



# IDENTITÀ, INNOVAZIONE E IMPATTO DELL'AZIENDALISMO ITALIANO.

## Dentro l'economia digitale



ATTI DEL XXXIX CONVEGNO NAZIONALE  
ACADEMIA ITALIANA DI ECONOMIA AZIENDALE - AIDEA

- Torino, 12 e 13 settembre 2019 -



A cura di:

Francesca Culasso

Michele Pizzo



UNIVERSITÀ DEGLI STUDI DI TORINO  
**DM** DIPARTIMENTO  
DI MANAGEMENT



[Collane@unito.it](mailto:Collane@unito.it)

Università di Torino

ISBN: 9788875901387



Quest'opera è distribuita con Licenza Creative Commons Attribuzione - Condividi allo stesso modo 4.0 Internazionale.

Disegno grafico: Davide Mezzino

Immagine di copertina: elaborazione grafica a cura di Davide Mezzino

# 73. Change, vagueness and complexity: Integrated Reporting in the public sector

*Silvia Iacuzzi, Research Fellow, University of Udine, silvia.iacuzzi@uniud.it.*

*Andrea Garlatti, Full Professor, University of Udine, andrea.garlatti@uniud.it.*

*Paolo Fedele, Associate Professor, University of Udine, paolo.fedele@uniud.it.*

*Alessandro Lombrano, Associate Professor, University of Udine, alessandro.lombrano@uniud.it.*

## **Abstract**

Accounting and reporting not only tangible but also intangible resources have become ever more popular. Integrated Reporting (IR) recognises that traditional manufactured and financial capitals are not sufficient indicators of sustainability and value creation opportunities. This is particularly so for public entities for whom accountability, legitimacy, transparency as well as value co-creation are crucial.

This paper investigates the role of IR in the public sector by examining it in practice with a case study about the University of Udine in Italy, where IR galvanized internal stakeholders into action and ultimately led to some adaptation of its concept. The research sets out the case for IR and its potential to lead to sustainable change. The analysis revealed that the university management and community at large were engaged in the integrated process in order to contribute to the development of new forms of reporting to help ensure not only full disclosure of university assets, but also that the value creation and value delivery potential were uncovered. However, the intrinsic discrepancy between the IR concept and its operationalization brought the University to challenge and debate the IR approach, and, ultimately, to reconceptualize and implement its own version which better fitted its strategic aims, its intended audience and its status as a public entity.

**Keywords:** Integrated Thinking, Capitals, Intangibles, Value Creation, Universities.

## **1. Introduzione**

Social, environmental and sustainability reports have become ever more popular (Stewart, 2015), while attention is now moving to Integrated Reporting (IR) in a recognition that traditional capitals (manufactured and financial) are not sufficient indicators not only for sustainability, but also for value creation opportunities (Eccles and Krzus, 2010).

However, among available models and reporting practices the Integrated Reporting Framework (IIRC, 2013) is not just about disclosure. Its potential relies in the possibility to favour a different way of thinking, that is an integrated understanding of an organization's strategies and policies geared towards present and future value creation for all stakeholders (IIRC, 2016). In particular, in the public sector IR not only responds to the need for greater accountability, legitimacy and transparency to deal with diminishing trust (Macnab, 2015; Katsikas et al., 2017; Biondi and Bracci, 2018; Manes Rossi, 2018), but questions ought to be raised as to the benefits to society more widely. Indeed, public entities have a value creation and stewardship responsibility in a public service logic (Osborne, 2018), which emphasises the need for public services to foster value co-creation. Interest has been gathering around IR and the number of companies producing integrated reports has slowly increased over the past five years as well as the number of academic contributions written on the topic (Dumay et al., 2016). However, several scholars have highlighted barriers and challenges to IR implementation (Dumay et al., 2017; La Torre et al., 2019). Concerns have been raised about the lack of regulation (Adams, 2017), the vagueness of its key concepts (Dumay et al., 2019), the complexity of its implementation (Dumay and Dai, 2017) and its assurance aspects, that is it does not provide suitable criteria and subject matters for its reports to be assured (Cheng et al., 2014).

Moreover, despite the increasing interest in Integrated Reporting and value co-creation, how value is co-created still remains unclear and there are calls for more studies that assess IR's rhetoric and practice (Dumay et al., 2016; La Torre et al., 2019). It is still unclear what approaches and internal mechanisms are used to implement IR and whether it is driving organizational change. This is a relevant gap since understanding how value is created and accounting for it in all its components whether tangible or intangible is an imperative strategic issue particularly for public entities (Macnab, 2015). Moreover, scholars recognize that in-depth research on how IR can facilitate changes to management accounting to respond to the increasing complexity of public sector organizations is needed, since accounting instruments derived from the private sectors are often not appropriate (Cavicchi et al., 2019).

This paper investigates the role of IR in the public sector by examining it in practice and analyzing the challenges associated with its implementation through an exploratory study which focuses on the University of Udine in Italy. There the implementation of a Strategic Plan galvanized internal stakeholders into action and ultimately led to the development of a report with some adaptation of the concept of IR. The research sets out

the case for IR and its potential to change public sector thinking leading to integrated thinking with actions and impacts on strategic planning and decision making in order not only to report, but to promote and sustain value co-creation.

Therefore, the main research question is: how does IR impact a public organization? In other words, how is IR implemented in a public organization? And what type of change, if any, does IR lead to? In order to answer these questions a framework will be developed based on models and mechanisms employed by previous empirical studies looking at IR (Stubbs and Higgins, 2014; Guthrie et al., 2017). Thus, the paper is structured as follows: first it outlines the theoretical background for IR, the development of integrated thinking and value co-creation. It then develops an analytical framework and the methodology which will be applied. Hence, the findings from the case study and their implications for theory and practice are discussed, before offering some concluding remarks in the final section.

Results are relevant from an academic perspective since they shed a further light on two fundamental phenomena in the public sector: by exploring how an integrated report was developed in a university setting, this paper enriches the research on both integrated thinking and value co-creation. It also answers the call for more empirical research on IR's rhetoric and practice and on its concrete role in the value creation process (Dumay et al., 2016; La Torre et al., 2019). Findings are also relevant for practice since they provide decision makers with insights about how IR can be promoted in order to enhance its impact on value co-creation.

## 2. Theoretical background

Reporting on organizations' social and environmental impact has evolved significantly in the past three decades. While historically the disclosure of relevant information about environmental, social and governance performance has taken place on a voluntary basis, the number of organizations producing social, environmental or sustainability reports has increased substantially, particularly amongst large multinational companies (Kolk, 2010), in line with the increasing demand by internal and external stakeholders to account for the socio-economic-environmental impact of business activities. Yet, while in the past much of the discussion on sustainability has focused on the ability of organizations to minimize the liabilities of poor environmental policies and social practices, non financial reports have more recently been looking also at incorporating growth opportunities associated with enhanced performance and the overall capacity to create value (Stewart, 2015). As a consequence, traditional reports (financial reports) and stand-alone (e.g. sustainability reports) which discuss social, environmental and financial information as "unconnected silos" (Haller and van Staden, 2014: 1191), neglecting the importance of integrating intangible assets and governance features (Stacchezzini et al., 2019), have lost some appeal. This is particularly so for the public sector which has seen a growing importance of more holistic "external reporting" (Broadbent and Guthrie, 2008: 141). On the one hand, the intensive use of human resources and the high involvement in social and environmental issues, make the public sector a suitable context for the adoption of IR (Bartocci and Picciaia, 2013; Cohen and Karatzimas, 2015). On the other, public organizations ought to enhance and promote value co-creation within society at large following a public service logic (Osborne, 2018), where public value refers to the possibility of enabling stakeholders to be active participants in the delivery of services as well as to contribute to their own welfare (Katsikas et al., 2017).

The focus on value creation has propelled the emergence of IR which seeks to offer a more holistic picture of an organization's activities by shifting away from standalone sustainability or social responsibility reports, towards a single document that communicates a broader picture focusing on the business model for value creation. As such, IR is a single tool which provides a holistic representation of all the dimensions which influence an organization's ability to create value over time in a forward-looking perspective (Higgins et al., 2014; Liu et al., 2018; Kilic and Kuzey, 2018; Stacchezzini et al., 2018).

The International Integrated Reporting Council (IIRC) is an international partnership of regulators, investors, standard setters, accounting professionals, and NGOs who share "the view that communication about value creation should be the next step in the evolution of corporate reporting" (IIRC, 2013: 1). It defines integrated reporting as "a concise communication about how an organization's strategy, governance, performance, and prospects, in the context of its external environment, lead to the creation of value in the short, medium, and long term" (IIRC, 2016: 6). Integrated reporting includes non-financial information on governance, environmental and social metrics which are integrated with traditional financial information: non-financial metrics are included to the extent that they are "material", that is they create value for the business with the aim of communicating a more holistic account of value creation. The IIRC defines value creation in general terms as "the process that results in increases, decreases or transformations of the capitals caused by the organization's business activities and outputs" (IIRC, 2013: 33).

However, while some maintain that IR encourages to consider what value means in terms of sustainability (Adams, 2015; Atkins et al., 2015) and can improve decision making (Burke and Clark, 2016), others emphasise that its definition of "value" is rather vague (Dumay et al., 2017) and that IR is too focused on the needs of capital providers and is all about the "prosperity of an organization" with a pre-eminence of investors as its primary audience and with little reference to the prosperity of society (Milne and Gray, 2013; Flower,

2015; De Villiers and Sharma, 2018). It has indeed been criticized because of the influence exercised by lobby groups, such as larger players and accountants (van Bommel, 2014; Flower, 2015; Strong, 2015).

Furthermore, IR raises new challenges compared to other sustainability reports as it is more closely tied into business strategy and how an organization creates value (Stubbs and Higgins, 2014). The IR framework suggests that six assets or capitals are the inputs and outputs in the business model of any organization, namely financial, manufactured, intellectual, human, social and relationship and natural capital. Some have criticized that its six capitals are rather subjective concepts of stock and flows of tangible and intangible resources which are difficult to explain beyond “insubstantial narratives” (Cheng et al., 2014: 98).

IR promotes the development of integrated thinking that is “the active consideration by an organization of the relationships between its various operating and functional units and the capitals that the organization uses or affects. Integrated thinking leads to integrated decision-making and actions that consider the creation of value over the short, medium and long term” (IIRC, 2013: 2). This concept remains rather vague to appreciate and complex to implement since it requires that through integrated thinking all employees at all levels consider their organization’s strategy, governance, performance and prospects through the connectivity and interdependencies of the factors that have a material effects on its ability to create value. If taken literally, IR requires to appreciate each of the six capitals and each functional unit within an organization in order to identify what “matters” to value creation and to produce an integrated report to provide an appreciation of an organization’s internal processes. Such a complex endeavour can often interest and be appreciated only by the highest spheres of an organizations and yet integrated thinking should pervade it at all levels (Dumay and Dai, 2017) because an IR process requires upstream the alignment and cultural harmonization of structures and people within the organization and downstream the alignment of production processes and data collection. Indeed, Dumay and Dai (2017) recognise that the IR framework implies that integrated thinking must replace some of the existing organizational culture in order to work.

Thus, the issue then becomes translating the concepts of integrated thinking into practice. In other words, when an organization considers operationalising the IIRC’s definitions, they are often vague and may make little sense to most within an organization, thus resulting complex to implement also because they require changes in behaviour and organizational culture. Therefore overall, while the IIRC’s rhetoric may be persuasive, often it is not convincing: it is grounded on few sound and rational arguments, yet there is little evidence that IR is superior when compared to other non financial reporting practices (Dumay et al., 2017). Indeed, recent feedback to the IIRC has led it to recognize that organizations are struggling with its framework (IIRC, 2017; La Torre et al., 2019).

### **3. Analytical framework**

Drawing insights from Laughlin’s (1991) model of organizational change, Stubbs and Higgins (2014) develop an analytical framework to explore whether IR stimulates organizational change, which has been later employed by Guthrie et al. (2017) in order to investigate the linkages between IR and public organizations’ internal processes. According to such framework, organizations consist of three components: interpretative schemes, that is beliefs, values, norms and purpose, which relate to the culture of an organization; design archetypes, i.e. structure, processes and systems; and tangible sub-systems such as people, behaviours, buildings, machines and finance. In Laughlin’s (1991) model, organizational change occurs in response to external “jolts”, such as the need to prepare an integrated report, which can bring about either a transition with first-order or morphostatic changes which result in changes to design archetypes and/or sub-systems, or a transformation, that is a second-order or morphogenetic change which affects all components. Four different pathways of change can occur: two first order (rebuttal and reorientation) and two second order (colonization and evolution). In the rebuttal pathway, an environmental jolt such as the introduction of IR would result in minor changes to the design archetype, it would be rejected and the organization would revert to its original set up. Reorientation occurs instead when environmental jolts are internalized by an organization and result in changes to the design archetypes and subsystems. Colonization takes place when IR results in changes to design archetypes and sub-systems, which spill over to interpretative schemes and are pushed through the organization by a small group of initiators. Evolution involves major changes in the interpretative schemes, which in turn reshape the design archetypes and subsystems and are promoted at all levels of the organization. IR fosters the reconceptualization of the interpretative schemes due to its pervasiveness and its acknowledgement of the connectivity among an organization’s six capitals, which underpin its value creation potential.

Stubbs and Higgins (2014) conclude that IR, at least at this early stage, does not drive morphogenetic change, but it leads to a transitional phase with minor reorientation. On the other hand, three years later Guthrie et al. (2017) find some evidence of second order change with some minor transformative changes in some of the public entities they analyzed.

Moreover, while so far little has been studied about the approaches employed by IR adopters, some studies have explored those employed by other management accounting changes such as sustainability reporting. Scholars (Schaltegger and Wagner, 2006) have identified two opposing approaches: the “outside-in”

approach, which aims at securing legitimacy through stakeholder dialogue and activities to fulfill their expectations, and the “inside-out” approach which is concerned with managing performance and occurs when managers require information to support their decisions. In other words, they could be interpreted like institutional vs. strategic legitimacy approaches (Suchman, 1995): organizations pursue an outside-in approach to enhance their reputation, secure social legitimacy with their stakeholders, and fulfill the PR aim of being socially compliant. On the other hand, with an inside-out approach, IR supports business strategy with accounting systems aligned to performance so as to provide effective and timely information for decision making.

A third “twin approach” (Burritt and Schaltegger, 2010) combines both the inside-out and the outside-in processes featuring both an external and an internal dimension to IR. By involving external stakeholders and establishing a management approach where reporting is integrated, the “twin approach” includes many organizational units in collecting information, communicating and reporting to improve performance. In addition, it involves external stakeholders in jointly developing integrated strategy, reporting, communication and accounting so that all stakeholders can contribute to value creation. Schaltegger (2012) also identifies a fourth PR-driven approach to reporting which treats sustainability reporting as a “window-dressing” or “satellite activity”, isolated from core business processes.

Stubbs and Higgins (2014) maintain that when implementing IR the outside-in and PR approaches are more aligned with a reorientation approach, where an external jolt results in small changes to the accounting and performance management systems. On the other hand, the inside-out and twin approaches are more aligned with colonization and evolution, as they suggest that governance, environmental and social issues help shape business strategy.

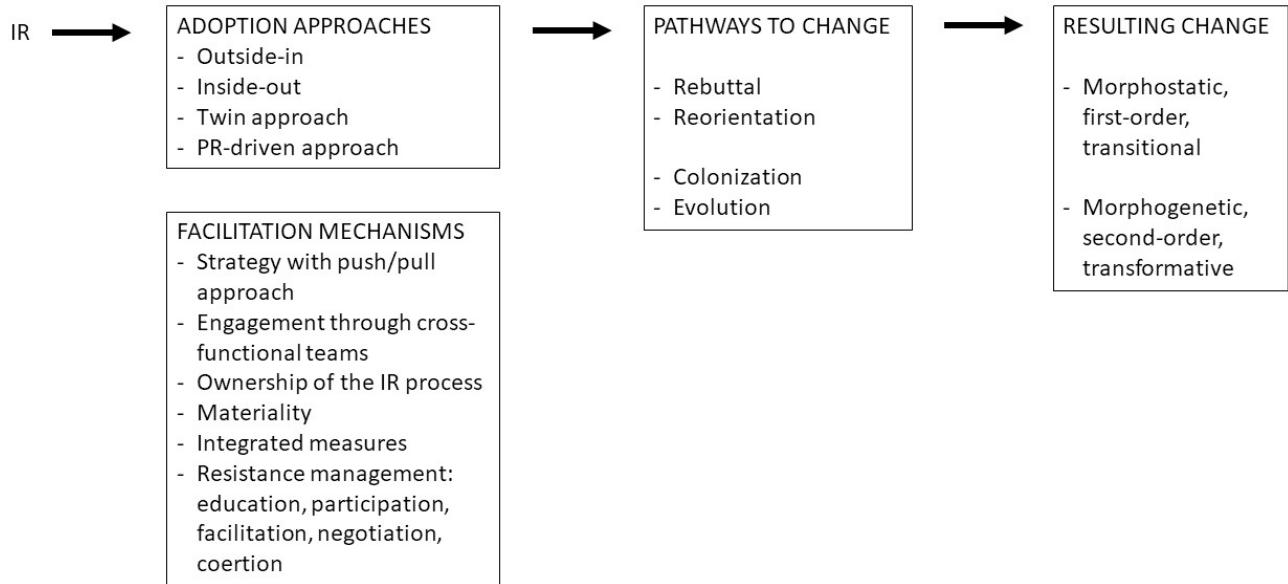
Furthermore, Stubbs and Higgins (2014) identify some specific mechanisms employed by organizations to facilitate integrated reporting, which were then revised by Guthrie et al. (2017) and which can be summarized in five main aspects:

- a strategy which can follow a push approach, when organizations use IR to drive change, or a pull approach, which occurs when IR is seen as the result of integrated practices;
- engagement through cross-functional teams, which are a key mechanism for implementing an IR approach as it requires planning and coordination across business areas, or at least through sustainability committees drawn from different functional areas to review and ratify the integrated report;
- ownership of the IR process: over time, if the IR process is not simply a “window dressing” exercise, its responsibility will shift from the communication or sustainability department to accounting and finance;
- integrated measures: it is necessary to develop integrated measurement systems and metrics such as tools, performance indicators and processes able to capture and represent the various capitals and IR elements;
- materiality analysis, that is a set of processes to identify material issues; in general organizations pursuing IR are attempting to align the materiality process with business strategy, focusing on fewer, more strategic and material issues.

In addition, several scholars (Dumay and Dai, 2017; Guthrie et al., 2017) maintain that one of the reasons why the adoption of IR does not lead to transformative change is that change inside an organization may face resistance because of routines and embedded cultures. Indeed, strong organizational cultures are not readily or easily replaced (Dumay and Dai, 2017). Thus, Guthrie et al. (2017) analyse a sixth aspect which can facilitate IR within an organization, that is the employment of mechanisms to reduce, or at least manage, resistance. Kotter and Schlesinger (1979) identify five fundamental methods for managing resistance: education, that is explaining the reason for change to persuade employees; participation, i.e. involving potential sceptics in implementing changes to enhance their commitment; facilitation through training and support; negotiation, that is offering incentives to agree to the change; and coercion, i.e. threatening negative consequences such as less perks, job losses, transfers, etc.

Therefore, the analytical framework which will be adopted in this paper to answer the research questions and explore what approaches and internal mechanisms are used to implement IR and whether it is driving organizational change can be summarized as in Figure 1.

Figure 1. Analytical framework.



#### 4. Methodology

For this exploratory research, from an overview of the relevant literature a key research question was developed together with an analytical framework and a research protocol with multiple data sources. A single case study was selected as research methodology since it is particularly useful when a “how” question is being asked (Yin, 2014): single case studies can be extremely valuable as they allow to improve the appreciation for how people frame and solve problems arising in factual contexts and they can be used as design exemplar for extrapolation-oriented research (Barzelay, 1993, 2007). The University of Udine was selected as it is among the first Italian public universities to have embraced IR and it has strong roots into its community. In turn, universities are an appropriate choice because they are knowledge-intensive organizations in which the development of intangible resources is pivotal (Vagnoni and Oppi, 2015; Sangiorgi and Siboni, 2017; Manes Rossi et al., 2018), even more so if they are public both because of their nature and because in general public universities have undergone a shift from being fully funded to being subsidized according to their performance (Guthrie and Neumann, 2007; Manes Rossi et al., 2018).

The study engaged directly with “insiders” involved in integrated reporting to examine the phenomenon in the context in which it occurs (Crane, 1999). In-depth interviews were carried out with the senior management involved in the IR process at the University of Udine. In particular, interviews and discussions involved the Chancellor, the four people involved in devising the Integrated Report, that is the Manager from the Budget and Financial Office, the University’s general Director, its deputy and the Director of the Department of Economics and Statistics, and the Business Strategy and Knowledge Management Professor involved in setting up IR training workshops, seminars and courses.

An interpretive approach, utilising qualitative data collection and analysis methods, is an appropriate methodological tool in an exploratory research of this nature (Crane 1999). The interviews were supplemented by a documental analysis: besides its 2017-18 integrated report, the University’s articles of association, the 2015-2019 Strategic Plan, the 2016-18 operational plan and various implementation documents as well as its website were reviewed to extract the main strategic objectives, processes and actions developed and implemented in order to fulfill the university’s vision and mission. Results were then discussed with the interviewees to triangulate the data and corroborate initial findings (Yin, 2014). Thus, the analysis allowed patterns to emerge resulting in the key themes discussed in the Findings section (Patton, 2002; Neuman, 2003).

#### 5. Findings

The University of Udine was founded in 1978 as part of the reconstruction plan of the northeastern region Friuli Venezia Giulia after a major earthquake in 1976. Its aim was to provide the local community with a centre for advanced training in cultural and scientific studies and with a point of reference for generating and exchanging knowledge and ideas. With its ca. 16,000 students Udine is considered a medium-size university in Italy. It offers bachelor, master and doctoral degree programmes in Agriculture, Economics, Engineering, Law, Modern Languages, Communication, Humanities, Medicine, Mathematics and Computer Science.

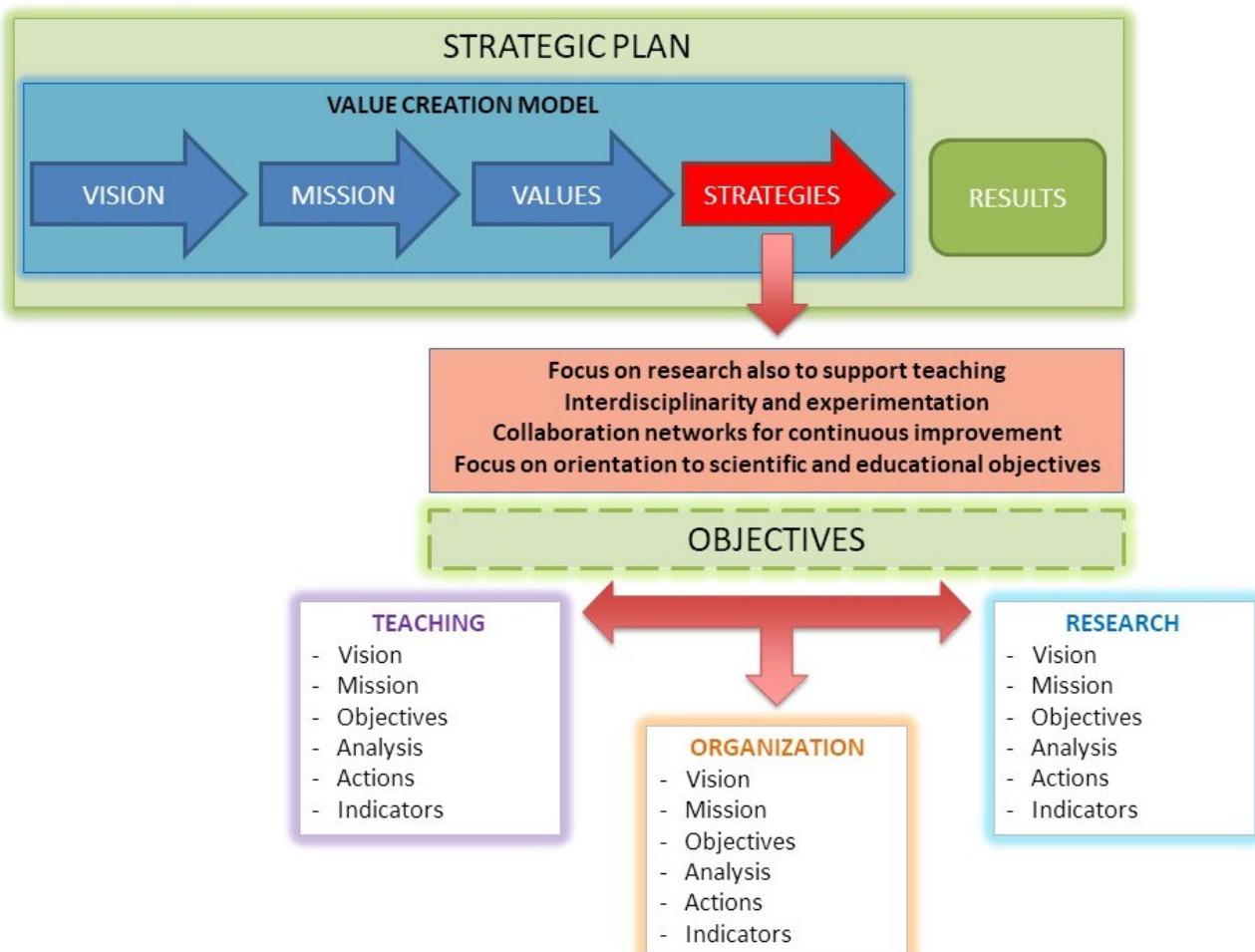
In 2015 the University of Udine adopted its first Strategic Plan which outlines the mission, vision, strategic guidelines and objectives of the University for the five-year term mandate of its Chancellor. The plan was considered the appropriate tool to define strategies and activities that would allow the achievement of the

University's long-term institutional objectives. Its mission as defined in its Articles of Association is: "to develop research so as to enrich teaching and knowledge transfer, in collaboration with Italian and foreign institutions, in order to favour the development of critical thinking, learning, and professional skills among students and the civil, cultural, economic and social growth of the community" (article 1, Articles of Association, University of Udine).

The vision outlined in the Strategic Plan calls for maintaining the unique specificity of a university founded by popular will and strongly rooted in its territory. At the same time, the University should follow the classical academic tradition and be a place where students participate in the construction of their future by experiencing that "hic sunt futura", literally "here lies the future", which is the University's slogan.

The Strategic Plan identifies three areas of intervention, that is three overall strategic business areas, which are teaching, research and organization (Figure 2). For each business area a mission, a vision and key objectives are outlined together with an analysis of the current status and a list of actions to be implemented and indicators to be monitored in order to achieve, or at least strive towards, the identified goals. Management control panels have been developed for the University as a whole and for each of its departments, that are its organizational units and cost centres. Both the central offices and each department have to develop three-year operational plans in line with the overall Strategic Plan and with the three-year budget which is approved every year by the University.

Figure 2. Business model for the University of Udine.

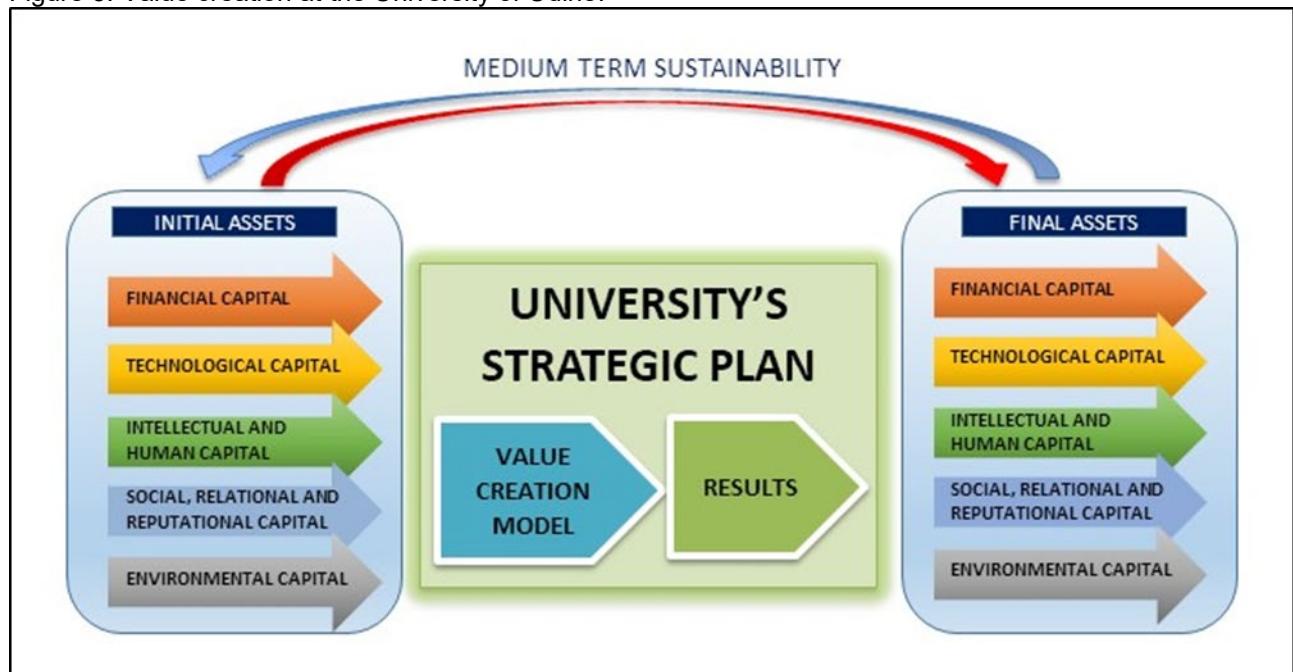


Hence, a substantial integrated process was already underway and the traditional "silo mentality" (Dumay and Dai, 2017: 578) had already been weakened when in 2017 the University decided to undertake IR as a step in this process. The declared aim of the report (UniUD, 2018) was to account for the impact of University activities undertaken in the 2017-2018 academic year on its assets, that is on its financial, technological, environmental, intellectual, human, social and reputational capitals. The main aims were to: 1) measure the value produced for various dimensions through the actions foreseen by the Strategic Plan for the academic year; 2) guide the academic community towards continuous improvement by monitoring the results of the actions undertaken following the Strategic Plan; and 3) communicate and share the University's performance with its stakeholders, both internal and external.

In the integrated report value is understood as the “characteristic of a good (commodity or service) of satisfying needs” (UniUD, 2018: 11). Hence, a progressive attention was developed towards reporting tools aimed at highlighting the overall and multidimensional contribution of the University to its community. The decision of embracing IR was taken because it was seen as the most complete reporting model available. These considerations are at the basis of the implementation of IR within the University of Udine. Interviewees confirmed that the main difficulties faced during the process were: the definition of materiality through the University’s capitals; understanding how to relate its assets to such conceptualization; the identification of the University’s value creation model; and the choice of what to include in a single report which should be concise to satisfy the IIRC guidelines and so that audiences would actually be enticed to read it. Interviewees agreed that these issues were augmented by the lack of clear guidelines in the IR framework already lamented in the literature (Cheng et al., 2014; Dumay et al., 2017). Yet, interviewees recognized that, though it took more time and effort, this brought some flexibility to the whole process and the possibility to adapt the IR principles and elements to what had been developed since 2015 through the Strategic Plan. Such document was identified as the basis for developing the IR report with its value creation model, its strategic guidelines and its proposed actions and indicators.

Therefore, the IR model was adapted selecting only 5 out of 6 capitals, leaving out from the traditional IR concepts “manufactured capital”. Moreover, “intellectual capital” was substituted with “technological capital”, which includes assets such as e-learning activities, digital labs and the 4.0 competence centre, while “intellectual capital”, interpreted as new research projects and degree courses, the recognition of one department of excellence by the Ministry of Education and so on, was linked to “human capital” (Figure 3).

Figure 3. Value creation at the University of Udine.



In order to keep the final document as concise as possible, information to be included in the report was selected according to four criteria: impact on value creation, novelty, specificity to the University of Udine and coherence among strategy, objectives, actions and results. The final layout included short texts with lots of images and explanatory figures to facilitate and encourage reading.

Therefore, the approach adopted to promote IR within the University of Udine has revealed a mixed outside-in and inside-out approach, hence a twin approach. There are both elements of stakeholder engagement and activities to fulfill the expectations of information by external parties typical of an outside-in approach, as well as some initial information and tools developed to provide a path to sustain IR, that is more typical of an inside-out approach.

However, IR is still at its infancy and has not yet been fully institutionalized. It has had some impact on design archetypes and tangible subsystems, but it has not pervaded all interpretative schemes. The Manager from the Budget and Financial Office indeed recognized that “we are so many, that not all of us share this integrated thinking.” Hence, the pathway to change is more of a reorientation with only some initial impacts on the central core of the organization which has so far “colonized” only some offices and departments. Yet, it might eventually lead to the colonization of the entire organization.

In terms of the facilitation mechanisms adopted to introduce IR, the report is perceived both as a pull and a push factor. On the other hand, the Director of the Department of Economics and Statistics recognises that staff at the Finance office perceived it as a first step which would need definitions, tools and indicators to be revisited to better fulfill IR requirements.

Surely engagement was fostered through cross-functional teams. An enlarged team was composed of the University top management figures, representatives from the Finance Office, all Area managers and the Directors of the nine Departments. For practical reasons the core operational IR team included four people, that is the Manager from the Budget and Financial Office, the University's general Director, its deputy and the Director of the Department of Economics and Statistics. The report was eventually approved by the University governing organisms, that is the Managing Board and the Academic Senate.

Therefore, the ownership of the IR process was from the beginning firmly placed within key organizational structures, which confirmed that it was never intended as a purely PR or "window dressing" exercise.

A powerful guiding coalition (Lapsley and Pettigrew, 1994) steered the development of IR inside the organization, as it had mastered the adoption of the Strategic Plan a few years earlier. As in other IR experiences (Gatti et al., 2018), this ensured, from the earliest stages, a strong sponsorship for the project by top management, and undoubtedly facilitated the subsequent steps of the design and implementation of the IR. Yet, the University community at large needs to further embrace such guidelines and a certain degree of receptivity to change is necessary for outcomes fostered by institutional leaders to become sustainable (Lapsley and Pettigrew, 1994).

A strong cross-functional core team was also key to the discussion of materiality, which required a strong reflection and commitment as it is a peculiar issue within public sector organizations that have to consider public value (Guthrie et al., 2017). Rather than following the guidelines from the IIRC or examples from other IR adopters, at the University of Udine the materiality process was linked to the business model fostered by the Strategic Plan. As explained by one of the interviewees, "in order to identify what distinguishes us, we needed to depart from the pure theoretical model." In doing so, the decision was to focus on those aspects that matter most to value co-creation and that are linked to the University's slogan "hic sunt futura".

However, while interviewees felt that the Report was a step in the right direction, they believed it can still be improved. In particular, they indicated that the actual measurement of assets and capitals at the beginning and at the end of the academic year should be included. Interestingly, the report covers an academic year from September 2017 to August 2018, which does not correspond to the University's financial year, which runs from January to December. This makes it difficult to integrate and compare financial and non-financial results. Indeed, financial results play a minor role in the Report.

Thus, indicators can still be enhanced to better represent actions and their results. For example, interviewees suggested that the assessment of outcomes and impacts can be refined by including the feedback from more stakeholders. Therefore, in terms of integrated measures, both integrated measurement systems and metrics can be refined.

The mechanisms used to manage resistance included both education with several meetings organized across the University to illustrate in an integrated fashion the results of the actions undertaken following the Strategic Plan, as well as facilitation with the organization of training workshops, seminars and courses. Moreover, in order to reduce resistance from intended internal and external audiences, the report was called "Social Report" because it was felt that integrated report would be misleading and not easily understood by lay people.

Hence, quite a few liberties were taken in developing and compiling the integrated report: the six capitals were developed differently than in the theoretical model, materiality was outlined according to the Strategic Plan, the financial information included was minimal, and even the name of the report was changed.

## 6. Discussion

Universities are knowledge-intensive organizations in which the development of intangible resources to foster value co-creation for the community they are part of is paramount (Sangiorgi and Siboni, 2017; Manes Rossi et al., 2018). At Udine the IR plan called for the university management and community at large to engage with the integrated process in order to contribute to the development of new forms of reporting to help ensure that the value creation and value delivery potential were made explicit. The integrated process focused on the "materiality" issue, that is what factors and aspects mattered in the specific case of the University of Udine in order to co-create value in the short, medium and long term. Eventually, the intrinsic discrepancy between the IR concept and its operationalization brought the University to challenge and debate the IR approach, and ultimately to reconceptualize and implement its own version which better fitted its strategic aims, its intended audience and its status as a public entity.

This on the one hand means that the process was in a transitional reorientation phase with IR playing a "transformative function" (Perego et al., 2016: 62) leading to integrated thinking and organizational change. IR should eventually lead to a comprehensive integrated process, which requires upstream matching and harmonizing structures, cultures and people within the organization, and downstream the alignment of production processes and data collection (Dumay and Dai, 2017). On the other hand, it means that the

integrated report which was developed was inherently subjective and it included a mix of historical and prospective qualitative and quantitative data which can give rise to concerns about the validity, reliability and comparability of the report itself (Dumay et al., 2017; Maroun, 2017). However, this apparent contradiction may be intrinsic in the IR framework, which explains ‘why’ IR is needed, but not ‘how’ to implement it (Dumay and Dai, 2017).

The University of Udine adopted an adapted version of the IR framework so much that it even changed its name to a more misleading, but more readily understood term such as “Social report”. Yet, this is not unique. Recent research by Adams (2017), which analyzes ten integrated reports from large US companies, highlights that only three companies mention the IR framework in their reports and just one uses the six capitals as inputs for its business model. One company used in its report’s title the term “One Report”, which refers rather to the model proposed by Eccles and Kruz (2010), and the rest do not follow or mention any specific approach.

## 7. Conclusion

Starting from the development of the IR framework and the emergence of the importance of intangible capitals for value co-creation, this paper offers some important theoretical and practical implications.

Overall, in contributing to the debate on emerging new perspectives and logics, it has confirmed some results by previous scholars (Stubbs and Higgins, 2014; Guthrie et al., 2017): IR can be considered more as an incremental than a ground-breaking transformation of existing approaches and arrangements. Precisely because IR requires to embrace integrated thinking, which affects the interpretative schemes of an organization, change will progress slowly even on fertile grounds where some integrated approaches have already been implemented. Hence, IR leads to change by integrated thinking seeping through an organization over time.

The results of the present study are also useful for policy makers and public managers looking to adopt IR. They need to be aware that IR rhetoric is persuasive, yet it will work only if integrated thinking is developed within the organization and if one is aware that, while it is based on set principles, its definitions are often vague, while its guidelines do not prescribe in detail how to proceed. Indeed, IR is rather complex to implement: its holistic approach may be useful for senior management with a deep understanding and knowledge of the organization, but few employees can conceptualise let alone operationalise integrated thinking using its rather vague guidelines and definitions. While this may seem to make little sense for setting reporting standards, it allows for the necessary flexibility to adapt an integrated report to an organization’s specificities, at the expense though of comparability and assurance.

Finally, there are some limitations that future research could address. First of all, the prospective application of these findings to other contexts should be carefully investigated and the analytical framework should be applied to different settings. In other words, in order to verify if and in how far they can be generalized, the implications from this study would need to be further validated using comparative examination with evidence not only from other universities, but also from public organizations in other sectors and geographies. Secondly, the interviews focused on people directly involved in the preparation of the integrated report excluding other stakeholders such as regulators, community leaders, students and their families. Further research could explore their perceptions of IR or focus on their understanding of the IR as well as the value co-creation process. Lastly, the framework could be enriched and different dimensions could be conceptualized and investigated. This could contribute to add knowledge and sharpen the paradigms of integrated thinking and value co-creation.

## References

- Adams, C. A. (2015). The international integrated reporting council: A call to action. *Critical Perspectives on Accounting*, 27, 23–28.
- Adams, C.A. (2017). Conceptualising the contemporary corporate value creation process. *Accounting, Auditing & Accountability Journal*, 30(4), 906–931.
- Atkins, J. F., Solomon, A., Norton, S., Joseph, N. L. (2015). The emergence of integrated private reporting. *Meditari Accountancy Research*, 23(1), 28–61.
- Bartocci, L., Picciaia, R. (2013). Towards Integrated Reporting in the Public Sector, in Busco, C., Frigo, M.L., Riccaboni, A., Quattrone, P. (Eds.) *Integrated Reporting. Concepts and Cases that Redefine Corporate Accountability*, Cham: Springer, 191–204.
- Barzelay, M. (1993). The single case study as intellectual ambitious inquiry. *Journal of Public Administration Research and Theory*, 3(3), 305–318.
- Barzelay, M. (2007). Learning from second-hand experience: Methodology for extrapolation-oriented case research. *Governance: An International Journal of Policy, Administration, and Institutions*, 20(3), 521–543.
- Biondi, L., Bracci, E. (2018). Sustainability, popular and Integrated Reporting in the public sector: a fad and fashion perspective, *Sustainability*, 10(9), 1–16.
- Broadbent, J., Guthrie, J. (2008). Public sector to public services: 20 years of “contextual” accounting research. *Accounting, Auditing & Accountability Journal*, 21(2), 129–169.

- Burke, J. J., Clark, C. E. (2016). The business case for integrated reporting: Insights from leading practitioners, regulators, and academics. *Business Horizons*, 59(3), 273–283.
- Burritt, R. L., Schaltegger, S. (2010). Sustainability accounting and reporting: fad or trend? *Accounting, Auditing & Accountability Journal*, 23(7), 829–846.
- Cavicchi, C., Oppi, C., Vagnoni, E. (2019). On the feasibility of Integrated Reporting in healthcare: a context analysis starting from a management commentary. *Journal of Management and Governance*, February, 1–27.
- Cheng, M., Green, W., Conradie, P., Konishi, N., Romi, A. (2014). The International Integrated Reporting Framework: Key Issues and Future Research Opportunities. *Journal of International Financial Management & Accounting*, 25, 90–119.
- Cohen, S., Karatzimas, S. (2015). Tracing the future of reporting in the public sector: introducing integrated popular reporting. *International Journal of Public Sector Management*, 28(6), 449–460.
- Crane, A. (1999). Are you ethical? Please tick yes or no. On researching ethics in business organizations, *Journal of Business Ethics*, 20(3), 237–248.
- De Villiers, C., Sharma, U. (2018). A critical reflection on the future of financial, intellectual capital, sustainability and integrated reporting. *Critical Perspectives on Accounting*, in printing
- Dumay, J., Bernardi, C., Guthrie, J., Demartini, P. (2016). Integrated reporting: A structured literature review. *Accounting Forum*, 40, 166–185.
- Dumay, J., Bernardi, C., Guthrie, J., La Torre, M. (2017). Barriers to implementing the International Integrated Reporting Framework: A contemporary academic perspective. *Meditari Accountancy Research*, 25(4), 461–480.
- Dumay, J., and Dai, T. (2017) Integrated thinking as a cultural control? *Meditari Accountancy Research*, 25(4), 574–604.
- Eccles, R., and Krzus, M. (2010). *One report: Integrated reporting for a sustainable strategy*. Hoboken, NJ: Wiley & Sons.
- Flower, J. (2015). The international integrated reporting council: A story of failure. *Critical Perspectives on Accounting*, 27, 1–17.
- Gatti, M., Chiucchi, M.S., Montemari, M. (2018). Management Control Systems and Integrated Reporting: Which Relationships? The Case of the Azienda Ospedaliero Universitaria Ospedali Riuniti Ancona, *International Journal of Business and Management*, 13(9), 169–180.
- Guthrie, J., Manes Rossi, F., Orelli, R., (2017). Integrated Reporting and integrated thinking in Italian public sector organisations. *Meditari Accountancy Research*, 25(4), 553–573.
- Guthrie, J., Neumann, R. (2007). Economic and non-financial performance indicators in universities: the establishment of a performance-driven system for Australian higher education, *Public Management Review*, 9(2), 231–252.
- Haller, A., and van Staden, C. (2014). The value-added statement – an appropriate instrument for Integrated Reporting. *Accounting, Auditing & Accountability Journal*, 27(7), 1190–1216.
- Higgins, C., Stubbs, W., Love, T. (2014). Walking the talk (s): Organisational narratives of integrated reporting. *Accounting, Auditing & Accountability Journal*, 27(7), 1090–1119.
- International Integrated Reporting Council (IIRC) (2013). *The International Integrated Reporting Framework*, London: International Integrated Reporting Council.
- International Integrated Reporting Council (IIRC) (2016). *Focusing on value creation in the public sector. An introduction for leaders*, London: International Integrated Reporting Council.
- International Integrated Reporting Council (IIRC) (2017). *International <IR> Framework Implementation Feedback*, London: International Integrated Reporting Council.
- Katsikas, E., Rossi, F. M., Orelli, R. L. (2017). *Towards integrated reporting: Accounting change in the public sector*. Cham: Springer.
- Kılıç, M., Kuzey, C. (2018). Assessing current company reports according to the IIRC integrated reporting framework, *Meditari Accountancy Research*, 26(2), 305–333.
- Kolk, A. (2010). Trajectories of sustainability reporting by MNCs. *Journal of World Business*, 45(4), 367–374.
- Kotter, J. P., Schlesinger, L. A. (1979). Choosing strategies for change. *Harvard Business Review*, 86(7/8), 1–10.
- La Torre, M., Bernardi, C., Guthrie, J., Dumay, J. (2019), Integrated reporting and integrated thinking: Practical challenges. In: Arvidsson, S. (ed.) *Challenges in Managing Sustainable Business: Reporting, Taxation, Ethics and Governance*. London: Palgrave Macmillan.
- Lapsley, I. and Pettigrew, A. (1994). Meeting the challenge: accounting for change. *Financial Accountability & Management*, 10, 79–92.
- Liu, Z., Jubb, C., Abhayawansa, S. (2018). Analysing and evaluating integrated reporting: Insights from applying a normative benchmark, *Journal of Intellectual Capital*, <https://doi.org/10.1108/JIC-02-2018-0031>.
- Macnab, A. (2015). Debate: Would outcome costing and integrated reporting link resources to strategy in the public sector? *Public Money & Management*, 35(6), 399–400.

- Manes-Rossi, F. (2018). Is integrated reporting a new challenge for public sector entities? *African Journal of Business Management*, 12(7), 172–187.
- Manes Rossi, F., Nicolò, G., Tartaglia Polcini, P. (2018). New trends in intellectual capital reporting: Exploring online intellectual capital disclosure in Italian universities. *Journal of Intellectual Capital*, 19(4), 814–835.
- Maroun, W. (2017). Assuring the integrated report: Insights and recommendations from auditors and preparers. *British Accounting Review*, 49(3), 329–346.
- Milne, M. J., and Gray, R. (2013). W(h)ither ecology? The triple bottom line, the global reporting initiative, and corporate sustainability reporting. *Journal of Business Ethics*, 118(1), 13–29.
- Neuman, W. (2003). *Social Research Methods: Qualitative and Quantitative Approaches*, New York: Pearson Education Inc.
- Osborne, S.P. (2018). From public service-dominant logic to public service logic: are public service organizations capable of co-production and value co-creation? *Public Management Review*, 20(2), 225–231.
- Patton, M. Q. (2002). *Qualitative research & evaluation methods*, 3rd ed., Thousand Oaks, CA: Sage Publications.
- Perego, P., Kennedy, S. Whiteman, G. (2016). A lot of icing but little cake? Taking integrated reporting forward. *Journal of Cleaner Production*, 136(A), 53–64.
- Sangiorgi, D., and Siboni, B. (2017). The disclosure of intellectual capital in Italian universities: What has been done and what should be done. *Journal of Intellectual Capital*, 18(2), 354–372.
- Schaltegger, S. (2012). Sustainability Reporting Beyond Rhetoric: Linking Strategy, Accounting and Communication. In: Jones, S. & Rathnayaka, J. (Eds.). *Contemporary Issues in Sustainability Accounting, Assurance and Reporting*, Bingley UK: Emerald Group Publishing, 183–196.
- Schaltegger, S., and Wagner, M. (2006). Integrative management of sustainability performance, measurement and reporting. *International Journal of Accounting, Auditing and Performance Evaluation*, 3(1), 1–19.
- Stacchezzini, R., Florio, C., Sproviero, A.F., Corbella, S. (2019) An intellectual capital ontology in an integrated reporting context. *Journal of Intellectual Capital*, 20(1), 83–99.
- Stewart, L. S. (2015). Growing demand for ESG information and standards: understanding corporate opportunities as well as risks. *Journal of Applied Corporate Finance*, 27(2), 58–63.
- Strong, P. (2015). Is Integrated Reporting a Matter of Public Concern? Evidence from Australia. *The Journal of Corporate Citizenship*, 60, 81–100.
- Stubbs, W., and Higgins, C. (2014). Integrated reporting and internal mechanism of change. *Accounting, Auditing & Accountability Journal*, 27(7), 1068–1089.
- Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *The Academy of Management Review*, 20(3), 571–610.
- Università degli Studi di Udine (UniUD) (2018). *Bilancio Sociale*, Udine: Forum.
- Vagnoni, E., Oppi, C. (2015). Investigating factors of intellectual capital to enhance achievement of strategic goals in a university hospital setting. *Journal of Intellectual Capital*, 16(2), 331–363.
- van Bommel, K. (2014). Towards a legitimate compromise? An exploration of Integrated Reporting in the Netherlands. *Accounting, Auditing & Accountability Journal*, 27(7), 1157–1189.
- Yin, R. K. (2014). *Case Study Research: Design and Methods*, 5th edn. Thousand Oaks, CA: Sage.