

The use of Intellectual Capital reports: The case of Italy

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Abstract: In the last two decades, scholars, practitioners and governments have underlined the relevance of reporting intellectual capital (IC). Analysing the evolution of IC research (Guthrie et al., 2012, Petty and Guthrie, 2000) and considering the fact that some 'IC pioneer' companies, like Skandia, have abandoned IC reporting, a recent stream has pointed out the need to investigate the use of IC reports 'in practice' (Dumay, 2013, Guthrie et al., 2012, Mouritsen, 2006) in order to understand whether IC reporting is something relevant or just a managerial "fashion" (Dumay, 2012, Mouritsen and Roslender, 2009, Fincham and Roslender, 2003). Moving from these considerations, the aim of our study is to explore if, how, and why IC reports are used by companies and if, how, and why IC measurement and reporting practices do (or do not) stabilise. In order to achieve this aim, a field study approach was adopted (Lillis and Mundy, 2005, Roslender and Hart, 2003). More specifically, the paper highlights the fact that the IC report is frequently a 'personal business' and discusses the determining role of some 'key' actors (i.e. project sponsors and project leaders) in affecting if, how, and what kind of evolution IC reports and measurements may undergo. Further, the paper sheds light on how the IC 'lock-in' phenomenon may occur not only in the accounting domain but also in others. Finally, it contributes to confirming the fragility of IC indicators. Differently from the majority of extant studies, this one focuses not only on the production of IC measurements and reports or on their peculiarities, but also on their use. Moreover, it adopts a longitudinal perspective as opposed to focusing on a specific moment in time. Lastly, in order to gain a broader view of IC in practice, this paper offers insights collected from several organizations, rather than from a single case study.

Keywords: Intellectual Capital reports, use of IC measurements, benefits and drawbacks of IC reports, field study, Italy.

1. Introduction

In recent decades the intellectual capital (IC) discourse has drawn growing attention of scholars and practitioners (Guthrie et al., 2012). Three main stages of the IC discourse can be identified (Guthrie et al., 2012). The first stage was characterised by the use of 'grand theories' to create awareness about the strategic relevance of IC in creating and managing sustainable competitive advantage, i.e. it focused on 'what IC is' (Catasús et al., 2007, Petty and Guthrie, 2000). The second stage, instead, was centred on the impact of IC on capital markets and value creation processes and on how IC should be managed in order to create value, i.e. on what IC does (Dumay and Rooney, 2011, Mouritsen and Larsen, 2005, Giuliani, 2013). The third stage is focused on 'IC in practice', i.e. on the use of IC measurements and the interplay between them and IC mobilization and management (Catasús et al., 2007, Catasús and Gröjer, 2006, Mouritsen, 2009). Indeed, it has become evident that the effects, the benefits, and the drawbacks of measuring and narrating IC have often been neither realized nor recognized in practice (Dumay, 2013, Guthrie et al., 2012). In summary, there has emerged a need to adopt an "in practice lens" in order to understand what happens *in vivo* and develop 'a critical examination of IC' (Guthrie et al., 2012).

Within the IC discourse, a primary role is played by IC reporting. It is considered to be a relevant managerial practice both for internal purposes, i.e. for visualising, understanding, and managing IC, and for external ones, i.e. for disclosing the value creation process and consequently supporting the value spread process (Abeysekera, 2007, Brennan, 2001, Fincham and Roslender, 2003, Guthrie et al., 2001, Lev, 2001, Petty and Guthrie, 2000, Seetharaman et al., 2002, Van der Meer-Kooistra and Zijlstra, 2001). Nevertheless, some 'IC pioneer' companies, like Skandia, have abandoned IC reporting (Dumay, 2012) and the majority of companies that took part in the Danish IC Statement project have also abandoned this practice (Schaper, 2016). This has revitalized the question of whether IC was something relevant or just a managerial fashion (Dumay, 2012, Mouritsen and Roslender, 2009, Fincham and Roslender, 2003). These considerations aside, some argue that there is a need to investigate the effects, the benefits, and the drawbacks of measuring and reporting IC in practice in order to understand to what extent IC measurements and reports are used (or non-used) in organizations and in the market and which internal and external elements can influence their fate (Chiacchi, 2013b, Dumay, 2012, Lönnqvist et al., 2009, Catasús et al., 2007, Catasús and Gröjer, 2006).

The aim of this paper is to analyse the use of IC reports from a longitudinal perspective, i.e. from their introduction up to the present, in order to understand if, how, and why IC reports are used by companies and if, how, and why IC

measurement and reporting practices do (or do not) stabilise. In order to achieve this aim, a field study approach focused on the Italian context was adopted (Lillis and Mundy, 2005, Roslender and Hart, 2003).

The paper starts with an overview of the extant literature regarding IC reporting. The next section presents the design of the study and the description of the field study. In the central part, an attempt will be made to make sense out of the case findings and to develop the theoretical arguments of the study. The paper ends by presenting some of the insights gained and the conclusions drawn, and proposing future research opportunities.

2. IC reporting: an analysis of the extant literature

Although IC has been debated for nearly twenty years, it is not possible to identify a generally accepted definition of it and, consequently, a large variety of IC reporting methods and tools have been developed in order to comply with specific IC concepts or to satisfy specific information needs (Andriessen, 2004a, Sveiby, 2010). This means that reporting IC is still a problematic issue, both from a theoretical perspective and from a practical one, as there is no generally accepted framework.

IC reporting is an issue that can be approached both from an ostensive perspective and from a performative one (Mouritsen, 2006). While the first approach focuses on the ‘technical’ specificities of an IC report (what and how it should report), the latter tries to understand the effects that reporting IC generates on the organization. More in depth, the performative perspective adopted in this study calls for research that aims to investigate ‘what IC does’ (Mouritsen, 2006). For example, it examines how organizational actors develop value by drawing on IC, how IC is understood and how it is implemented in practice, how IC elements are mobilized so as to promote certain effects which are context-specific and invented within the situation in which IC is given meaning, and how IC can be used as a promoter of organizational change (Mouritsen, 2006, Mouritsen, 2009, Dumay, 2009, Mouritsen and Roslender, 2009). In all, the IC performative research agenda calls for a shift of the research focus from the production of IC reports to their use. In order to understand the use of IC reports, it becomes necessary to understand the reasons for reporting IC, the actors involved in the process, and the main benefits and drawbacks deriving from this practice.

From the analysis of the extant literature, two different (although related) perspectives on IC reporting (Brännström et al., 2009) can be identified. One perspective focuses on measuring the value of IC and the other takes as its starting point the management of IC. The argument for the value measuring perspective springs from the fact that the capital market has valued the firms’ equity (much) higher than the book value (Edvinsson and Malone, 1997, Sveiby, 1997). Here, IC research focuses on visualizing the value already generated by an organization (Boeker et al., 2005, Fincham and Roslender, 2003) and the main users of this kind of IC reports are the external stakeholders. In the managerial discourse, several authors have presented models of how firms produce value (DATI, 2000, Kaplan and Norton, 1992). The logic of this perspective is that the recognition, measurement, and reporting of its IC enables the firm to manage its resources and activities and to deliver sustainable competitive advantage. In summary, the reasons for reporting IC can be related to the management of this resource and of the related value creation process or to the disclosure of IC in order to make the ‘invisible’ value visible for the stakeholders.

The two abovementioned perspectives identify different underlying reasons (or different expected benefits) for reporting IC that can be summarized as follows (Andriessen, 2004a, Gröjer and Johansson, 2000, Marr et al., 2003).

Table 1: Reasons for analysing and measuring IC.

Gröjer & Johansson (2000)	Marr et alii (2003)	Andriessen (2004)
<ul style="list-style-type: none"> • Corporate governance • Insider gains • Investor decisions • Merger and Acquisitions • Credit decisions • Tradability • National accounts • Management control 	<ul style="list-style-type: none"> • Strategy formulation • Strategy assessment & execution • Strategic development, diversification and expansion • Compensation • Communication to external stakeholders 	<ul style="list-style-type: none"> • Improving internal management • Improving external reporting • Transactional and statutory motives

It is important to stress that these reasons are neither exclusive nor static. They can coexist and change over time, depending on changes in the external context or in managerial needs (Giuliani, 2009).

With reference to the actors involved in the IC reporting process, some scholars have stressed that they determine the implementation trajectories of IC projects (Chaminade and Roberts, 2003) and also play ‘a significant role as driving forces during the early stages in MR [measurement routine] development’ (Johanson et al., 2001). More specifically, the organizational actors become gradually more engaged in sensemaking and sensegiving processes (Gioia and Chittipeddi, 1991) that are useful for assigning a meaning to IC and for understanding how they can use IC as a solution to their practical issues (Dumay and Cuganesan, 2011, Dumay and Rooney, 2011, Giuliani, 2016). In particular, according to Chiucchi (Chiucchi, 2013a, Chiucchi, 2013b), within an IC reporting project, there are two actors who seem to be particularly relevant: the ‘sponsor’ and the ‘project leader’. The sponsor can be defined as the person that promotes and legitimizes the IC project within the organization; the ‘project leader’ instead, is the person that develops the IC project in practice, i.e. the person that is actually involved in the design and implementation of the IC report.

By analysing the literature on IC reporting, it is possible to identify the expected benefits, namely improving the value creation process through an adequate management of IC and increasing the transparency, the quality of the organizational disclosure, and the value spread process by making the invisible visible to the external stakeholders. Moreover, several studies have underlined that IC reporting supports the managerial decision process, enables IC management, supports organizational changes and organizational learning processes, influences the company’s market value as it is value relevant, affects the financial analysts’ decisions, etc. (Giuliani, 2013, Mouritsen, 2004, Giuliani and Marasca, 2011, Mouritsen, 2009, Chiucchi, 2013a, Chiucchi, 2008, Aboody and Lev, 1998, Bukh, 2003, Dahmash et al., 2009, Giuliani, 2015a, Giuliani, 2015b).

Because reporting IC is ‘not all sunshine and roses’, it is also important to understand the main related drawbacks. According to the extant literature, drawbacks can include the following aspects: the inability to meet the expectations related to ‘grand theories’ (Dumay, 2012), the risk for the IC report and its metrics to rapidly become obsolete in a quickly changing environment (Chiucchi, 2013b, Giuliani et al., 2016, Giuliani, 2015a), and the risk of incurring a ‘lock in’ or ‘accountingisation’ phenomenon (Chiucchi and Dumay, 2015, Habersam et al., 2013). The ‘accountingisation’ phenomenon occurs whenever accountants apply accounting solutions to management challenges in an attempt ‘to make the intangible tangible’, i.e. when IC measurement predominates over IC management.

While the majority of studies are focused on the production of IC measurements and reports (Edvinsson and Malone, 1997, Lev, 2001, Mouritsen and Larsen, 2005, Andriessen, 2004b) or on their characteristics (Giuliani and Marasca, 2011, Mouritsen, 2009, Giuliani, 2014), their use is an area still open to research. The latter appears to be the Achilles’ heel of IC reporting: despite the plethora of proposed models, their diffusion and use is not so widespread in practice (Dumay, 2013) and early adopters, such as Skandia for instance, have abandoned IC measurement and reporting practices. Therefore, we ask: what happens to IC reports once they are produced? More specifically, we are interested in understanding if, how, and why they are used or not and if, how, and why IC measurement and reporting practices stabilise (or not) within companies. All empirical studies conducted so far are focused on a single case or a limited number of cases; therefore, the analysis is rather fragmented. In this study we aim to conduct a field analysis referred to a larger number of companies in order to be able to capture a variety of experiences and gain a broader view of IC in practice (Chiucchi, 2013b, Giuliani, 2013); we also aim to answer the call for investigating IC in practice (Dumay, 2013). Furthermore, this paper contributes to the existing literature by examining what has happened to IC reports after their implementation, and it also answers the call for IC studies that have adopted a temporal lens (Giuliani, 2009).

3. Design of the study

Understanding the use of IC reports requires focusing on the expectations, on the behaviour of the actors involved in the process, and on the process itself. In other words, in order to understand if, how, and why IC reports are used and if, how, and why measurement and reporting practices do (or do not) stabilise, we also need to focus our attention on the process. This is because *how* questions usually help to answer the *why* questions (Lukka, 2007).

This research adopts the field study method to investigate the abovementioned questions. The field study method can be considered a research design that is focused on a relatively small number of companies and it lies between wide-ranging surveys and single or multiple case studies (Lillis and Mundy, 2005, Roslender and Hart, 2003). In particular,

we chose the qualitative interview as the information collecting method (Fontana and Frey, 1998, Qu and Dumay, 2011, Kreiner and Mouritsen, 2005). Using a questionnaire was rejected as unlikely to offer the necessary level of detail with reference to individuals' perceptions. Case study research was also rejected considering that it does not permit investigation of the full range of perceptions (Roslender and Hart, 2003). By analysing several organisations, it becomes possible to understand whether an emergent finding is simply idiosyncratic to a single organization or consistently replicated in several, and also, to better understand complex phenomena such as the use of IC reports.

The reason behind the focus on Italian firms is twofold. On the one hand, from an analysis of the extant literature, it seems that 'Italy has become the new, hotbed of IC research, especially aimed at working side by side with managers inside organisations in developing IC practices' (Dumay, 2013). On the other hand, as the authors are Italian it was easier for them to make contacts and develop good relationships with Italian firms rather than with foreign ones.

Differently from other countries, e.g. Denmark, where national projects on measuring and reporting IC have been launched, in Italy there have been no national or large-scale projects. Italian companies began, on their own initiative, to measure IC adopting different frameworks, starting in different points in time, and pursuing different aims.

Since it was difficult to obtain data concerning the number of Italian companies that ever produced an IC report, we adopted a step-by-step approach. The data collection process was conducted in the spring of 2014. We focused on companies that had prepared at least one IC report for internal and/or external use. We included in our research only those companies which measure and report IC intended as the system of intangible resources including human, organizational, and relational capital (Edvinsson and Malone, 1997, Sveiby, 1997). This means that we excluded companies which measure and report only specific IC resources, such as human capital, for instance.

First, a review of national and international publications within the IC field was carried out through SCOPUS. We chose this tool because it is recognized as a high quality and comprehensive publication database (de Moya-Anegón et al., 2007, Vieira and Gomes, 2009). Second, we used Google libri (the Italian version of Google books) to look for Italian books reporting on Italian companies that measure and report IC. Third, we conducted search on Google to collect data about companies that have not been the object of publications but which have self-reported having measured/reported IC. Fourth, in order to integrate the results of the desk research, some informed Italian individuals (scholars and consultants operating in the IC field) were interviewed; this was done to help us understand whether the list produced in the previous steps was complete and, if necessary, add any missing firms.

Through this whole process, a total of thirty-four companies were identified as representing a large percentage of the Italian firms that report IC. Out of the 34 identified organizations, we could analyse sixteen of them. As far as the rest (eighteen companies) is concerned, five of them were impossible to contact, either because they were no longer in business or because there was no contact information for them on the Internet, and thirteen firms declined to participate in the research.

The main data-gathering technique was the semi-structured interview because the aim of the analysis was to reach a deep understanding of the phenomenon under study (Qu and Dumay, 2011, Kreiner and Mouritsen, 2005) and to compare different practical experiences within the IC reporting field. Semi-structured interviews were selected as a means of data collection because they are well suited for exploration of the perceptions and opinions of respondents regarding complex and sometimes sensitive issues and they also allow the interviewer to probe for more information and elicit clarification of answers. Each interview was designed to explore the issue of the use of IC reports. The interviews were conducted during the spring and summer of 2014; they lasted one to two hours each and they were all tape-recorded and then transcribed for analysis.

In order to overcome bias, the analysis was carried out through analyst triangulation (Yin, 2003, Patton, 1990). The work was designed in such a way that one of the researchers was in charge of the data collection, while the others had to examine the interview material and the notes in order to analyse all the evidence. Post-communication with the respondents helped the authors to ensure the accuracy of the collected data.

4. The field study – Data analysis

The majority of the companies that responded to our survey and that declared they had been measuring and reporting IC operate in the private sector (private companies 69%; public companies 19%; non-profit companies 12%). Worthy of note is that 69% of the companies measured and reported IC for both internal and external aims and the

rest (31%) exclusively for internal aims. None of them produced an IC report only for external aims. Among the companies analysed, only three stopped after the first experience whereas thirteen continued to measure and report IC for some years. The duration of the experience ranged from a maximum of sixteen years to a minimum of one year, at the date of the analysis.

We will develop the analysis of the interviews considering the seven companies that are still measuring and/or reporting IC. Since the aim of our research is to understand if, how, and why the IC report and the information on IC are used and if, how, and why measuring and reporting practices stabilise, we are interested in understanding the experience of those that are still measuring IC. Finally, we will also consider the reasons why the projects were abandoned.

Table 2: Companies which are still measuring and/or reporting IC

Company	Stopped producing the ICR (Y/N)	Stopped measuring IC (Y/N)	Initial Aims: INT/EXT
A	N	N	INT/EXT
B	N	N	INT/EXT
C	N	N	INT/EXT
D	Y	N	INT
E	N	N	INT/EXT
F	Y	N	INT
G	Y	N	INT

The seven companies shown in Table 2 are still using an IC report and/or IC information, and their experiences are different. There are four companies (A, B, C, and E) which are still measuring and reporting IC, and the IC report is closely tied to a supplementary report, the social report in three cases and the quality report in one case.

As for the other three companies, which started the IC measurement and reporting projects exclusively for managerial aims, the IC report was eventually abandoned but IC measurement was not. As a matter of fact, in all of these last three cases (D, F, and G), where IC was exclusively or predominantly measured to support IC management, after ceasing to produce an IC report, some IC measures were included in departmental and/or corporate control tools. When asked, those companies provided examples of how some of the IC measures have continued to be produced or of how, over the years, other measures referred to specific capitals (e.g. human, relational, etc.) have evolved.

...some of the evolutions I introduced over the last years, especially to control the marketing and sales' activities, such as, for instance, the monitoring of customer 'engagement', the customer relationship value, [...], have been, how can I say..., 'borrowed' from the IC project... They are the evolutions of some ideas and concepts that emerged during the IC project and of some of the indicators we used there.

[Company F]

These companies have also used the IC information included in the IC reports to trigger managerial actions.

...information on IC led to creating actual and prospective customer databases. This increased the marketing department's knowledge referred to the market and new actions to acquire customers. For instance, in order to improve the customers' competences in using company products (which were technology-based) training courses were provided. As far as 'major customers' were concerned, instead, activities such as company visits and ad hoc meetings were planned.

[Company F]

These three companies (D, F, and G) share another characteristic: the controller was the project leader (in D and F) or was part of the team that had the responsibility of carrying out the project (in G). These actors seem to have a very relevant and decisive role in pushing IC measurement forward. Thanks to their participation and close cooperation with consultants and researchers in all the steps that characterized the design and implementation of the IC report, they acquired the competences needed to technically 'master' the system, became able to manage the IC measurement system on their own, and to push measurement forward. They seem to have had a role in fostering the taking up of IC accounting practices consistent with the company decision-making process that would satisfy managers' information needs. These controllers reported that they have acquired new competences and knowledge related to other departments in order to promote and/or carry out some activities useful for IC management (e.g. analysis of the quality of the workplace relationships, competitor analysis, etc.). However, they also observed that this has caused problems related to the 'invasion' of other departments' responsibilities and that this has sometimes impeded the continuation of the projects in the proposed direction (e.g. in company D, some projects for measuring relational capital were hindered because the Marketing manager considered them his responsibility). Therefore, in these companies where IC has continued to be measured internally and where it also seems to have had an impact on actions, the controller appears to manifest the characteristics of a 'business analyst' more than those of a 'bean counter' (Granlund and Malmi, 2002).

In three of the companies that are continuing to measure and report IC, the experience of measuring IC was "dragged" by that of social report, thus following in its wake. As a matter of fact, IC is reported as a section of the IC report, and this seems to have determined the 'fate' of IC reporting. In two cases, although questions specifically referred to the IC report and to IC information were asked, the interviewees frequently answered referring to 'social reporting' instead of to IC reporting, and their comments were referred to social accounting information in general instead of only to IC.

With reference to the inclusion of the information on IC in the social report, the interviewee in company B said:

...at the beginning, we prepared a social report with included an intellectual capital section. Intellectual capital was something 'added' to the social report, also from a physical point of view. In the last few years, intellectual capital got integrated into the section in which we talk about human capital [...] and in the one where we talk about relational capital..

In these cases (B, E) IC information seems not only to be dragged by social reporting, but also to merge with it.

Something different happened in company C, where IC measures are included in the social report as well, but seem to be used by managers and also seem to have an impact on actions.

... even if data is collected by specific departments, it is then shared and discussed by teams, and it can immediately trigger alert signals and actions...

The interviewee in company C also stated that the IC indicators have been used by the marketing department to analyse customer satisfaction and also in focus group with employees, with workers' unions, and with suppliers.

Differently from companies B and E, the project leader in company C was the CFO, whereas in the two other cases it was the General Manager (B) and the head of Human Resources (E). Consistently with what we observed for the companies that measured IC predominantly for internal aims, the fact that the project leader was the CFO seems to have some bearing on the use of IC measuring for managerial aims.

As far as company A is concerned, in the first years an autonomous IC report was produced and it was useful for supporting a change in management strategy. After some time, the sponsor of the IC report, the General Manager, who was also the project leader and principal user, decided to combine the IC report and the quality report into a single document. In this case, the information on IC was deemed essential to report to the Board of Directors and also to the public administrations funding the company.

...the Board of Directors read the results and said 'ah, but are we really like this?! Is this a picture of us?!... [the IC report] showed highlighted data and organizational values that before were just intangibles. I mean, [...] when we got them written down, we assessed them, we could give them a quantitative/numerical value...so there was a change. It was not only 'theory' anymore but something written on paper, something we could use to face others' opinions [...] Also, relationships with public authorities were difficult in that period, [...] Now we have data to tell them 'Look! We saved you all these billion of Euros'. This gives us a different status, a different position in the eyes of public administrators...

To sum up, in all these cases the IC report and/or the IC information are used ex-post, to understand what happened. In only one case did the interviewee declare having set objectives on some measures. In all cases where IC information triggered actions on IC the CFO/controller was the project leader and could be considered a business analyst. The CFO/controller seems to have a role in pushing forward IC information production and in putting it at the service of managers' needs. When the project leader is the General Manager, IC information is used to account for his/her activity to the Board of Directors and/or to external stakeholders.

In all of these cases, IC information seems to be a 'personal business' or a business 'reserved for very few people'. IC information continues to be produced because of the commitment of one person (the project leader) who sometimes, when the project leader is the General Manager, coincides with the principal user. When the project leader is the CFO/controller we noticed a genuine belief in the usefulness of this information for supporting company management and a commitment to finding ways to put it at the service of managers by introducing it along with other controlling tools or by designing new tools which contain IC information.

To conclude, we also report the main reasons why nine companies in our sample stopped measuring and reporting IC. The reasons were varied: the loss of interest by the project leaders/sponsors, their leaving the company, managers' scarce interest, the financial crisis, company restructuring, the overwhelming amount of mandatory documents to be produced, and the fact that measuring IC is time-consuming and requires a high commitment by those who have to collect and process the information. In some cases companies interviewees declared that they abandoned measuring IC because the initial promises were not fulfilled. For instance, two companies highlighted the fact that the report was unable to communicate the value of the company IC to specific stakeholders, i.e. banks. In two other cases it was pointed out that the impossibility of comparing IC information to other companies' information made it too difficult to understand the value of the company's IC.

5. Discussion and conclusions

The aim of this paper was to analyse the use of IC reports from a longitudinal perspective, i.e. from the time of their introduction up to the present, in order to understand if, how, and why they are or are not used and whether IC reporting practices stabilise or not. In order to achieve this aim, a field study approach focused on the Italian context was adopted (Lillis and Mundy, 2005, Roslender and Hart, 2003).

First of all, it seems that the use of the IC reports is strictly related to the IC concept's sensemaking and sensegiving processes, especially by some key actors. Scholars and practitioners have highlighted that IC is a multi-dimensional magmatic concept that is widely discussed in literature but still largely unknown in practice (Dumay, 2013, Gröjer, 2001, Mouritsen, 2009). Several studies have pointed out that an IC reporting project usually starts with a discussion about what IC is, as it is often confused with the ideas of human resources or social capital or knowledge (Chiacchi, 2013a, Chiacchi, 2013b, Giuliani, 2013, Giuliani and Marasca, 2011, Andriessen, 2004b, Dumay and Cuganesan, 2011). In other words, from an empirical perspective, IC is like an empty box that needs to be filled with a meaning that makes sense for the organization. In fact, the analysed companies that are still reporting IC managed not only to 'make sense' of IC but also to 'give it a sense' that was useful for them to also make it understandable to other members of the organization and render it appropriate for specific aims. As previously mentioned, IC measurements became a part of the strategic control system or a part of either the social report or the quality report, depending on where the IC concept was considered most useful for the organizational needs and (especially) for the aims of the sponsor and/or of the project leader. In those companies where the IC reporting practice stopped it seems that the organization had not managed to give its own sense to IC; in other words, IC never acquired an organizational meaning and it remained understood only by a few key actors. Consequently, when these people quit the organization or their interests changed, the IC project faded into oblivion.

The collected evidence also sheds light on the relevance of some key actors in determining the success or the failure of an IC project. As outlined above, some studies have analysed the role of the sponsor and of the project leader in the introduction and implementation stages of an IC project (Chiucchi, 2013a, Chiucchi, 2013b). This study, due to its longitudinal approach, highlights that sponsors and project leaders are crucial in determining the fate of IC projects. They are instrumental in making the IC project last over time if they find something useful in it for themselves, i.e. if the IC report satisfies their needs. At the same time, the sponsor and the project leader seem to also play a crucial role in the project's failure. The IC project failed when the IC concepts, methods, and tools did not meet the expectations of the sponsor and/or of the project leader. This happened for example when the IC project did not produce the desired benefits in terms of improvement of the corporate image or of the organizational performance. As the CFO of one company said: 'I carried out the IC project because I imagined that our main shareholder would be interested in it... for me it was a way to be more transparent... but I was wrong, as our main shareholder never read the IC report and consequently, I abandoned the project'. In all, the IC project failed whenever it was not considered 'worth the trouble' or when it was considered a 'private business', something belonging to and understood by an élite. As a consequence, when interest faded or the results did not meet the expectations of this élite group, or when those people quit the organization, the project eventually dwindled down to nothing. In some cases, it seems that IC was seen as a passing managerial fashion, something that managers 'had to have' but without any in-depth knowledge of what an IC project is or what it does (Roslender and Fincham, 2001). As a case in point, the sponsor/project leader of one company observed that he 'fell in love' with the idea of analysing IC, that the IC report was his 'toy' for a while, till he found 'a new toy'.

The findings of our study lead us to reflect on the IC 'lock-in' phenomenon which occurs when IC is introduced from an accounting perspective so that the focus tends to be on measuring rather than on managing (Chaminade and Roberts, 2003, Chiucchi and Dumay, 2015). In the cases we examined, IC entered the organization from different perspectives (accounting, quality, human resources, external reporting, management accounting, etc.), and while in some cases IC got locked into the entry perspective, in a few cases the 'lock-in' was avoided and IC acquired, over time, a different focus. In other words, while the literature mentioned above is focused on the typical hypothesis of lock-in, i.e. the one in the 'accounting world' where measuring dominates over managing, the examined cases show that IC can also be locked into other 'worlds' (quality, social, etc.) depending on its point of entry. The paper also sheds light on the role that a CFO/controller, who is the one that usually designs and implements the IC report, may play in the un-locking process and in the stabilisation of IC measurement practices. Where the CFO/controller takes a traditional approach (bean-counter role) (Granlund and Malmi, 2002) the IC project tends to fail. Instead, whenever s/he plays more of a business analyst role (Granlund and Malmi, 2002), the IC project has greater chances of survival as s/he is able to make IC interesting and useful for the whole organization; in other words s/he is able to operationalize IC and help it evolve from an abstract concept to something concrete.

Another aspect to discuss is the use of the IC report. In the archaeology of IC, the IC report was considered a useful tool for understanding the present in order to forecast the future, as IC is considered to be one of the resources that drive future organizational performance (Mouritsen and Larsen, 2005, Edvinsson and Malone, 1997, Sveiby, 1997). In other words, the focus should be on what will happen and this kind of focus should be found both in the content of the IC report and in how the IC report is used. From the analysis it emerges that the IC report is mainly used to 'have a picture' of the past, to shed light on the activities carried out, and to see the results achieved by the organization or by specific areas of the organization itself. For example, the IC report was seen as an opportunity to highlight achievements that were not visible in the other company reports (financial report, social report, etc.) such as the ones related to reorganization activities, to quality assurance, to developing social relationships, etc. Thus, the IC report was a way to 'make the invisible visible' but where the 'invisible' was not an intangible *per se* but an intangible related to a specific organizational area. This idea also finds support from the fact that in several cases the marketing area did not find the IC project particularly interesting as its activity is clearly visible in terms of sales; on the other hand, the R&D, the HR, the IT and the Quality departments were often particularly interested in the IC report and in the picture it would give of their activity and results.

This last point also leads to reflections on the indicators included in the IC report as it is the whole of the indicators that gives a specific perception (a specific picture) of the organization or parts of it. The problems related to the indicators seem to be one of the main obstacles to the stabilisation of IC reports and one of the main causes for abandoning them. More in depth, the analysis confirms that IC indicators tend to have technical problems as they are not self-evident, are ambiguous, time consuming in terms of calculation, and difficult to understand and put in relation to one another (Gröjer and Johansson, 2000, Mouritsen, 2009, Mårtensson, 2009, Catasús et al., 2007, Cuganesan and Dumay, 2009, Dumay and Cuganesan, 2011, Giuliani and Marasca, 2011). In addition, our study shows

that IC indicators tend to be produced by one area in the company (usually by the controller) (i.e. 'the producer'), with reference to another area (for example R&D, HR, IT, marketing, production, etc.) (i.e. 'the observed') and used by top management (i.e. 'the user'). The existence of these three roles (producer, user, and observed) and the technical problems inherent to the process imply that developing IC indicators tends to be seen as a way of controlling specific organizational areas which are reluctant to be measured with a tool they do not understand and which do not accept being 'invaded' by another area. It has to be underlined that this point is not only due to a technical problem but is also a cultural issue; the focus is on the quest for the 'perfect' or 'objective' measure instead of on the organizational impact of IC (Chiacchi and Montemari, 2016). In summary, if the rise and potential growth of organizational conflicts is recognized in time and the focus is not only on the technical aspects of IC, the IC reporting project is more likely to survive over time.

All in all, the fate and the stabilisation of IC reporting practices seem to be determined by aspects related to the IC concept's sensemaking and sensegiving processes, to the interest, satisfaction, and culture of the sponsor and of the project leader, and to the technical and organizational issues related to the production of the IC indicators and to their backward looking characteristic.

These findings have both theoretical and practical significance. This study contributes to the literature on IC 'in practice' (Dumay, 2012, Guthrie et al., 2012) as the analysis is developed 'in vivo' and not 'in vitro'. It also sheds light on factors determining the fate and stabilisation of IC practices as the results show what happens after IC concepts, methods, and tools are introduced within an organization.

The main limitation of this study is that it was not possible to interview all of the companies that have experienced the creation of an IC report. Nevertheless, we believe that the investigated cases offer a wide picture of what happens in reality.

Taking into consideration the extant literature, future research avenues could consist in the analysis of the roles played by the IC sponsor and the IC project leader and of how their personal characteristics can affect IC projects in order to contribute to the research regarding the 'actors' involved in an IC project (Chiacchi, 2013a, Chiacchi, 2013b, Giuliani et al., 2016). Moreover, it could be interesting to delve into whether and how consultants have a role in determining the fate of IC projects, as the role of this 'actor' has been investigated in other context but not in the IC one (Briers and Chua, 2001, Christensen, 2005, Ittner and Larcker, 2002). In addition, further insights could be gained by comparing the Italian experience with others that have different characteristics. Finally, as our empirics are mainly focused on private organizations and the discourse of IC in the public sector is gaining momentum (Bardy et al., 2016, Dumay et al., 2015, Guthrie and Dumay, 2015, Garlatti et al., 2014), it can be interesting to analyse, from a longitudinal perspective, the use and the 'fate' of IC reports specifically in this context.

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