The Process of Creating Value With Intellectual Capital Practice as An Intangible Asset in Communities of Practice in The SME: An Empirical Case Study

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Abstract: In the realm of knowledge management, great emphasis has been put on intellectual capital (IC) as an important and, partially, intangible asset for achieving economic value and competitiveness. This has led to many attempts to measure the economic value of IC. These methods, however, are to some extent questionable and do not seem to be recognized in practice, scholars claim. This might be due to the intangible character of IC. Even though scholars have conducted studies on IC, more research on IC practice and the value creation process with IC is called for; especially in the context of a small to medium-sized enterprise (SME). Based on an empirical and qualitative case study of an SME, the current paper explores the process of IC practice creation and how IC practice is related to value in tangible-intangible dynamics in the SME. The current paper applies practice theorising and the community of practice (CoP) approach to propose how IC practice can create value by integrating intangible knowing about end consumers in the practice of producing tangible output. The empirical results illustrate how establishing communities of practice and fostering knowledge brokers facilitating meaning-negotiating processes is crucial to developing IC practice as intangible assets in the SME, and the paper discusses how making the intangible knowing tangible may increase the value of intangibility in the process of creating IC value and IC practice.

Keywords: Intellectual capital, measurement, intangible assets, communities of practice, knowledge brokers, SME

1. Introduction

The assumption that intellectual capital (IC) is a valuable, intangible asset to businesses is widespread in the field of knowledge management and IC (Osinski et al., 2017). This has led to an increased attention towards the measurement of the value of IC. However, these measuring tools aimed at measuring the value of IC as an intangible asset are questionable (Ibid.). Further, measurement of IC and intangible assets is mainly of concern within accounting research (e.g. Mouritsen and Thorsgaard Larsen, 2005, Castilla-Polo and Ruiz-Rodríguez, 2017). However, before measuring the value of IC as an intangible asset, an understanding of the process of the value creation of IC is crucial (Cuganesan, 2005).This paves the way to study what IC does rather than what it is and how IC is related to value rather than if it is valuable as called for by Mouritsen (2006). In the same vein, the study considers IC practice the interaction of the tangible and intangible assets as interdependent resources in practice; a study that has been called for by scholars (Marr et al., 2004, Cuganesan, 2005).

In spite of the great influence that SMEs have on the global economy, only little attention is paid to SMEs in IC literature (Marzo and Scarpino, 2016, Guthrie et al., 2012). Additionally, the need to study IC in the SME is supported by the view that SMEs throughout Europe are under pressure from globalization due to increased international competition, and SMEs also need methods with regard to managing IC (Mertins et al., 2009). Thus, the current paper explores how IC is practiced and how it is related to value in the context of an SME.

In order to investigate IC from this performative perspective as called for (Mouritsen, 2006), the study applies a practice theoretical approach with a focus on the performative practice in organizations, such as 'doings and sayings' of the organizational practice (Nicolini, 2012). From the realm of practice theories, the community of practice (CoP) theorising by Wenger (1998) is applied in order to study the practice community as a place for the creation of learning, knowledge, and IC. Of concern in the study is thus how the IC practice and IC value creation processes are highly dependent on the engagement and meaning negotiation in CoPs. This enables the answering of the following research question:

How can IC practice and IC value be created as an intangible asset in tangible-intangible dynamics in communities of practice in the case of an SME?

To inform research by answering the research question empirically, a single case study of an SME is undertaken to explore the IC practice in this type of organization and how CoPs play a role to the IC practice and the value of it. The case in study is an SME producing convenience food and selling it to the end consumers via, for example, coffee shops and petrol stations. As part of a strategy to many double turnover, the organization emphasizes the integration of knowledge from design management in the organizational practices. In doing so, the organization aims at developing IC practice as a valuable process. This forms the basis for an exploration of IC practice in an SME.

2. Theory

2.1 IC practice and the interdependent dynamics of tangibility and intangibility

Among various definitions of IC, the interest in the difficulty with the value measuring potential of IC seems intrinsic in many IC definitions. For instance, Sveiby (1997) concludes that IC is the gap between the market and the book value of the firm, and Martines-Torres (2006) underpins IC as not being present in the organization's financial statements even though it may account for up to 80% of the company's market value. However, these approaches to IC value are considered insufficient (Mouritsen et al., 2001).

Following a literature review of IC by Martín-de-Castro et al. (2011), definitions of IC are many but do have the following three characteristics in common: its intangibility, its potential to create value and the growth effect of collective practice and synergies.

However, scholars also found that among the several studies of IC dealing with intangible assets, there are divergent opinions as to whether the concept of IC can be defined synonymously with intangible assets (Osinski et al., 2017). For instance, Castilla-Polo and Ruiz-Rodríguez (2017) present IC and intangible assets as synonyms and underline intangible assets as key to achieving business success by, for example, having the ability to innovate and launch new products on the market. In turn, Marr et el. (2004) consider the interdependency of tangible and intangible resources of an organization worth scrutinizing for further conceptualization.

A great deal of research on IC has emphasized IC as human capital, relational capital and structural capital (Cuganesan, 2005), and studies have been undertaken to define and measure quantitatively relational capital, human capital and structural capital (e.g. Hosseini and Owlia, 2016, Miciuła, 2016, Hejazi et al., 2016). These measuring methods are, as stated, criticised for not measuring the full value potential of IC as an intangible asset. In the same vein, Marzo and Scarpino (2016) suggest that dividing IC into relational capital, human capital, and structural capital reflects a static approach with a narrow quantitative focus. Rather, Marzo and Scarpino's (2016) claim, focus on activities and processes for understanding IC practice from a dynamic IC view is needed. The dynamic IC view emphasizes quality being the identity of resources and their relationships, as IC is mobilized in activities. Further, this dynamic view fits SMEs due to their informal systems and low hierarchies.

Thus, in recent scholarship it is acknowledged that IC research needs to study IC in activities and processes in organizational practice to understand IC practice "in action". In order to address this gab in research, the current paper follows the dynamic IC view. Hence, the paper does not seek to achieve static descriptions of the economic value of IC, as research on this topic is immense. As an alternative, the paper studies the IC practice in practice and how IC is related to value as both a tangible and intangible asset. This qualitative account and the exploration of IC practice in the case of an SME are new to research.

2.2 CoPs as a place for the process of IC practice and IC value creation

As a performative approach to study IC practice is called for (Mouritsen, 2006), the study applies a practice theorizing approach (Nicolini, 2012, Schatzki, 2001). Practice theory implies "a performative perspective to offer a new vista on the social world" (Nicolini, 2012, p. 7). Studying practice is grasping processes and activities as they happen, and this can be done by studying 'doings' and 'sayings' in organizations (Schatzki, 2002). With this as a stance, practice theory enables the study of IC practice from the dynamic IC view considering the process of IC value creation.

Practice theory derives from, among others, Marx, Heidegger, Wittgenstein, and Sartre (Nicolini, 2012). Also, the work of Nonaka and Takeuchi (1995) derives from the Heideggerian human ontology (Heidegger, 1962).

Thus, practice theory and knowledge management have to some extent common roots in terms of the process ontology. Considering knowledge social and processual, practice theory scholars define knowledge as knowing in practice (Nicolini, 2012, Schatzki, 2002, Wenger, 1998), which resembles the dynamic IC view.

In the realms of knowledge management and practice theory, scholars claim that knowledge is rooted and created in CoPs (Brown and Duguid, 1991, Brown and Duguid, 2001, Lave and Wenger, 1991, Wenger, 1998), sticking to the knowledge ontology of social constructivism (Brown and Duguid, 1991). Nicolini (2012) highlights Wenger's (1998) notions on knowledge as being rooted in practice communities and also outlines Wenger's conceptualization of CoPs as practice theory. In order to study the dynamics of IC practice, hence, CoP theorising is applied.

According to Wenger (1998), the concept of practice "is first and foremost a process, by which we can experience the world and our engagement with it" (Wenger, 1998, p. 51), and as practices of collective learning evolve over time in a kind of community, those are CoPs (Wenger, 1998). A CoP has been defined as "groups of people informally bound together by shared expertise and passion for joint enterprise" (Wenger and Snyder, 2000, p. 139) – a definition reflecting Wenger's reluctance to define the concept too narrowly. A CoP is characterized by the following: mutual engagement, joint enterprise, shared repertoire, and meaning negotiation in practice. However, Nicolini (2012) claims that, simply, the study of shared practices is preferable rather than studying if organization members have fulfilled criteria for having formed a CoP. Also in recent knowledge management scholarship, it seems widely acknowledged that a CoP is a place for learning and knowledge creation (Aljuwaiber, 2016). Further, the CoP was found useful to develop positive organizational outcome and, specifically, a relevant place for development of human capital and social capital (Manuti et al., 2017). The interaction of social capital and human action were further found mediated in the CoP (Abou-Zeid, 2007). Research has thus been conducted to investigate the role of CoPs and IC from the static IC view. However, as stated above, a practice-based and dynamic IC view on the CoP as a place for the creation of IC practice and IC value is needed.

Despite the definition of IC by O'Donnell et al. (2003), in which it is intrinsic that IC also is created dynamically in the CoP, few scholars have studied the two concepts in combination. The dynamic definition underlines the value creation potential of IC as highly dependent on communicative competence among the members of the CoP. In continuation, one may say that the communicative competence is also crucial to the creation of new CoPs. Such a cultivation of new CoPs could be necessary to foster new knowledge (Wenger et al., 2002). And learning across CoPs was found to be potentially difficult due to conflicting epistemic cultures (Mørk et al., 2008). Since it is widely acknowledged that CoPs are informal by nature and differ from, for example, a formal team (O'Donnel et al., 2003), research needs to be conducted on IC practice and IC measurement practice in the borderland between CoPs and formal organizational structure. Applying this leads to attention as to how relations to practice IC are established and meanings of IC practice and IC value are negotiated across formal departments.

3. Methodology

The study is conducted as a case study, which is an empirical inquiry that enables in depth study of a complex issue in its real-world context (Yin, 2014)). The approach offers the opportunity to learn from a single case (Yin, 2014, Stake, 2005), and it is adopted to study IC practice "in action" and how IC is developed in CoPs. Further, case studies are suitable when answering "how" and "why" questions (Yin, 2014) as in the current study.

In order to answer the "how" and "why" research question, the aim of the analysis is to build explanations about the case. Thus, the aim is to explain how things happen and build explanations as to why (Yin, 2014). Explanation building reflects initial theoretical propositions that form the basis for examining the case study evidence with the theoretical propositions in an iterative process (Yin, 2014). In the current case study, the theoretical propositions outlined above from IC theorising and CoP theorising have initially formed the ground for choice of case, data collection and data analysis. This methodology is outlined in the following.

3.1 Choosing a case to study IC practice in an SME

The case organization is chosen due to its strategy to implement knowing about end consumers in organizational practices. This knowledge and IC practice is to be developed by a design manager. In doing so,

the organization attempts to increase the level of IC among all organization members. As the study of IC practice in an SME is the aim of the current study, the chosen case is suitable for answering the research question. Further, the case in this study is worth examining because SMEs in particular have knowledge-based value-creating potential (Marzo and Scarpino, 2016).

The SME is employing a person holding a master of arts degree in design management. With this degree, this employee has her educational background within humanities and art, which is said to be of importance to business (Darsø, 2004, Irgens, 2014). However, a debated question is whether art is of economic value at all, and, if accepting it as economic value, whether it is so as a tangible tool (Darsø, 2004) or an intangible special way of being and acting (Irgens, 2014). This outline of art in business resembles discussions in literature on IC. First, in discussing whether or not art and IC are of economic value to businesses. Second, in discussing if art and IC are tangible or intangible assets. Third, both literature on art in management and IC theorising, as stated above, call for insights on how and why art and IC is practiced in organizations. As the case of the current study is an SME aiming at integrating art and humanities is the organizational practice, the case offers insights into IC practice and the value creation process of IC practice.

3.2 Collecting data to study IC practice in the SME

In the case, qualitative data is collected due to the "how" research question (Yin, 2014). The case study approach also fulfils the methodological requirements from the practice theoretical approach calling for other data than surveys and interviews (Schatzki, 2002). Thus, the research questions and the theoretical propositions pave the way to collect qualitative data as observations and interviews. As the object of study is the IC practice and how it is related to CoPs and as the case organization aims at implementing the knowing from design management as IC practice, the primary respondent and unit of analysis in the study is the employee holding a master's degree in design management. Thus, it is an embedded case study design (Yin, 2014), as this enables the study to focus on IC practice creation.

Consequently, the first interview was conducted with the design manager and her manager, the innovation manager. As the study went on, other organization members related to the the design manager in the organization were interviewed in order to explore to their IC practices and how they approach IC practice IC value creation. Thus, the following nine interviews were conducted: two with the CEO, one with the innovation manager and the design manager, two with the design manager, one with the product developer, one with the chief performance officer (CPO), one with a sales manager, and one with a production manager. Interviews lasted 45 to 60 minutes each and were audio-recorded and transcribed in order to enable an analysis of the meaning and interpretation hereof (Kvale and Brinkmann, 2009). The interviews were conducted as semi-structured acknowledging the strength of fluidity in the qualitative interview (Yin, 2014).

Along with the interviews, twelve days of participant observation was conducted (Yin, 2014, Spradley, 1980). Observations gain access to "everyday" settings in organizations (Yin, 2014) and thus to study what happens in the organization. Mainly, the design manager was observed in activities related to the development of IC practice. Thus, the method of observation was participant observation (Yin, 2014) with the researcher being a participating observer or observing participant (Spradley, 1980, Bøllingtoft, 2007) depending on the activity taking place. Observations and interviews were conducted and carried out from an interactionist approach (Järvinen, 2005, Järvinen and Mik-Meyer, 2005), allowing a dialogue and thus benefitting from the qualitative research being open to what happens in the case. In doing so, the study applies a relativist and interpretivist perspective (Yin, 2014) to capture the perspectives of different organization members as a method to investigate how and why these nuances illuminate IC practice and IC value in the case.

3.3 Analysing data

With the theoretical propositions having shaped data collection, also data analysis follows the strategy of relying on theoretical propositions, comparing them with findings, and revising the propositions in more iterative processes as a way of building explanations (Yin, 2014). Thus, systematic and theme-focused coding occurred (Miles et al., 2014) in an iterative process with the codes based on the conceptualization of IC and CoP.

Code operationalization of IC was based on the conceptualization IC practice as implementing the practice of design management as either a special way of being and acting in the world (Irgens, 2014) or a tool (Irgens, 2014, Darsø, 2004) resembling the intangible-tangible dimension of IC. Considering IC practice a tangible and

intangible interdependent relationship, the data analysis of IC was based on two codes: IC tangibility and IC intangibility. As IC practice in this case is studied as design management practice, coding was operationalised by coding interviews and observation notes by finding quotes about design management, which was then coded as either tangible or intangible. This was used to grasp IC practice and the tangible-intangible interplay hereof.

As the study explores how IC practice is – and can be – developed in CoPs, there are also codes deriving from Wenger's (1998) CoP conceptualisation. Thus, CoP codes were: mutual engagement, joint enterprise, and shared repertoire, as they are the constituting elements in a CoP (Wenger, 1998). Coding interviews and observations in this manner enables a study of CoPs between the design manager and other organization members. In combination with the coding of IC this paves the way to analyse the relation between IC practice and CoPs. The findings sections present, based on CoP coding, the three most significant attempts made by the design manager to engage in CoPs and, using Nicolini (2012) phrasing, share practices.

4. Findings

First, the analysis shines light on the IC practice from a management and design management perspective. Next, the study explores the role of CoPs for IC practice and IC value creation. Finally, the analysis explores how IC practice and the value of IC practice is negotiated differently depending on the attempts to engage in CoPs.

4.1 The process of IC practice and IC value creation in the SME from the perspectives of the CEO and the design manager

To the CEO, employing the person with a master's degree in design management is a part of a strategy to bring the company to the next level of development with a highly-increased turnover by among other things integrating design management approaches to the organizational practices, which he states in the table below.

Table 1: Quotes from the CEO and the design manager about design management practice in the SME. Structured by author as tangible and intangible IC practice assets.

Design management as: Quote(s) by:	Tangible IC	Intangible IC
CEO	Product quiz Persona project involving a cardboard figure of the typical end consumer User samples (interviews, questionnaires)	"We will implement this design thinking and always take the view of the end user. We are going to move away from the traditional mass communication of products to developing products with the end users, and thus we want to create needs that the end consumer did not even know that (s)he had."
Design manager	User samples (interviews, questionnaires) Product DNA Product quiz Persona project involving a cardboard figure of the typical end consumer Puzzle to gather knowledge on the end consumer Creative work with sales persons	"We have enough chairs in the world, so the designer will look behind the product and consider the values of the product, the person using it and the problem [that the product solves]." "[Design management is] understanding the end consumer and being at the deep end for a long time." "[Design management is] exploring the values of a product in order to sell more of it."

With the quote, the CEO outlines how IC practice is intended to entail intangible knowledge about the end consumer buying the tangible products of the company (i.e. convenience food). To the CEO, implementing a design management strategy, or "design thinking", involves the development of all organization members having a work practice that is always the most well suited to creating most value to the end consumer buying and consuming the products. This should be done by integrating the intangible knowing from design management in the practices of organization members. The value of IC practice is thus intended to be related to products better appealing to customers with an increased sale thus. As the CEO states, the intangible

knowing will be mediated or communicated in the organization via tangible tools such as quizzes for the organization members to learn more about the end consumers and cardboard figures to represent who the customers are.

Changing the practices of all organization members is thus a matter of developing IC in the sense of the dynamic IC view considering IC an intangible asset that is more than abstract knowledge, namely a system of knowing activity (Marzo and Scarpino, 2016). To the CEO, hence, it is important to increase the level of IC and changing the way of knowing among organization members by basing their activity and tangible output on intangible knowing about the end consumer.

This new strategy should be seen in the following light: By the foundation of the case organization, it was considered a "craft firm" employing mainly blue-collar workers. Hence, the attention in the company has mainly been paid to the tangible output: convenience food. In order to comply with this historic tradition and cultural trait, the intangible knowing is mediated through tangible objects such as products quizzes and cardboard figures.

The design manager is responsible for developing this new knowledge and changing practices accordingly. Following the design manager, the intangible part of design management is strongly connected to product development by focusing on, for instance, the value of a product and not solely on the product itself. This IC practice reflects IC as intangible and related to the tangible products.

Considering the quotes from the design manager to be new to the organizational practice, the tangible part of design management is formed by tools to both create knowledge about the end consumer and to share it with other organization members in order for them to integrate the same knowing about the end consumer in the activities constituting their practice. Using questionnaires and interview guides is thus a way to generate knowledge about the end consumer in terms of norms and values and the end users' problems that the company's products may solve. By assessing the data, the design manager is to develop intangible knowing about the end consumer. Using the so-called product DNAs, products quizzes, cardboard figures, and puzzles is a way to enable other organization members to achieve the same knowing about the end consumers and achieving this in the activities that form their daily practice.

Hence, the study finds that the SME intends to create IC value with knowing about abstract end consumer phenomena to be integrated in organizational practices of producing the tangible output.

4.2 Attempts to engage in CoPs for IC practice and IC value creation

The design manager is expected to be the key driver in the development of IC practice by sharing knowledge to change activities and practices throughout the organization towards the end consumer. The analysis of the data with attention to CoPs in the case shows three attempts by the design manager to engage in CoPs with other organization members, which is elaborated in the following. As Nicolini (2012) suggests, the central point when studying CoPs is not to judge on the CoP based on Wenger's (1998) criteria. Rather the central point is the shared practice, which the analysis shines light on to scrutinise how CoPs and shared practices influence the process of IC value creation.

First CoP attempt: The innovation department

The design manager is formally organized in the innovation department, which also consists of an innovation manager and a product developer. They are responsible for the innovative product development process and they manage the intangible-tangible interdependency of product development. With regard to the practice of the design manager and the value-adding intangible character to the tangible products, they claim the following:

> *Jill [the design manager] knows how to draw and analyse our complex processes [in product development]. (Quote product developer)*

> *The design manager will be the one to ask critical questions and be the devil's advocate [in product development]. (Quote innovation manager)*

From their point of view, the value of the intangibility is added in the practice of having process overview and being able to ask critical questions when developing products. As the product developer and innovation manager are chef and baker by education respectively, their quotes point to their sharing and creating new IC practices with design management that ads intangible knowing to a practice highly occupied with a tangible output. As their shared practice and CoP like relation is a result from their formal organising in the same department rather than an informal engagement, one may say that it is not a CoP. Of importance, however, is their shared practice, even if it is not informal as called for by Wenger (1998). Their sharing practices points to their knowing how to combine practices as the basis of value creation.

Second CoP attempt: The "food pilots"

The concept of "food pilots" has been introduced in the organization to integrate the knowing from design management in other organizations members' activities. One way to do this is to involve "food pilots" in data collection about end consumers to a new product. The "food pilots" are managed by the design manager. Aside from the design manager, the product developer from the innovation department and four blue-collar workers also participate. The participation of sales persons was also planned on; however, they did not have the time to join.

Observing the activity on that day began in a meeting room with the design manager presenting the products and questionnaires used to collect data about the product and the end consumers. The food pilots are to give test samples to people in the shopping street in the nearby city centre and ask questions about the product's qualities and the person in question.

In doing so, the design manager and the food pilots have made attempts to share practices and to fulfil the criteria of having a CoP by developing a shared repertoire, mutual engagement, and joint enterprise (Wenger, 1998). Further, the concept of meaning negotiation (Wenger, 1998) is observed in the practice of the design manager and the food pilots by the following activity:

> *Before going to the city centre, the design manager presents the products and the questionnaire to the food pilots. Questions and comments are regularly posed by the food pilots. Interestingly, the questions are often answered by the product developer, who also complements some of the points of the design manager. (Vignette from observation notes).*

Thus, the CoP among the food pilots and the design manager is promoted by the product developer being a knowledge broker enabling the crossing of boundaries and the introduction of tacit knowledge into other CoPs (Wenger, 1998). Referring to the day of data collection among the food pilots and the innovation department, the product developer utters:

> *Yes, on that day the designer and the food pilots met for the first time a whole day, and my strength was that I know them personally. Therefore, I know how Mike needs to get things explained and I know how Di needs to get things explained to understand them. Afterwards, the designer told me how happy she was about how things went on that day, things were just flowing. And I agree with that; it was a really good day. (product developer)*

Having shared histories (Wenger, 1998) with the blue-collar workers as a former member of the formal production department and current member of the formal innovation department enables the product developer to hold multi-memberships of both two CoPs. Thus, as Nicolini (2012) would phrase it, she knows how to interact with different "knowings" and helps to shares practices. This paves the way for developing IC practice as an asset in the daily activities and practices of the food pilots.

However promising, among the food pilots are, besides the design manager and the product developer from the innovation department, employees from the production who are blue-collar and wage-earning employees. Thus, they have allocated paid working hours to be a food pilot and attend the workshop. The idea, though, was to integrate members from the entire organization in the food pilot project to create knowledge about the end consumers throughout the organization and integrate the intangible knowing about the end consumers into all practices and knowings of the organization. Despite these intentions, no white-collar workers attended. Thus, the attempts to create shared practices and CoPs with the food pilots is only enabled by the formal structure. This limits the IC practice in the SME. As the study in this section shows, a CoP is a place to develop

IC practice. However, it also finds that in this case, it only emerges from the formal structure, as this is the case with the innovation department and the food pilots.

Third CoP attempt: The sales persons

As stated above, no sales persons joined the food pilot group. Instead, an an attempt was made by the design manager to share the IC practice with the sales department when conducting a one-hour workshop for the sales department.

The workshop takes places four months after the workshop with the food pilots, and the data from that day is among the data that has been processed to develop a so-called persona representing the typical end consumer of a given product. The aim of the workshop, as part of the organizational strategy, is to let the sales persons know who the end users are and what they are like. This is to help them sell the products.

> *The design manager introduces various artefacts, and she structures the workshop as a quiz, asking the sales persons to physically create the end consumer as a paper figure based on questions posed by the design manager about the characteristics of the persona related to the given product. The sales persons had to guess the persona of a new product by building a physical figure of the typical end consumer. It seems the sales persons answer questions related to persona characteristics wrong. […] A sales person questions the reliability of the answers of the end users. (Vignette from observation notes).*

The sales persons are thus doing the quiz as intended by the CEO and design manager as a way to integrate abstract knowing about the end consumer in their practice. The study finds that the workshop is an attempt to develop a CoP and share knowings and practices with the aim of integrating the knowing from the design management practice into the sales practice. However, many features from a CoP are missing.

First, there is no knowledge broker attending the workshop. Next, there is to some extent mutual engagement when they are doing things together and there is an attempt to develop a shared repertoire, since they are working with tools and artefacts (Wenger, 1998). However promising, they are only working for one hour, and this might limit the development of a joint enterprise in terms of achieving negotiated enterprise, mutual accountability, interpretations, rhythms, local response (Wenger, 1998).

The design manager and sales persons seem to have divergent assumptions about the characteristics of the end user. Thus, one of the things to negotiate would be the end user, since a sales person also expresses doubt about the trustworthiness of the answers of the end users. In the sharing of practices, thus, the mutuality is important, and this may be underestimated by the CEO and design manager in the process of creating new IC practice. Rather than sharing practices, the study finds that is it mainly the design management practice that is shared with the sales persons.

4.3 The value of IC practice negotiated in CoPs

Initially, the study found how the development of knowing about the end consumers in all organizational practices is expected to be of economic value. In this section, the analysis explores to what extend other managers negotiate the value of IC practice.

Table 2: Managers' quotes on design management

Organization member	Quote on design management
Innovation manager	"Once we know how to integrate the knowledge about the end consumer into the organization, we become rich."
Production manager	"We do not need the persona project to focus on the end consumer; I think the people in the production department know who they [the end consumers] are, but creating knowledge across the organization is good."
CPO	"We just need to agree that we always have to focus on the customer, but we do not need design thinking to administer it. That may simply be common sense."
CEO	"Now Bob [CPO] is more positive [towards design management] because he sees the results on the bottom line."

Comparing these quotes with the findings above regarding the interactions between design management and other organizational units, the study finds that where there is interaction to share practices, there are positive

negotiations of the value of design management. For instance, the innovation manager utters a positive view on the value of IC practice of integrating knowledge about the end consumer in the organization.

The table shows how the production manager and the CPO negotiate the value of the IC practice differently. In continuation, the study suggests that while the production manager and the CPO negotiate the value of the design management negatively, it is not due to negative evaluation of knowledge about the end consumer to the organizational practice. Rather, the production manager expects the knowing of design management to be already part of the knowing of the practices of the employees in the production. The CPO, on line with that, considers the knowing of design management "common sense" rather than a knowing.

Thus, the CPO and the production manager acknowledge the importance and value of having practices that are suitable for accomplishing activities in a way to meet the needs and demands of the end consumers. They acknowledge the value of the IC practice, but do not consider it a knowing. Rather, they consider this part of existing practices in the organization and not a practice that is founded design management as a specific knowing itself. Their view reflects a static view on IC practice and IC measurement practice, as their opinions point to the value of IC practice residing in all practices: IC practice is thus solely a sub-practice to a primary practice as e.g. production practice and the value of IC practice can only be measured as a sub-value to the value generated by the core practice of e.g. production practice.

In the table above, the CEO acknowledges this co-existence of different views on the intended value of design management, but underlines that, for instance, the CPO has over time become more positive, as he sees the results on the bottom line. However promising, the positive attitude of the CPO derives from positive results on the bottom line which confirms his static value evaluation of IC practice and this static IC measurement practice. Consequently, this study finds that despite great attention to develop a practice considering IC an intangible asset, the case organization has made no attempts to develop IC measurement practices with respect to the practiced dynamic IC view. Regarding the production manager and the CPO, the CoP theorisation would call for more interactions and shared practices between them and the design manager to negotiate the relevance and thus value of design management for their practices. As Wenger (1998) states, the aim is not heterogeneity, rather an exploration of the complexities of creating new practices with insights from other practices and knowings. This is a way to promote both IC value and IC practice.

5. Discussion

By conducting an in-depth single case study of an SME and by applying a practice theoretical approach, the study explored and gained new insights on IC value creation in practice. As it is a single-case study, knowledge from it cannot be generalised statistically, but it can be generalised analytically (Yin, 2014). Thus, both scholars and practitioners concerned with IC practice in SMEs aiming at developing IC practice and integrating new abstract knowing, from e.g. design management, may learn about the complex character of the value creation process of IC practice and the relation to CoPs.

For instance, the study found how IC is practiced as abstract and intangible knowing about values, norms and problems related to customers and products when manufacturing tangible products to achieve economic value. A further important finding is that this dynamic IC practice exists together with a static IC view. In this way, the study gains insights in to a case that moves away from what management scholars (e.g. Irgens, 2014) would consider the positivistic-rooted traditional management by also practicing management informed by the humanistic management approach, paying attention to more abstract phenomena such as customer values, norms and needs.

Creating a dynamic IC practice relies on turning the abstract knowledge asset, in this case design management, into a system of knowing activity, as suggested by scholars (Marzo and Scarpino, 2016). From a CoP perspective, this is done by establishing CoPs and sharing practices and knowings across formal organizational units. The study finds that IC is created in CoPs both in terms of developing IC practice and IC value. However, CoPs do not occur solely due to informal systems and low hierarchies that characterise the SME and the current case. Hence, the study finds that more efforts need to be undertaken to cultivate CoPs. A limitation of the study, which thus entails further research potential, is if enough has been done to cultivate these. Further, if some managers do not acknowledge the intended IC practice as a knowing as the CEO does, this may point

to lack of communication and interaction about the motivations of the CEO to implement design thinking in all organizational practices.

In the current case, IC is intended to be practiced as an intangible asset understood as abstract knowing integrated in practices. This, however, is a challenge to an SME that historically has paid attention to the tangible output. With respect to this cultural trait, much is done to turn the abstract knowing into tangible mediators of the knowing, e.g. product quizzes and cardboard figures. Nevertheless, as organization members and managers doubt the "value" of the abstract knowing of design management, one may ask, if this attention to turning the intangible into something tangible renders the value of the intangible knowing. In continuation, the study finds that lack of dynamic IC measurement practices promotes the view on IC not being an intangible asset.

6. Conclusion

An SME can develop value creating processes with IC practice as an intangible asset by combining abstract and intangible knowing about the end consumers with knowing about the tangible organizational output. The current case demonstrated that this can be done by integrating abstract knowing from the arts and humanities as, for instance, design management. This knowing can be integrated in the organization when organization members share practices and engage in CoPs with room for mutual meaning negotiation, which can be promoted by knowledge brokers. Developing IC practice in CoPs is a way to both integrate the abstract knowing in other practices, but also to increase the value of IC practice, as engagement in CoPs is a way to create new IC practice and to negotiate the value of IC practice. However, there are pitfalls to this development. First, it is important to share practices in a mutual engagement. Second, another pitfall concerns the tangible-intangible interplay of IC practice, as, one the one hand, communicating the intangible and abstract knowing of IC practice via tangible mediators as quizzes and figures promotes IC practice. On the other hand, though, this tangibility may render the intangible dimension of IC practice making it seem irrelevant and invaluable as a knowing. This limits both the organization-wide development of IC practice and the development of new ways of measuring IC practices reflecting the very dynamic and processual nature of IC practice creation. Rather than aiming at finding new IC measuring methods, the paper suggests that organizations may benefit from dialogue and negotiation among organization members as a way to explore the relation between IC practice and IC value to a given organizational practice. Third, CoPs do not emerge themselves, even if this may be expected in an SME with low hierarchies and informal systems. Rather, in the SME, IC practice development needs managerial attention both in terms of communication and formal structure to support sharing of practices in mutual engagement.

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