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Abstract: The paper discusses challenges of innovation management that relate to limitations of the innovation concept to match the vast difference in the organisational and institutional contexts in which the concept is applied. Even though the concept of innovation is no longer restricted to manufacturing firms operating on the market, the concept has not accordingly been developed to match the specificities of the many new contexts of application. The paper particularly focuses on the OECD-definition and discusses its shortcomings on the basis of empirical studies in two sectors that have only recently drawn the attention of innovation research: the operational service sector, and the public sector. It is argued that we need to address fundamental meta-theoretical questions for the concept to be useful to innovation managers. Lastly, it is argued that we need a differentiated, context-specific rather than a generic concept of innovation.

Keywords: Innovation concept; innovation management; policy; operational services; public sector.

Introduction

These days innovation is important strategic concept in all sectors of the economy, including the public sector (see e.g. Mulgan and Albury, 2003:2; Considine and Lewis, 2007:581; Moltesen and Dahlerup, 2008: 147; Bason, 2007). Thus, innovation is not restricted to manufacturing or knowledge intensive business services, even though these are the sectors that innovation research traditionally has dedicated most attention (Drejer, 2004; Koch and Hauknes, 2005:4; Toivonen et al, 2008; den Hertog, 2000). The scope of areas in which innovation is thought to be relevant has expanded over the years to include e.g. service innovation, public sector innovation and third sector innovation. However, the concept has only to a limited extent been modified in accordance with the very different contexts in which it is meant to play a role. Generally, there has been little critical analytical reflection on the usage of the term, and the implications of the concept appearing in both research, management and policy discourses.

The dominant definition of innovation, namely the Schumpeterian inspired OECD definition presents innovation as planned and deliberate changes in a market context. Innovation is defined as: "the implementation of a new or significantly improved
product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations" (OECD, 2005:46).

This definition is rarely discussed in innovation research, even though a large number of organisations do not have deliberate and systematic innovation activities, or do not operate at the market. Organisations may still develop new products and processes even if they do not think of them as innovation. However, the development of new practices and the creation of value may differ so vastly between contexts, such as public, private and social sectors, that we may need new concepts of innovation. In this paper, we present examples of practices that illustrate how we need to integrate specificities of these different contexts into the innovation concept. Since the concept of innovation is to be found everywhere it is time to discuss what the concept actually shall do and for whom.

The paper unfolds a discussion on the basis of two empirical tracks: studies of SMEs in the operational service sector, and a case study of a public sector organisation. The studies show that operational services and SMVs innovate in very different ways than those described in innovation theory. The study of the public sector elucidates that traditional innovation concept have shortcomings in regards to embracing the democratic and political aspects of organisational practices (Langergaard. 2011).

The aim of the paper is not to offer new concepts of innovation but rather to initiate a reflection and debate on current concepts of innovation. It is also important to mention that the innovation concept is highly ambiguous and that the number of different definitions of innovation makes it impossible to address all aspects of the concept in this paper. We shall argue that we need to address fundamental meta-theoretical questions about the innovation concept if it should aid innovation managers to work with core tasks of their respective organisations. A more systematic discussion of the innovation concept and in particular the implications for management requires that we dare face some basic philosophical questions about the theory and concept of innovation. We must be clear on questions about what an innovation theory and concept is, what it does, and why we need it. Thus we raise the following question:

Research question
How do innovation practices in operational services and public sector organisations challenge the OECD definition of innovation? How could a modified innovation concept support innovation management in the organisations studied?

The concept of innovation
Innovation literature is notable for its lack of discussions and reflection on the innovation concept. Rather, we see the innovation concept more or less directly adopted into new contexts without reflection about how such a concept of development fits into and affects the practices of these contexts.

The concept of innovation has since early conceptions been linked with economic development. The history of the idea of innovation goes as far back as to Adam Smith and Marx who were concerned with how the development of new technologies where shaping the economy and society (Lundvall, 2006). Schumpeter later developed an
economic theory, which held technological competition to be the driving force of economic development (Fagerberg, 2007:14-15). Some argue that the concept has lost the connection to economic development that is explicit in the Schumpeterian theories (Drejer, 2004). Nevertheless, innovation theory has maintained certain core research interests, namely to uncover barriers and drivers of innovation (Becheikh et al, 2007; Fagerberg, 2005; Tidd, Bessant and Pavitt, 2001). The reason is that innovation is considered pivotal to the competitiveness and efficiency of firms (see Fagerberg, 2007; Tidd, Bessant and Pavitt, 2001). The link between the economic performance of businesses and their innovative capability makes innovation a central concern for management (Tidd, Bessant and Pavitt: 2001:xi). This leads innovation theory to a predominant interest in how innovation takes place rather than what it is. With this rather one-sided focus on barriers and drivers, the focus on the concept of innovation as such has been pushed aside as has the managerial and societal implications of certain ways of defining innovation.

**Innovation in services**

The field of innovation research has, however, broadened considerably since the time of Schumpeter and the term innovation is now also used in relation to services, both public and private (Gallouj and Savona, 2010:27-29; Miles, 2005:435; Halvorson et al, 2005:2).

The few challenges to the Schumpeterian concept of innovation are found in service innovation research, where researchers discuss the similarities and differences between innovation in manufacturing and services (Drejer, 2004; Gallouj and Djellal, 2010, Howells, 2010; Gallouj and Savona, 2010:27). Some researchers suggest that we need a whole new vocabulary that liberates itself from a product-dominant logic, when we talk about services (Vargo and Lusch, 2008). Others have worked with formulating context-specific concepts of innovation (Drejer, 2004). This has led to alternative innovation concepts such as *ad hoc innovation*.

Concepts like *ad hoc innovation* (Toivonen, 2010; de Jong and Vermeulen, 2003; Gallouj and Weinstein, 1997) and *bricolage* (Fuglsang, 2008) signify the close connection to daily practice. Innovation activities are closely integrated in the daily practices rather than organized as projects or in R&D departments (Fuglsang, 2008). Development is from this perspective rarely articulated as innovation. It is argued that specific properties of service activities such as the analytically ‘fuzzy’ nature of their output make it difficult to measure them by traditional economic methods and to detect improvement at a qualitative level (Gallouj and Weinstein, 1997:537).

One of the few studies in operational services show that these particular services challenge some major assumptions in service innovation theory, such as the idea of closeness to customer and uniqueness of each service (non-standardization). Often the customer is not present by the delivery of services such as cleaning and security services. Further, operational service firms often use a strategy of standardisation in order to bring down costs in order to be competitive on markets with high competition on price (Sundbo, 1999). This show how different sectors face radically different conditions for innovative activities, and that we may need to differentiate even further than between products and services.
In a policy context, however, innovation in services is usually defined with typologies based on the OECD definition. The Danish strategy for innovation in services for example refers to the OECD definition of innovation (Forsknings- og Innovationsstyrelsen, 2008). This definition is a tool for statistics and for studying innovation activities quantitatively, which excludes gradual changes in everyday practices that are not easily measurable (Fuglsang, 2008:2).

**Public sector innovation**

Even though research in public sector innovation has exploded in scope within recent years (Borins 2006; Grady, 1992; Becheikh et al, 2007), the field is still very fragmented. We find almost no discussion of differences between the public and private sector and of what it means to be innovative in this political, democratic context. The few places where differences are mentioned (Hartley, 2005; Moore, 2005) they lead to no consequences for the definition of innovation. In contrast to social innovation research that specify the ‘social objective’ (cf. Austin et al, 2006; Dees, 1998; Mort et al; 2003), we find no serious attempts to define a sector specific concept of innovation for the public sector, even though some argue that we need to redefine the concept in order for it to better fit the context (Jæger, 2009).

Most public sector innovation definitions are presented as typologies of innovation (Bason, 2007; Koch and Hauknes, 2005; Halvorson et al, 2005; Hartley; 2005; Windrum, 2008). The typologies contain similar objects of renewal as the OECD definition (products/services, organisational/administrative, delivery innovations) but some add policy innovation (Windrum, 2008:10), conceptual innovation (Windrum, 2008; Hartley, 2005; Halvorson et al 2005) or democracy innovation (Bason 2007; Hartley, 2005). These types of innovation appear as add-ons that do not challenge the innovation concept or innovation theory as such. The lack of theoretical reflection within innovation theory is a problem because the concept is both a policy concept, a scientific concept, and a concept that guide managerial practices.

**Empirical research design**

Our empirical studies are stem from two independent research projects that were executed in two different areas, namely in SMEs in operational services and in a public sector organisation. The studies in the public sector were part of a Ph.D. project, and the study of SMEs was parts of a research project in operational security services, called the SOS-project (Service-Optimisation in the Security Business) carried out by the Danish Institute of Fire and Security Technology in collaboration with The Alexandra Institute. On the basis of the results of these two independent projects, the authors decided to combine and compare the challenges arising in connection to the innovation concept in these different contexts and take up a discussion of the shortcomings of the existing concepts.

The SOS-project ran from 2010-2012 and had the aim to develop knowledge to support the development of ICT-based solutions in the security business specifically, and operational services in general. The intention behind the project was that ICT-based solutions would lead to innovation in the form of new processes, products and business models. The methodology of the SOS study was both qualitative and quantitative. Semi-structured interviews (cf. Kvale, 1997) were supplemented with focus groups and participant observation. Further, approximately 11 in-depth
interviews and six focus groups were carried out, besides a quantitative research among 70 SME’s. The project included five security companies as primary cases throughout the whole period, besides on-going validation among 23 companies within the operational service sector.

The Ph.D. project ran from 2008-2011. It included an in-depth qualitative case study based on written material 14 qualitative semi-structured interviews about the innovation work in a Danish public sector organisation. The study looked at two different innovation projects and on the organisational frame for the innovation activities. The focus was on how the innovation staff conceptualised innovation, the users, and the role of the public sector in relation to the innovation activities (see Langergaard, 2011 for details). The study figured in the Ph.D. thesis in a discussion of the conceptual and normative specificities of innovation in the public sector.

Experiences from our empirical studies
Our empirical studies show that innovation activities are so varied and multifaceted that the current definitions have serious shortcomings with regards to capturing these developments. Further, they show that current innovation concepts are difficult to translate into organisational contexts that differ from the ones in which the concepts were originally defined. This poses major problems to innovation managers when they attempt to use the innovation concept as a guiding principle for development activities in their organisations.

Innovation in operational services
Our studies in operational services show that the dynamics of innovation as well as the conceptualisation of development differ vastly from current innovation concepts.

The Danish security business is composed of a large number of small and medium sized enterprises and few large companies. Very few of the service companies have R&D departments or any systematically organized innovation activities. Research shows that this seems to be the case among small enterprises in general. The main reason for this is that overall focus of the companies is on their day-to-day operation due to hard price competition.

Insights of the SOS-project:
- Operational service firms do not in general take risks in relation to development due to limited funds.
- Most strategic considerations take place in the head of the owner-manager and are not implemented at an organisational level.
- Development is integrated into the daily activities of the companies and in the encounters with costumers rather than in systematic development projects.
- Innovation is not a used concept and few owner-managers recognize it as part of their daily practice.

As a consequence of the above we may simply risk to exclude some developments that fall outside the definitions of innovation and we may also risk including activities, which may fit the definition but may not be the most desirable developments. The concept of innovation ends up being a restriction when research projects are implemented, since the terminology of the projects proposals do not fit the given reality. It is a challenge for innovation practitioners or project managers
when a policy concept is uncritically transferred to be a concept of practice. And this is very much the case in relation to project funds in Denmark that favour innovation projects.

**Innovation in public organisations**

The public organisations in Denmark have as something relatively new started working with innovation. This is encouraged by an increased focus on innovation from political quarters and the formulation of a strategy for public sector innovation (Rådet for Teknologi og Innovation, 2008). The study conducted in the Danish public sector organisation showed that the innovation staff faced certain challenges of incorporating concerns about due process and citizen rights into innovation activities. The organisation was a public authority and concerns of due process were thus pivotal to the core tasks of the organisation.

Insights from the public sector innovation study:

- Innovation was a concept that was used in development and user-involvement activities
- The innovation staff wished to include concerns for rights and due process in the innovation work but found no support or guidelines in existing concepts and methods of innovation and user-driven innovation where they looked for inspiration.
- Innovation did not support development that held due process, rights or citizen competence as pivotal aspects of the practices of the organisation.
- Citizens were conceptualised and studied as users with 'service experience' rather than as holders of rights.
- The objective of innovation was very difficult to define in a way that was integrated with the core practices and mission of the organisation.

The general conclusion was that the existing concepts and theories of innovation are unfit for the public sector in light of its responsibility to deal with common societal concerns, citizen rights and democratic claims to legitimacy. Improvement or development in a public authority context cannot be reduced to service experience or customer satisfaction (Langergaard, 2011). The problem is that the current understandings of innovation has not been detached from market thinking and thus risk encouraging a development of de-politicisation and commercialization of the public sector by conceptualising it first and foremost as a service provider rather than a political institution (Langergaard, 2011).

**Discussion: Concept or concepts of innovation?**

So far we have presented different aspects of the innovation concept and our results from two very different studies. The reader may begin to wonder how these different aspects are related, and if they can be combined in a common point all. But the point is exactly that the concept is multifaceted and that we must clarify the different aspects of innovation as the conditions of development in different sectors are so very different. By looking at organisations, both in the private and the public sector, as objects for innovation research we detach the innovation concept from its practical implications; that innovation basically is about creating something new and better. But, this always takes place in certain contexts that determine what improvement
means. Thus, the relationship between innovation and improvement needs to be clarified. The empirical findings lead us to address fundamental issues of the innovation concept.

We distinguish between two different levels of the concept. One is the level on content (what is to be defined as innovation?), the other is at the level on concept (what kind of concept are we talking about and what is its function in theory or policy?).

The concept
We start by addressing the concept of innovation. Different attempts to clarify the concept reveal the ambiguity of the concept. Some authors emphasise that the concept should reflect how development processes actually take place (Fuglsang, 2008) by arguing that the OECD definition only includes deliberate changes or implementation of something planned, so that it misses out on how changes occur. Others emphasise that the concept of innovation is an analytical concept or tool. It is not meant to be a descriptor of an objective reality or a generic category of behavioural dimensions in an empirical reality. Here the analyst decides what counts as innovation (Koch and Hauknes, 2005.7). What is still unclear is whether the authors see the concept as having only an analytical (scientific) dimension, or if they also see it as having a pragmatic, policy or management dimension, i.e. as a guiding principle for action. In both research and policy on innovation there is a tacit assumption that innovation is desirable as such. This can be traced back to the idea of innovation as a factor for increased competitiveness (at the micro-level) and economic development (at the macro-level) as mentioned above. This takes the concept from being an explanation for growth or competitiveness to becoming something desirable that managers should strive for. But this transition leaves the concept ambiguous and leads to difficulties when we do not modify the concept to fit concrete contexts of practice in which development is not always about growth or competitiveness.

We shall not discuss the schism of the concept between policy and research (see e.g. Miettinen (2002) for an analysis of the concept of innovation systems) but rather insist on distinguishing between the pragmatic and the analytical dimensions of the concept. The problem occurs when same concept used for making statistics and policy is guiding innovation activities and management in organisations. The case studies show that the OECD definition has no resonance in the organisations of the operational service sector and that it misses out on important aspects of the activities in the public sector. It is, however, possible to make statistics on innovation based on the OECD definition, even if it has no resonance in the organisation. This does not ensure however, that the changes that are measured as innovations are the changes that make relevant improvements within the certain domain of the organisations’ operations. This is a severe limitation to this generic innovation concept. Today operational services and public sector organisations are encouraged to innovate and are led to believe that innovation can improve their organisational practices. Thus, the dominant definition of the OSLO manual becomes guiding for practices and function as a framework for innovation work in some organisations and thus also shapes reality (not only measures it). This sets some requirements to the content of the concept.

Innovation as improvement – better practices and outcomes
In the OECD definition innovation is characterised as new or significantly improved products, services etc. As mentioned, Drejer (2004) identified the concept specificity of innovation as changes that make an economical difference. But if we distinguish between different domains of innovation, such a definition is only relevant to a certain limited group of organisations. When innovation is adopted into new contexts, a relevant notion of improvement is not synonymous with the creation of economic value. Improvement may however be incremental, as when a young guard starts to regularly use his iPhone to solve certain work tasks in order to make it easier and faster to carry out his functions. This kind of change may be important to the organisation, but the economic outcome may not be easily measured and it is not a planned change. If we are to have a generic concept of innovation it must be a minimal one – change that aims at improvement. But the object of renewal and the corresponding conception of value that determines what is actually an improvement must be context specific.

This leads us to the typological structure of innovation definitions. Innovation is renewal, but always something that strives for creating something new and better. Creating and renewing for something better can only be done within a certain context or domain (cf. Paulsen, 2012). This results in severe limitation to the numb application of typologies to which more and more new types are just added to fit new contexts. It hollows out the context and focuses only on the object of renewal, and not the innovation itself (namely what does it mean to initiate or create a positive development within a certain context). Innovation means to renew, and that is the generic core of the different innovation concepts. But the rest has to be context specific in order to make sense. Why is this so important? Because this elucidates that the skills, knowledge and specific activities that may result in something new and better are different and that management of innovation is about recognizing this.

**Conclusion**

We have now reached the point of our inquiry when we are able to answer our two questions:

*How do innovation practices in operational services and public sector organisations challenge the OECD definition of innovation? How could a modified innovation concept support innovation management in the organisations studied?*

From the discussion and analysis above it has become clear that the studies lead us to question the following dimensions of the OECD definition:

- It needs to be clarified if the innovation concept is mainly a retrospective and analytical category that has a place in statistical and scientific studies or if it should also be a concept that is useful to managers and thus useful for guiding practices
- In both cases we need a differentiated rather than a generic concept of innovation
- The innovation concept must take the core tasks and central values and skills of different organisational contexts explicitly into account
- If the concept should be useful to managers is has to be closely linked to knowledge and skills that are specific to the domain or sector in which developments take place
These conclusions have implications for both practitioners, researchers and policy makers. The next question is how a modified and context specific innovation practice could support management. The answer is that a more domain or context specific innovation concept is open to adapting to the respective core missions, skills and domains of certain organisation. In a school, for example, developing improvement requires knowledge of teaching, pedagogy and facilitating learning and reflection and practices that directly integrate these dimensions in innovation work. Managers thus need to formulate innovation in very context specific ways, and this means integrating mission and goals of the organisation into innovation activities, rather than blindly seek to create new products, services, marketing methods or whatever a definition of innovation contains. In operational services the overall purpose of development is not innovation per se but efficiency and competiveness, it is crucial that practitioners bases their work on the reality of the SMEs and their main challenges – which is not to get the good ideas, but to commercialize these ideas. This supports an integration rather than a decoupling between the mission and goals of organisations and their innovation activities.

The context-specific approach to innovation now also shows that even as a statistical tool the OECD definition has shortcomings. When activities, goals and values differ between organisations in different sectors, relevant improvements also differ which makes a generic measuring device problematic. The public sector for example does not become better or more legitimate by providing services first and foremost, but rather by improving democratic decision-making processes and by securing political, civil and social rights of citizens.

References


