Innovation incentives or performance measures for improved innovation practices? The case of scale-intensive service firms

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Structured Abstract

Purpose: Innovation practices that are client-centric or open paradoxically require simultaneously increased individual autonomy as well as increased managerial control to guarantee alignment between on-going activities and organizational goals. Innovation management theory emphasizes management control and explicit innovation strategies as prerequisites for innovation performance, while theory on service innovation emphasizes individual autonomy and incentives to foster open innovations. In this paper we explore this tension by addressing the research question: How are innovation practices incentivized and controlled to ensure sustained innovation performance?

Design/methodology/approach: We follow an explorative research design involving 25 semi structured interviews within five large scale-intensive service firms. Scale-intensive service firms are strategically sampled for this study because these firms experience tension between open service innovation characteristics and efforts to standardize.

Originality/value: We show how innovation practices transcend the individual level and by and large are collective efforts that also involve the mobilization of external resources. Incentives observed have an effect on individual behaviour while performance measures to a larger degree cater to the collective level. We present two propositions for further empirical investigation.

Practical implications: The findings suggest that individualized incentives do not suffice to motivate, mobilize and direct the required collaboration and collective effort needed to ensure sustained innovation performance.

Keywords: Incentives, innovation practice, performance measures, management control, innovation performance.

Paper type: Academic Research Paper
1 Introduction

According to Prahalad and Ramaswamy (2004) consumers today have more choices of products and services than ever before, but they seem dissatisfied. Firms invest in greater product variety but are less able to differentiate themselves. As competition intensifies and profit margins shrink, managers are under overwhelming pressure to enable innovation. Extant theory is however not consistent in the description of how innovation practices that ensures sustained innovation performance is created. Kahn, Barczak, and Moss (2006) are normative and suggest that a clearly defined innovation strategy is a prerequisite condition for high performance for innovations. Foss, Laursen, and Pedersen (2011) on the other hand suggest that incentives are a prerequisite for ensuring sustained innovation performance by fostering an innovative organizational practice. The reason for the emphasis on incentives is linked to individual autonomy. The increasingly open innovation activities intensify the collaborative effort between autonomous employees and the involved external resources.

Practice comprises multiple people and their activities, being a social phenomenon (Schatzki, 2012). Schatzki, Knorr Cetina, and von Savigny (2001, 2) explains that “practice theorists conceived of practices as embodied, materially mediated arrays of human activity centrally organized around shared practical understanding”. The understanding of practices is inspired by organizational and management studies (Brown and Duguid, 1991; Jarzabkowski, 2005; Johnson, Melin, and Whittington, 2003; Orlikowski, 2002) and sociological theorizing about the character of society and human action (Schatzki et al., 2001).

Accordingly, fostering individual autonomy and increased managerial control to ensure alignment between on-going activities and organizational goals are contradicting. This paper aims to build a bridge between these discrete research streams and extend them with insight from Foss et al. (2011) by addressing the following research question: How are innovations practices incentivized and controlled to ensure sustained innovation performance?

In this paper our aim is to contribute in filling this literature gap by exploring the practice of innovation in one specific subset of services: Scale-intensive services. Scale-intensive services are standardized services produced at a large scale mainly by large firms. Examples are bank services, insurance services, telecommunication services and logistics services (Pavitt, 1984).

2 Theory

The innovation management literature (Froehle and Roth, 2007; Kahn et al., 2006) and on the Product Development and Management Association (PDMA) certification work (PDMA, 2006, 2012), claim that one important dimension of service innovation management is strategy. Innovation strategy refers to an articulation of the role of innovation in achieving the organizational aims (Cooper, Edgett, and Kleinschmidt, 2001) by aligning the overall business strategy with innovation decisions (Menor and Roth, 2007).
It has also been emphasized that innovation is becoming increasingly open (Chesbrough, 2011; Chesbrough, Bouquet, and Barsoux, 2011; Vargo and Lusch, 2004). Chesbrough (2003) introduced the concept of “open innovation”, stating that firms can and should use external as well as internal ideas, and internal and external paths to market, as the firms look to advance their technology and value proposition. A main characteristic of open innovations is that it implies a multiplicity of actors who act in a world of changing objectives (Fung, Fung, and Wind, 2007; Westerlund and Leminen, 2011) and the elimination of the organizational boundary of the in-company and out-company origins of innovation. This view is also supported by Vargo and Lusch (2004). They suggest that value creation is intimately linked to client-interaction and less to protection of property rights. Thus, central to their service-dominant logic is the proposition that the customer becomes a co-creator of value (Payne, Storbacka, and Frow, 2008).

That service innovation is positively related to co-production was empirically confirmed by Chen, Tsou, and Ching (2011). A service innovation is a new service experience or service solution that consists of one or several of the following dimensions: a new service concept, new customer interaction, new value system/business partners, new revenue model, new organizational or technological service delivery system (Hertog, van der Aa, and de Jong, 2010). The question is what requirements on strategy an open service innovation approach entail. Chesbrough (2003) describe an open innovation funnel with a “fuzzy front end” that implicitly requires strategy to prioritize innovation activities, resource mobilization, incremental or radical innovations across current market and, new markets.

There is a tension between the increased individual autonomy to communicate freely with external and internal stakeholders and increased managerial attention and control to guarantee alignment between on-going activities and organizational goals. In many ways innovation and management control functions represents two contradictory logics. Innovation represents a phenomenon that is open, emergent, chaotic and unpredictable (Perrin, 2002), whilst management control activities are more closed, planned, formal and predictable (Merchant and Van der Stede, 2007). Thus, due to these differences there has been a discussion in the innovation literature related to whether management control has the ability to help or hinder innovation, often referred to as the “help or hinder debate” (Akroyd, Narayan, and Sridharan, 2009). This discussion has resulted in two separate research streams: One arguing that management control helps innovation (Cooper, 2001) and one arguing that management control hinders innovation (Amabile, 1998).

The increased openness and client centricity create institutional constraints on the organization. Foss et al. (2011, 996) emphasise this point when they propose that the drive for client-centricity empowers individuals to interact more autonomously with the organizations external environment as boundary-spanning individuals (Rosenkopf and Nerkar, 2001). These individuals need incentives and decision rights to engage in such boundary-spanning activities, as well as the possibility to communicate easily with the
home organization. In light of these challenges it is important to build managerial
capacity to manage open innovation activities.

In addition (Foss et al., 2011) suggest increased emphasis on organizations’ incentive
systems as prerequisites for good innovation practices where firms attempt to leverage
user and customer knowledge in the context of innovation. “This can be achieved in
particular through the use of new organizational practices, notably, intensive vertical and
lateral communication, rewarding employees for sharing and acquiring knowledge, and
high levels of delegation of decision rights.” (Foss et al., 2011, 980). Foss et al. (2011,
980) suggest that this can be achieved through performance measures or incentives;
“There is some evidence to suggest that companies increasingly are changing their
internal organization toward greater delegation of authority and better communication
within the firm (particularly along the lateral dimension) and performance incentives
(e.g. Zenger and Hesterly, 1997).”

The authors define incentive systems as “work practices that enhance internal
information flows and give motivation (incentives) and latitude (delegation). Moreover,
the focus on delegation, internal communication, and incentives allows for a focus on the
factors that directly affect the behavior of given employees. Improving the skills of the
pool of employees is much more long term in nature and is not so directly related to
social behavior within the organization”. In their review of extant literature on
innovation, they identify a variety of descriptions of organizational incentive systems:
Incentive plans/profit sharing, formal appraisals, merit-based promotion (Huselid, 1995);
Line incentives (Ichniowski, Shaw, and Prennushi, 1997); Incentive pay (Ichniowski and
Shaw, 1999); Decision architecture (Mendelson, 2000); Skill-based pay, group-based
pay, performance-based promotion, and employee stock ownership (Guthrie, 2001).
Thus, these authors suggest that an integration of management control functions and
innovation strategies would benefit innovation performance.

Innovation management theory thus emphasizes management control and explicit
innovation strategies as prerequisites for innovation performance, while theory on service
innovation emphasizes individual autonomy and incentives to foster open innovations. In
the following we empirically explore this tension by focusing on practices of service
innovation in scale-intensive service firms.

3 Methodology

The study is based on empirical case materials derived from interviews in five large
international scale-intensive service firms (Pavitt, 1984). In preparation for the interviews
a questioner guide was developed and based on the PDMA glossary (PDMA, 2006). The
five participating firms were theoretically sampled (Eisenhardt and Graebner, 2007;
Flyvbjerg, 2011) to enlighten issues related to strategy and service innovation.

Scale-intensive services are standardized services that are produced at a large scale
mainly by large firms. Examples include bank, insurance, telecommunication, and
logistics services (de Jong, Bruins, Dolsma, and Meijgaard, 2003; Pavitt, 1984). These
services have some characteristics that distinguish them from other services: e.g., they are
often dependent on physical networks or information- and communication-technology
(ICT) networks (Soete and Miozzo, 1989). In particular, we address the role of internal employees when they are involved in service innovation processes in the scale-intensive service firms in which they are employed. Scale-intensive service firms are particularly relevant for this study as these firms standardize and harvest from scale advantages and thus to a large extent experience the effect of the tension between open- and client centric innovations and the organizations’ needs to align activities.

The five scale-intensive service firms selected operated in both business to consumers and business to business markets. Beta is in the Telecommunications industry, Gamma is in the financial services industry, Epsilon and Alpha are in the insurance industry and Delta is a state owned limited company within the logistics and mail services industry.

Data was collected in 25 semi-structured interviews lasting between one and two hours. The interviews were recorded and transcribed. The units of analysis are service innovation projects. To reflect both the strategy and innovation practices of the firms, informants with different roles, and from different firm levels, were chosen: Managers, business development and IT specialists.

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*Table 1: Data sources*

There were also more frequent interactions between the research group and five key informants, one from each of the participating firms. The key informants functioned as liaisons between the researchers and the respective firms and they were involved in the identification of informants.

In order to make sense of the data, the analysis progressed in several stages. First, the material was thoroughly discussed and made in a presentation form in Power Point to present it to selected employees and managers in the firms to validate the data’s veracity and enhance the trustworthiness of the analysis (Lincoln and Guba, 1985). Second, the material was scrutinized in light of the research questions. We looked at how these innovation practices were incentivized on the one hand, and how they were controlled on the other hand. In this way we were able to detect how management control and explicit innovation strategies were involved and whether incentives to foster open innovations were present. Third, we contrasted the findings with existing theory.
4 Findings

The findings are divided between i) the individual autonomy and incentives to foster open innovations and ii) management control and explicit innovation strategies as prerequisites for innovation performance.

4.2 Incentives for innovation activities

The mobilization of internal resources is important for ensuring that the service innovation project would be realized.

Networking and creating ownership is extremely important. Even with the top manager in Sweden, with 400,000 customers, even she said yes. There is so much power. A good project internal manager is one who knows people, and networking is extremely important; excessively important. (Employee, Gamma)

The mobilization of external resources involves existing and potential customers.

[We talk to customers], first and foremost, because decision-making processes in these kinds of large companies require that we have a relationship [with them]... I think that it helps to talk with them, to have a relationship [with them], so that they will buy services that we will have to work with. Also, it is important for us to listen to their needs. (Manager, Beta)

The individual autonomy and perceived ownership are important for committing to the innovation activities.

In my old job so we had a way of working that was dramatically different from what we saw in many large companies, and that is the typical suggestion box, right. Whether it is digital in some fancy tools or whether it is a physical box. It does not matter. You ask for innovation ideas, then, and you might get about 2000 ideas, and then no one is doing anything about them. And that is completely wrong. You cannot do that. Of course you lose the internal commitment then. Then, you have used up the chance. So it's about putting the idea generation and development in system. [...] If you ask about good ideas, then it's not taking ownership to not do something with those. (Innovation professional, Gamma)

Concept and idea generation does also occur in relation to the external environment:

We are good at capturing the needs that come in early and to see the core of the services. There are many things we're thinking about, such as is the back-log that we would like to take out, and ideas and suggestions as to what we can add and what we can do better. Many are creative for what works for the new service innovation and we catch it and get it from sellers. Some of our challenge is that there are so many concurring needs, so we have to be strict on prioritizing. The difficulty in prioritizing is that we are a relatively small group which involve that we cannot tailor make solutions according to all the wishes and identified needs. (Manager, Delta)

Innovation activities involve a boundary spanning role where internal and external resources collaborate:

I have “followed the book,” but it has been extremely demanding. It is as if my job is a “talking” job, and I go around and talk and talk, and I get so tired of my own voice. I
meet people and often I’ll ask, “Why don’t you talk with him? Why don’t you know each other?” and they’ll answer “I have never talked to him,” and I reply “But, I know that he is sitting and working on exactly the same things as you do!” I take it for granted that people collaborate; if they don’t, then we won’t make it. That is why all of these ideas have been lying there, unsolved, because they have not collaborated… So, mainly it is about walking around, talking to people, and making them talk together. I have faced a lot of challenges and have made communities work together that have never have worked together before. For instance, [there are] two different external agencies that do the same job… I have intervened and said “This is not working, you have to do the same thing.” I have even tried to make these two agencies collaborate on my project…that has been challenging. But, this is an example of the kind of iron door that I kick open. (Employee, Alpha)

Our findings suggest that there are few incentives to drive innovation together, thus the collective effort needed is not incentivized.

Beta Norway wants to move in a more open direction to the ecosystem we are part of. What clearly emerged was that there was no structured process in front, in the idea collection. So we have no process to manage ideas and not challenge them either such as how to drive innovation together with other players in the early stages. So one of my focus areas has been to answer the following: how to create a structured fuzzy front end process and how to find incentives to share innovation-related knowledge? Thus fuel fuzzy front end engine incentives. Today there are no incentives to share that knowledge. Thus it also stopped in a way. Internally, we are organized in silos with very tight bulkheads and only vertical incentives, so they have nothing useful to enable cooperation. (IT professional, Beta)

Regarding the individual autonomy and incentives to foster open innovations, our findings show that networking internally and externally are important, reflecting individual’s autonomy, while there are few incentives to collectively drive the service innovation activities. We thus turn to the control of, and explicit strategies for, innovation activities.

4.2 Management control of and strategies for innovation activities

Concepts, ideas and measures for innovation performance are to a large extent generated internally and during the innovation activities:

We’ve created a strategy for what we can imagine to use. Target image and a strategy - is to build up some channels that are small today and take down the other. [...] In business development (FU), we obtain (innovation) management initiatives. It says something about what we should consider, and the measures that they believe are important to the company. Then we try to create a mandate - what is the purpose of the measure - the resources, time, scope, and type of impact we believe the initiative can bring. Once that is done, we go into a creative idea phase to see what's out of options - create hypotheses to see what is possible, technical, marketing and resources [...] So we establish a formal project and getting resources to manage the project. Then there is the
development of a project that over time is taken over by the line organization and then introduced to the market. (Business developer, Epsilon)

Our findings show that the problem is not the number of ideas, creativity, but ability to connect innovation and strategy:

My experience over the last few years is that seeing ideas and opportunities are not the problem. We have a large number of new ideas, the challenge lies in taking ideas to commercialization. It is mostly about implementing, prioritizing and developing good ideas. (Business developer, Epsilon)

Business relations are not perceived as strategic innovation resources:

The standardized customer - supplier model sits very deep in the company, and naturally enough it is the one that is rooted in the project model. And it's very difficult to make changes there. (IT professional, Beta)

Our study reveals that there is a lack of explicit innovation strategies.

In our strategy documents, there is nothing about being in front. And we don’t have a defined innovation strategy. The work with defining the overall innovation strategy or activities were put aside during the financial crisis and has not picked up since then. (Business manager, Alpha)

There is also a lack in explicit innovation incentives and performance measures for innovative practices:

In our culture, we must have quick time to market. But we do not have measurements or clear structures to ensure that this will actually succeed. We draw a funnel, innovation process with various ports - 100 ideas, 20 cases - 10 projects – resulting in four new services. We tried this but we are not systematic. We are actually not successful in measuring this, although we tried a few times. (Manager, Alpha)

There are few measures explicitly aiming at the innovation performance:

“I am only measured in terms of deliveries I do; how satisfied the business areas with my delivery. However, I would like to be measured about the process innovation. We have no central innovation unit; it is delegated to each business unit” (Innovation Manager, Alpha).

To measure innovation in advance and assess the potential contribution to the strategic goals are deemed difficult. I.e. customer experience is a strategic area where a large strategic gap should be close to innovation initiatives, and yet the innovation processes found weed away those ideas due to the inability to express innovation outcomes in financial terms.

Shared goals have to be measured in the same was as corporate goals, but it lacks now. (Manager, Delta)

We are characterized by a culture that seeks low risk. Innovation and creativity are less safe. The priority initiatives are often linked to what we see the competitors are doing to succeed. Our culture is a challenge for an innovative organization. This is probably the insurance industry; there is little innovation in general because core business is the reduction of risk. (Business developer, Epsilon)

Our findings show that there are no explicit innovation strategies. Further, regarding managerial control, both management control systems and innovation systems still exist
at a general level and we observe that there is an important distinction between these two: Incentive structures are predominantly aimed at individual performance and behaviour whilst management control attend to the overall organizational performance.

“The incentives are individual...such as performance bonus” (Innovation officer, Epsilon).

“There are limited performance measures explicitly attached to innovation performance” (Manager, Delta).

These findings will next be discussed in relation to existing literature.

5 Discussion

Our findings suggest that incentives for service innovation activities were predominantly aimed at individual behavior. In addition the studied firms used a limited number of measures to evaluate the outcomes of their innovation activities and utilized general performance measures that to a larger degree evaluate collective performance. Several informant stated that their innovation practices involve a boundary spanning exercise between internal and external stakeholders and that the innovation performance is by and large a collective effort. We found that to the degree that the scale-intensive service firms explored have explicit innovation strategies or more general business strategies, strategies give direction to the innovation activities. Moreover, the personnel involved in innovation activities in these scale-intensive firms exercise considerable autonomy and perform a boundary-spanning role between the internal and external resources that collectively contribute to innovation performance.

The increasing drive for openness and client centricity in service innovations produce a tension between autonomy of employees engaging in boundary spanning innovation activities and the need for management control and alignment between innovation activities and organizational goals. Open innovation practices are collective efforts and will suffer if performance measures and incentives attend only to individual behaviour. These findings suggest that the capacity to enable the collective effort on collaboration and mobilization of both external and internal resources are to a limited degree linked to individual incentives but more to performance measure that adhere to the collective level of the innovation outcomes.

The collective effort is an aspect that is not addressed by Foss et al. (2011) in their argument for the prerequisite attention on on incentives to foster innovation performance. Our findings suggest that incentives aimed to affect individual behaviour do not necessarily align individuals’ efforts to enable a collective effort. Thus, we offer the following proposition:

P1: Innovation activities benefit from incentives and performance measures that are at the collective level capturing innovation practice, not only individual innovation behaviour.

Extant innovation management literature suggests that an explicit innovation strategy is articulated and that there is a relation between sustained innovation performance and innovation strategy (Barczak, Kahn, and Moss, 2006; Cooper et al., 2001; Froehle and
Roth, 2007; Menor and Roth, 2007). Our findings suggest that strategy gives direction to innovation practices. Moreover, our findings suggest that measuring and controlling innovation activities in detail is difficult while general innovation outcome measures to some degree capture the collectiveness of innovation activities. Management control initiatives focus to a larger degree outcomes, than incentives, and are thus by nature more collective. Hence, we suggest the following proposition:

P2: To enhance innovation performance there should be incentives and performance measures linked directly to the promotion of innovation practices and not just general performance measures.

Overall, our findings related to organizational resources are consistent with the practices prescribed in general service innovation management studies (e.g. de Jong et al., 2003). Based on the findings of our study, performance measures that promote innovation practices appear to be more relevant to the innovation performance in these large scale-intensive service firms than innovation incentives because performance measures capture the collective dimensions of innovation practices better than individualized incentives. Consequently, whereas Foss et al. (2011) raise some important questions with respect to individual autonomy, open innovations and incentives, they underemphasise the collective and collaborative aspects of innovation practices and the effect of individualized incentives on the innovation performance. In addition, Foss et al. (2011) also raise the importance of connecting innovation practices with the management control systems. This study indicate that there are existing general performance measures do give incentives for collective efforts, but that they to a limited degree promote innovation performance.

6 Conclusions

The implication of study is that individualized incentives do not suffice to motivate and direct the required collaboration and collective effort. In contrast, the general performance measures to a better degree capture the collective dimensions. However, existing performance measures do lack relevance to the innovation performance and support short-term and revenue generating decision making.

The increasing drive for openness and client centricity in service innovations produce a tension between autonomy of employees engaging in boundary-spanning innovation activities and the need for management control and alignment between innovation activities and organizational goals. Open innovation practices are collective efforts and will suffer if performance measures and incentives attend only to individual behaviour. Two important lessons can be drawn from this study: First, innovation performance benefit from incentives and performance measures that at the collective level to enable s innovation practice, not only individual innovation behaviour. Second, to enhance innovation performance there should be incentives and performance measures directly linked to the promotion of innovation practices and not just general performance measures.
References


