attributed to “value” and value to whom is critical in shifting the extent to which **business, society and the environment co-exist in a mutually beneficial way**.	NE	5	1
9 - Haller (2016) Book	**Stakeholder theory** presents a limited perspective, which **does not clearly include the environment**. However, the concept of value of the **IIRC is linked to the concept of “shared value”** by Porter and Kramer (2011; 2013), which supports shareholder value that includes social impacts as drivers of the value parameters. Including environmental, social and corporate governance (ESG) aspects in management strategies and decisions, leads to higher shareholder return and, and is therefore rational and profitable from a **shareholder perspective** thus benefiting both sides (shareholder and company).	NE	5	3
	The Framework doesn’t even refer to specific approaches that have already been developed **to measure particular capitals individually or in bundles together**. Like i) *Working Group “Accounting and Reporting of Intangibles” of the Schmalenbach Association for Business Administration; ii) The Natural Capital Coalition (Natural Capital Protocol); iii) The Carbon Disclosure Project (Carbon Disclosure Project); iv) KPMG - True Value; v) New Economics Foundation - Social Return on Investment; vi)*	EE FC MC IC HC SRC NC	10	4

	World Business Council of Sustainable Development - Redefining Value; vii) EFFAS/DVFA (ESG KPIs); viii) Global Reporting Initiative (G4Guidelines).			
10 - Barnabè (2016) Article	System dynamics (SD) is a **support** to integrated reporting (<IR>) for a **more transparent representation of value creation processes** as well as strategy design and implementation, improving the understanding of past, present and future paths of value creation, qualitative maps and formal simulation models.	FC MC IC HC SRC NC	10	4
11 - Adams (2017) Article	Aimed at examining and explaining the complex interrelationships which influence the ability of firms to create value for their providers of finance and other stakeholders, referred to in practice as "integrated thinking." This work concluded that the link between ESG risk, reputational damage and delivering on strategy **is related to i) increasing investor demand for information on ESG risks; ii) the importance of board involvement in integrating environmental and social sustainability into corporate practices; iii) increasing regulatory and stock exchange requirements to disclose both ESG risks and strategy; iv) global discussions on the role of corporate reporting in achieving the Sustainable Development Goals.**	EE FC SRC NC	1, 4 and 6	4
12 - Gokten and Gokten (2017) Article	Profit is the result of creating value in the short term; the medium-term value would be the **fair value** expected by investors for equity; and long-term value is the **value represented to society**.	NE	5	3
13-Sofian (2018) Article	The term 'value' was defined as a benefit that someone has from something, but value **cannot be created without someone to access it.** We live in a society where everything is connected: business with people, business with environment, business with society, society with environment. **We all depend on each other.** Hence, companies should try to consider **as many interests as possible of its stakeholders**, no matter through which instrument or method they are calculating the amount of the so-called "value" created.	NE	5 and 7	2
	Analysis of the various instruments used to explain value creation (Kering's Environmental Profit & Loss Statement, KPMG's True Value Methodology, Value Added Statement, Natural Capital Protocol) demonstrates that they are in line with the IR concept of value. The results show that **KPMG's True Value Methodology and Value Added Statement** are more appropriate to the IR's concept of value creation. However, **none of the instruments is considered fully consistent with the Framework 1.0**.	FC MC IC HC SRC NC EE	10	4

14 - Barnabè, Giorgino and Kunc (2019) Article	The authors proposed the **Dynamic Resource-Based View (DRBV)** based on the common idea that strategic resources are interconnected and have to be managed with the collaboration of all stakeholders in order to inform governance actions and create value with a holistic perspective.	FC MC IC HC SRC NC	10	4
15- Roslender and Nielsen (2020) Article	The general failure of research on the IR approach to devote much attention to both the value creation process and the business model concept has had the consequence of **overlooking the importance of customers and customer value expectations**. This observation applies both to those researchers who are principally interested in the technicalities of IR and those who continue to lament the downgrading of a sustainability focus.	SRC	2	5
16- Kumarasinghe, Peiris, and Everett (2021) Article	The company analyzed maintains **ethical strategies, policies and behaviours** with respect to its prominent stakeholders, and strategically discloses those practices, enabling it **to establish and sustain competitive advantage over its competitors**.	SRC	6	2
17- Steenkamp and Roberts (2021) Article	Results show that one of the companies analyzed uses a **performance scorecard**, and obtains audit assurance on key information regarding sustainability related to its value creation, which consequently validates whether this information is material and reliable.	FC MC IC HC SRC NC	10	4
18-Dameri and Ferrando (2021) Article	The future of an organization depends on its ability to create value by carrying out an **economically, socially and ethically useful function**, starting with a clear identification of its purpose and value proposition, which involves **satisfying the expectations of shareholders and stakeholders bringing the organization resources**, **skills and legitimacy**, but to do so, the organization has **to generate resources enough to feed these responses**; in other words, there has to be **a balance between the value shareholders and stakeholders create and receive**.	FC MC IC HC SRC NC NE	4, 5 and 6	2
19- Crous and Van (2021) Article	Results found that value-creation disclosures are mostly concerned with quantitative value creation, and that they focus on value concepts, such as returns to investors, cash flow, increase in employee numbers, and benefits to employees. However, **the companies' reports still do not include concrete statements or definitions about what value creation is considered to be; neither do they disclose qualitative value-creation concepts**.	IC HC SRC NC NE	6	3

20- Cisi and Centrone (2021) Article	IR definition of Human Capital is **able to define a link between human capital, value creation, and social impact**. It is not only based on **people's competencies, capabilities and experience**. It is focused on **motivation to innovate and on an explicit focus on ethical values, loyalty, and motivation**.	HC SRC	6 and 8	4

Legend:
VALUE CREATION
FC – Financial Capital MC – Manufactured Capital
IC – Intellectual Capital HC – Human Capital
SRC – Social and Relationship Capital NC – Natural Capital
EE – External Environment NE – Net Effect

Source: Elaborated by authors.

The results indicate that of the 20 pieces of work listed in Table 7, half is directly related to the concepts of sustainability, in line with Flower (2015), Thomson (2014), Brown and Dillard (2014), Adams (2015), and Coulson et al. (2015), who argue that the IIRC's Integrated Reporting incorporates the concepts of sustainability into the concept of value creation. From this finding, it is possible to infer that the IR narrative takes this approach, but does not refer only to actions taken financially, portraying how a company creates value for various stakeholders, unlike standard reports. This reporting mechanism favors both interests, then society can demand accountability and investors can demand sustainable value, thus inhibiting conflict of interests. In addition, investors can encourage corporations to undertake initiatives of this nature, since the absence of sustainability in the business model can compromise the long-term survival of financial capital.

The term value creation in IR should meet the criteria for recognition and disclosure as shared value, aiming at achieving net value, as per **pieces 6, 8, 9, 12, 13 and 18**. A company's shared value created in IR is only considered if it is attributed to environmental, social and corporate governance (ESG) in management strategies and decisions, as the shareholder's financial perspective usually provides greater returns, benefiting both interests (shareholder and society). However, Framework 1.0 does not specify the term 'shared value creation,' and the word 'sustainability' was mentioned only once, which, therefore, generates a dubious interpretation. In other words, if value creation is something inherent to IR, why is sustainability not mentioned? This result is in line with Brown and Dillard (2014) and Feng et al. (2017), as there is no problem with the ideology that the operations of business, stakeholders, and society can be equitably beneficial, as the corporate environment cannot disregard social intentions, climate change, and resource depletion. In view of this, it is inferred that the absence of further explanations regarding value creation induces the elaboration of reports in a ceremonial character, that is, there are no explanations related to this creation.

According to Coulson et al. (2015), the IIRC was formed by a global coalition of the accounting and sustainability areas, in order to develop a structure to supply information on complex operations in the business environment, which are often not reported in the financial report. Thus, the IIRC relied on studies supported by the TBL approach – such as the Forum for the Future (2009) and the Sigma Project (2003) – to develop Framework 1.0. These studies classified five capitals (natural, social, human, manufactured, and financial) to improve the communication of accountability to society. Additionally, the IIRC added intellectual capital to its Framework 1.0.

Piece 5 explored exclusively intellectual capital, which refers to intangible resources that create value for the company. Therefore, it is characterized as one of the fundamental elements for users to understand how companies create value, given that intangibles express competitive advantages in the corporate scenario. Authors who fall into this topic concluded that the intellectual capital of Framework 1.0 can be classified into three categories: structural, human, and relational.

As the disclosure of competitive advantages can be harmful to the business, care should be taken when exploring intellectual capital; however, it is relevant, given that the financial statements do not reflect the whole. In comparison with the capitals of Framework 1.0 regarding the structure of intangible capitals, for IR intellectual capital includes organizational aspects (tacit knowledge, systems, and protocols), and intellectual property (software, licenses, trademarks, and patents). The human part, with human capital (alignment of the company with the support for the governance, risk management, and ethical values structure). And the relational with social and relationship capital (intangible capitals associated with the brand and reputation developed by an organization). That is, the intangible elements are related to intellectual, human, and social and relationship capitals. Capital categories and items are a recommendation of the Framework 1.0, as they are the theoretical concept of value creation. However, according to the results of Beattie and Smith (2013), IR intangibles relate to more than one capital.

In this way, these intangibles could be grouped together, instead of being treated in different capitals, thus aiming at a holistic view of the business intangibles, avoiding partial views. For example: instead of intangibles being disclosed in intellectual, human, and social and relationship capitals, they could be disclosed together, only in intellectual capital. Such an inference requires that the personnel involved in IR elaboration have this holistic view. An example of this capital would be information that does not meet the criteria of international accounting standards, as it is not an organization’s property, such as information on intangibles related to intellectual, human, and social capitals, which are indispensable in an organization’s business model to create value over time. In line with Maniora (2015), intangible assets have 2/3 of the representativeness of the book value in the market.

According to **piece 1**, specifically manufactured capital, which refers to an organization’s physical objects when they are supported to create value over time, such as buildings, machine and infrastructure (roads, ports, bridges, and plants for the treatment of sewage and water) related to the standardized financial statements. This capital may also include items that are not owned by the organization, such as public roads operated under concession, considering that they can only be included in IR if they are part of the inputs for the company’s operating process. However, if this object is affected by the business operation (for example, pollution), it should be reported in the company’s IR (Flower, 2015). The disclosure of details about manufactured capital goes beyond financial aspects, that is, its monetary value, and it is necessary to understand the entire business process, involving several areas.

In view of this, it is important to emphasize that tangibles are used as sustenance to create other values within the organizational context, for example, administrative buildings are used by human (employees), intellectual (software), and natural (environmental management) capitals for value creation. In addition, tangibles can cause, depending on the activity, direct and/or indirect impacts on natural capital, such as the emission of carbon dioxide and waste. And the tangibles not owned by an organization are related to concession activity, which should also report their natural impacts. The relevance of these interconnections between capitals reveals that the TBL should be present when IR is prepared.

In this research, **piece 20** was directly related to human capital, which is associated with the employees' capabilities, competencies and experiences (IIRC, 2014). By capitalizing, understanding and shaping the collaborators' and employees' knowledge based on innovation, internal value – that can be financial or not – is created. Indeed, employees directly affect the company's performance, as they are involved in the operational process of the activity. Consequently, management should understand the capabilities, skills and experiences in order to establish the alignment of its team to keep them engaged and motivated, thus creating financial value or not, consequently, improving results and employee satisfaction at work.

As for the way to communicate value creation, it is worth mentioning that IR seeks more qualitative information to explain its value creation (piece 19), but **pieces 9**, **10 and 13**, **14 and 1**7 cite existing approaches to measure and/or report the capitals individually and together that can help the user's understanding of a company's value creation, but Framework 1.0 does not mention any of these approaches. **Pieces 7 and 13** point to the DVA as an accounting report that expresses monetarily the connectivity between the proposed capitals of the Framework 1.0. In line with the results of Haller and Staden (2014), the DVA has the potential to cooperate with IR usefulness, because it demonstrates the remuneration (financial capital) distributed to stakeholders (employees, government, society, investors, creditors, for example), thus playing an essential role in the value creation narrative and providing information about the creation and distribution of value in a company.

It is worth mentioning that, despite its contribution to clarifying value creation, the DVA supplies partially the IR proposal, because it does not portray the tangible and intangible, and does contemplate the IIRC guidelines completely, regarding the qualitative information inserted mainly in intellectual, human, social and relationship, and natural capitals. Finally, regarding the **external environment, pieces 2, 4, 6, 9, 11 and 13** are related to the natural and social contexts; however Framework 1.0 recommends that they also should be cited for the process of creating value regarding the environment external to political, economic, and commercial contexts.

After classifying, correlating and identifying the authors' concepts that address the meaning of value creation (Tables 7), Table 8 summarizes the qualified data.

Table 8

Summary of the analysis of research results in Table 7

Value creation	**Repetitions**
Financial (FC)	10
Manufactured (MC)	9
Human (HC)	10
Intellectual (IC)	10
Social and Rel. SRC	15
Natural (NC)	11
Net Effect (NE)	7
External environment (EE)	6

Value creation understanding	**Repetitions**
1	3
2	1
3	2
4	4
5	6
6	5
7	1
8	1
9	1
10	6

Semantics:	**Repetitions**
Paraphrase (1)	1
Synonymy (2)	5
Antonymy (3)	4
Hyponymy (4)	9
Duplicity (5)	4

Source: Elaborated by authors.

With regard to the value creation understanding by the IIRC (2013), it is noted that there was a balance in the amount of repetitions, except for topics 2, 7, 8 and 9, and topics 5 and 10 stand out (Table 1). In the semantics analysis, hyponymy for the concepts was predominant, that is, there is a relationship of meaning that occurs between expressions with a more specific meaning and generic expressions, then the result of this research completes the "Value Creation – Background Paper" (IIRC, 2013a). Based on the results, it is noted that the concept of value creation is supported by the literature in the following order: social and relationship, natural, human, financial, intellectual, manufactured, net effect, and external environment.

Discussion of results

A company's actions should not be just for profit, as it is the case with financial reports aimed primarily at investors, funders, and other creditors. In this way, sustainability needs to be integrated simultaneously with the financial view, as its non-incorporation into strategies could compromise a company's continuity. Besides, a company needs the society' prosperity, because business depends on local economic, social and environmental conditions for its success. For this purpose, IR composes the capitals (financial, manufactured, intellectual, human, social and relationship, and natural) and externalities (natural, social, political, commercial, and legal) to elucidate the company's value creation in the past, present and how it will be maintained in the future.

That being said, it is inferred that IR tends to communicate more non-monetary information that expresses its value creation, since, for Coulson et al. (2015), Framework 1.0 does not require the measurement of data in monetary terms, as it is not the purpose of IR to quantify or monetize the company's value at a given time. From the exposed concepts, it is possible to observe that the Framework 1.0 is directed to the concepts used by Social and Environmental Accounting, according to Flower (2015), Thomson (2014), Brown and Dillard (2014), and Adams (2015). This occurs because the characteristics of IR seek to level the maximization of profit with a focus on the well-being of society and the environment, cooperating so that organizations rethink when making a decision.

However, as much as the purpose of value is co-creation over time between the organization and stakeholders, Framework 1.0 needs adjustments, since, according to Flower (2015), the term 'value' in Framework 1.0 presents a significant bias for investors, since it is not mandatory for companies to report negative impacts regarding external entities, such as the environment. In this way, organizations, through IR, can camouflage by disclosing only positive effects on the environment and society, without reporting the destruction of their value. This reveals the ceremonial aspect of adopting the IR, which can be minimized in the face of greater details regarding its elements. However, it is up to the preparers to consider the information in the report, by revealing data that expose the business, interfering with competitiveness.

In addition, neglecting non-financial information, that is, not disclosing or integrating it, can result in a distorted view of current or future practices. Therefore, incorporating this adjustment, IR could root financial stability and sustainability, contrary to what the IIRC advocates, not even mentioning sustainability (Dumay et al. 2016). Figure 3 shows a reinterpretation of the value creation process, based on this research.

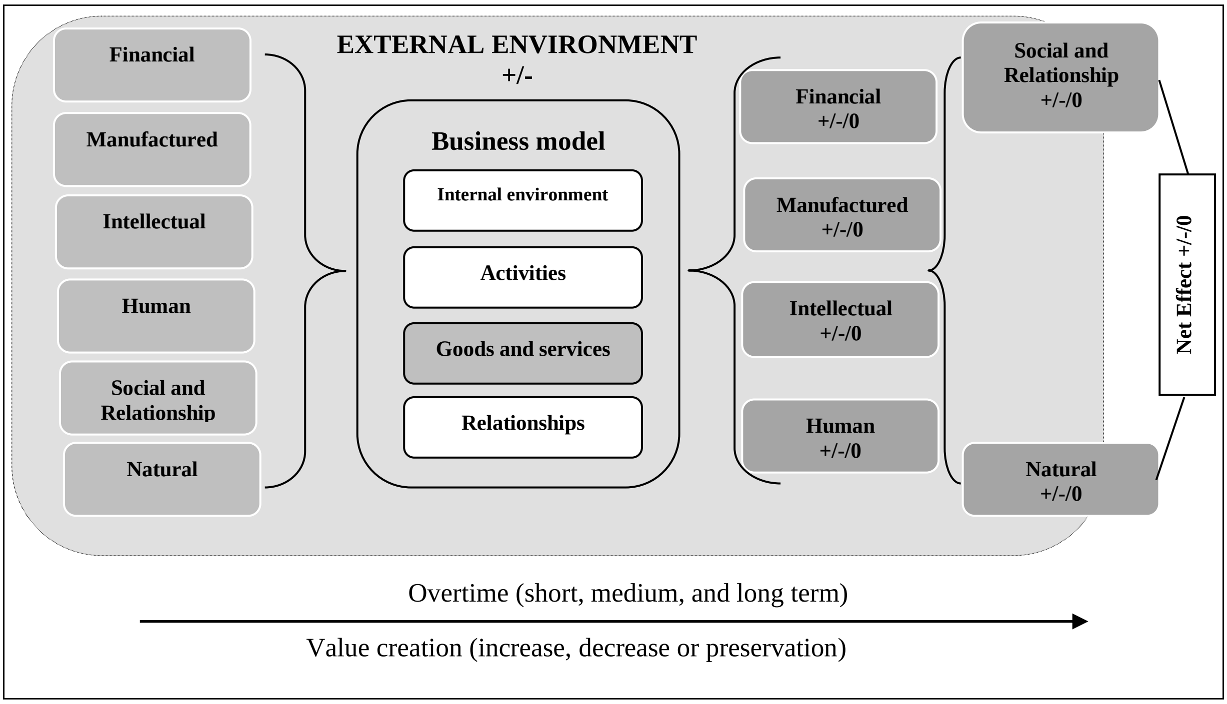

Figure 3. Framework 1.0 adjusted value creation process

Source: Adapted from IRCC (2014) based on the research results.

In summary, for an organization to comply with the proposal of a report in line with IR, contemplating the concept of value creation, it is necessary to report both the positive and negative effects on society and/or the environment. If a value creation action is negative, the organization should develop mitigating measures to reduce this effect, because, over time, it will affect capital and sustainability. Furthermore, the contexts of the external environment collaborate or hinder the company's ability to create value. In fact, capital facilitates the recognition of operations and their interdependencies, thus obtaining an overview of the impact of the business in the past, present, and future.

The results show that the concept of value creation in IR is that a company generates financial and non-financial, tangible and intangible value, weighted by the positive and negative effects on society and the environment. In this context, value creation is not exclusive to the financial context and uses the TBL to reach the net value in IR in the short, medium and long term, as it incorporates into its structure that the organization should be accountable to society and the environment, which comes from its activities, relationships, products and/or services. For this, the value created needs to be recognized or perceived by stakeholders. Consequently, IR can avoid the fallacy of sustainable corporate practices when they are, in fact, practices that undermine sustainability (Thomson, 2014).

Final Considerations

The objective of this research was to build the semantics of the concept of value creation, based on the existing literature, delimited to the IR proposal. Based on the results achieved, it is concluded that the organization, through its activity, carries out actions of tangible and intangible, monetary and non-monetary values (capitals), which are created both directly and indirectly by the organization, considering their positive or negative effect for society and the environment. In this way, creating value for the organization and, simultaneously, for stakeholders and society in general, is to understand the possible externalities, whether positive or negative. Nevertheless, negative value creation causes adverse effects for those that create it, for stakeholders, and society.

With this, it is inferred that an organization should be proactive and seek continuous improvement when preparing the IR, in order to recognize its true value creation, in the short, medium, and long term, because in Framework 1.0 the financial value is relevant, but not enough to create value. Thus, the IR communication structure aims to make management and senior governance aware of the importance of reporting their actions of values considered from the financial to the natural (integrated thinking), allowing them to rethink their strategies and decisions. For example, an activity, or a product, that has a more affordable cost can have a short-term financial return, but it can generate negative future effects, both for the organization and for society and the environment.

The recommendation is to continue discussions about value creation in IR, and that the items not identified in this research based on the "Value Creation – Background Paper" (2013a) should be studied, such as identifying the relationship between the sense of value and human needs directed at three items: functional utility (what the product/service does), economic utility (how much it costs), and emotional utility (how it makes the customer feel). The connections and interdependencies between different factors collaborate to value creation, because they achieve different results for different stakeholders, and are considered activities that can affect a company's future potential. A company's value is created/maximized with the help of innovation, enabling organizations to recognize their strategic sources and devise mechanisms to create a lasting or sustainable force.

Additionally, it is suggested that research should discuss the elaboration of matrices to identify actions of values in practice, since the real capacity to visualize, manage, and communicate the sources and the results of value creation is still not a clear question for companies that adopt it, because in practice it is still a challenge to identify and report their different types of values and explain to stakeholders how the company created its value in the past, creates it in the present, and will create it in the future. In this context, it is a challenge for companies to report their actions of values relating their trade-offs and demonstrating the chain of interdependence, that is, to identify the capitals that increased (+), decreased (-) or were transformed (0), and the influences of the external environment that impact – in a positive and negative way – on legal, economic, political, social, and environmental contexts. Thus, it is necessary to identify benchmarking reports or models that support stakeholders, in addition to understanding these transformations and how an organization creates value over time.

This research contributes to the interpretation of the concept of value creation for future IR disclosures, clearly elucidating what would be the organization's value creation and accountability to society, in view of the difficulty in applying this concept in public consultations of 2013 and 2017, as revealed by preparers. This denotes the need for the IIRC to focus on improvements to this overarching concept in Framework 1.0, being clearer and less technical. In view of this, if it seems confusing, dubious and unreliable in the organizations' view, it may become skeptical about reliability and credibility, or even an instrument of greenwashing, omitting information about the real operational impacts. Moreover, a clear definition of the concept can contribute to non-concise and illegible information in IR.

From a theoretical perspective, researchers sought to advance the discussion in the literature in the context of value creation, since this study provided guidance regarding the understanding of the fundamental concept for IR elaboration. This research contributes to society and companies by discussing Framework 1.0 clarity, in order to supply the communication of a company's value creation and accountability to society. In this context, unsustainable businesses will find obstacles to present and disseminate fallacies about sustainable practices.

This study was limited to data collection sources, as it was restricted to the analysis of content of books, articles and documents selected. As a result, there were no significant results in the sample, because discussions on value creation in IR started in 2011, with the paper "Towards Integrated Reporting – Communicating Value in the 21st Century" (IIRC, 2011). This is a negative point for the Framework 1.0 discussions, since the concept of value creation is an essential element to IR elaboration.

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Appendix

TITLE	BASIS	YEAR	SEMANTICS
Redefining Corporate Accountability Through	CAPES	2013	N
Leading Practices in Integrated Reporting	CAPES	2014	N
Value Creation Reporting: Answering the Question „Value to Whom" according to the International Integrated Reporting Framework	CAPES	2017	Y
Bankers' perspectives on Integrated Reporting for value creation: evidence from Nigeria	CAPES	2017	N
Integrated Reporting: Communicating Value Creation	CAPES	2018	N
Towards Integrated Reporting in Europe - An analysis of 40 annual corporate reports regarding their value creation disclosures	CAPES	2018	N
Visualizing and managing value creation through integrated reporting practices: a dynamic resource-based perspective	CAPES	2019	N
インタンジブルズに基づく企業の価値創造 ―BSC，知的資本報告書，統合報告の論点比較―	CAPES	-	ITEM A
HARUSKAH VALUE CREATION HANYA TERDAPAT PADA INTEGRATED REPORTING?	CAPES	-	ITEM A
統合報告書に基づく価値創造プロセスの比較研究	CAPES	-	ITEM A
NO ACCESS	CAPES	-	ITEM A

NO ACCESS	CAPES	-	ITEM A
Managing material value creation matters in integrated reporting	EMERALD	2021	S
Value creation disclosure: the international integrated reporting framework revisited in the light of stakeholder theory	EMERALD	2021	Y
NO ACCESS	SCIELO	-	ITEM A
Bankers' perspectives on Integrated Reporting for value creation: evidence from Nigeria	SCIELO	2017	X
Approaching Value Creation From An Integrated Reporting Perspective	SCIELO	2018	Y
Visualizing and managing value creation through integrated reporting practices: a dynamic resource-based perspective	SCIELO	2019	X
Value creation disclosure: the international integrated reporting framework revisited in the light of stakeholder theory	SCIELO	2021	X
Managing material value creation matters in integrated reporting	SCIELO	2021	X
Value creation and business models: Refocusing the intellectual capital debate	SCI.DIR	2013	Y
The International Integrated Reporting Council: A call to action	SCI.DIR	2015	Y
Exploring the implications of integrated reporting for social investment (disclosures)	SCI.DIR	2016	N
Reporting on long-term value creation by Canadian companies: A longitudinal assessment	SCI.DIR	2018	N
Intellectual capital disclosure in integrated reports: The effect on firm value	SCI.DIR	2020	N
Materiality in an integrated reporting setting: Insights using an institutional logics framework	SCI.DIR	2020	N
Accounting for the value expectations of customers: Re-imagining the Integrated Reporting initiative	SCI.DIR	2020	Y
The relationship between corporate social responsibility expenditures and firm value: The moderating role of integrated reporting	SCI.DIR	2021	N
Value creation and business models: Refocusing the intellectual capital debate	SCOPUS	2013	X
Integrated reporting as a mechanism of increasing business value	SCOPUS	2014	Y
Integrated reporting and assurance: where can research add value?	SCOPUS	2015	Y
Marketing communications of value creation in sustainable organizations. The practice of integrated reports	SCOPUS	2015	Y
'Representing' value creation: A combined approach of system dynamics and integrated reporting for the airline sector	SCOPUS	2016	Y
Exploring the implications of integrated reporting on organisational reporting practice Evidence from highly regarded integrated reporters	SCOPUS	2016	N
Conceptualising the contemporary corporate value creation process	SCOPUS	2017	Y
Integrated or non-integrated reports: French listed companies at a crossroads?	SCOPUS	2018	N
Reporting on long-term value creation by Canadian companies: A longitudinal assessment	SCOPUS	2018	X
Determinants of Companies that Disclose High-Quality Integrated Reports	SCOPUS	2019	N
Are SMEs Ready for Integrated Reporting? The Malaysian Experience of Accountability	SCOPUS	2019	N
Visualizing and managing value creation through integrated reporting practices: a dynamic resource-based perspective	SCOPUS	2019	Y
*IMPLEMENTATION OF INTEGRATED REPORTING: A CROSS-COUNTRIES' STUDY**	SCOPUS	2020	N

Investigating the interplays between integrated reporting practices and circular economy disclosure	SCOPUS	2020	N
Does Corporate Governance Affect the Quality of Integrated Reporting?	SCOPUS	2020	N
Integrated thinking, orchestration of the six capitals and value creation	SCOPUS	2020	N
Ethics disclosure as strategy: a longitudinal case study	SCOPUS	2020	Y
Value creation disclosure: the international integrated reporting framework revisited in the light of stakeholder theory	SCOPUS	2021	X
The Human Capital for Value Creation and Social Impact: The Interpretation of the IR's HC Definition	SCOPUS	2021	Y
Integrated Reporting Implementation and Core Activities Disclosure in UK Higher Education Institutions	SCOPUS	2021	N
Balancing quantitative and qualitative value-creation reporting	SCOPUS	2021	Y
NO ACCESS	SCOPUS	2021	ITEM A
Managing material value creation matters in integrated reporting	SCOPUS	2021	X
Integrated thinking, earnings manipulation and value creation: Malaysian empirical evidence	SCOPUS	2021	N
Accounting for the value expectations of customers: Re-imagining the Integrated Reporting initiative	SCOPUS	2021	X
The relationship between corporate social responsibility expenditures and firm value: The moderating role of integrated reporting	SCOPUS	2021	X
NO ACCESS	SCOPUS	-	ITEM A
NO ACCESS	SCOPUS	-	ITEM A
Conceptualizing and enabling circular economy through integrated thinking	SCOPUS	2021	N
Does integrated reporting information influence internal decision making? An experimental study of investment behavior	SCOPUS	2018	N
Does integrated reporting information influence internal decision making? An experimental study of investment behavior	WILEY	2018	X
Conceptualizing and enabling circular economy through integrated thinking	WILEY	2021	X

LEGEND:

Y - Yes, there is semantics

N - There is no semantics

X - Article duplicity

ITEM A – Table 3 – Articles with no access/language

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