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Theoretical considerations about Innovation in the Public Sector

- Potentials, consequences and misunderstandings

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Abstract

Since 2007/2008 governments all over the world are facing considerable economic constraints. Public expenditures are reduced from central and local governments challenging the existing ways of creating and producing welfare. The premise of *work smarter not harder* is applied in different policy areas in order to maintain the quality of policies and services with fewer resources. Within this context traditional ways of governing, thinking and implementing policies and services seem to fail and call for new ways of understanding politics. New Public Management (NPM) reforms emerged in the 1980s in most Western countries with the purpose of reforming the public sector. However, the mechanisms of these modernising reforms do not provide governments the solutions required to the existing problems. Among other reasons for the silo and competitive thinking embedded in NPM. New and creative ideas are necessary to transform governments' capacity to cope with wicked problems. Innovation in the public sector can be a way of rethinking old ideas and practices and find solutions to the new problems. In order to create an innovation culture and work systematically with innovation, politicians and public managers need to understand the potentials and risks of innovation, to rethink organisation structures and to accommodate organisational values, norms and routines in coherence with innovation practices. But what is innovation? And how is it possible to enhance the quality in the public sector through innovation? These questions will be answered in the following paper from a theoretical point of view. Literature about innovation is broad and fails to provide a normative definition of innovation. This is because innovation is understood as a container concept and normatively defined. This generates analytical problems in the study of innovation in praxis.

This paper contributes to the development of a theory about innovation within the field of public administration, political science and sociology in a rigorous and objective way. This conceptual paper seeks to give a better understanding of innovation and provide relevant tools for academics and practitioners to avoid misunderstandings of innovation. The aim of this paper is to explore and analyse the different competing understandings of innovation and to provide further steps towards a comprehensive model to work with innovation. The paper also contributes to the investigation of innovation by presenting an exiting literature review on the topic. This paper is part of a series of two other papers about innovation based on empirical findings in a Danish municipality and on methodological reflections about innovation.

Keywords: Innovation, innovation culture, wicked problems, New Public Management, New Public Governance, innovation journey, innovation phases and innovation management

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Introduction

Governments all over the world are facing considerable economic constraints since 2007/2008. Public expenditures are reduced from central and local governments challenging the existing ways of creating and producing welfare. Furthermore, the mechanisms applied to mitigate the pressing problems do not provide plausible solutions. This situation press governments to think out of the box and to find new ways of thinking and implementing policies and services. Innovation is not a panacea, but can increase the quality in the public sector because it offers new possibilities to reformulate old ideas, new possibilities of conceptualising the machinery of the public sector, break down policy dead-locks and bring together new partners to create and implement policies. Working with innovation in the public sector is not necessarily an easy task because the concept in political science or public administration is relatively new. Furthermore, as a discipline, there are few empirical studies that approach the concept in connexion with existing practices. The word is elusive (Halvorsen, 2005) and can catch different meanings (Jensen et al, 2010: 22), making it difficult to provide a consensual definition among academics. Innovation also depends on the context and generalisations without empirical evidence can lead to confusing contradictions. And last but not least, the concept has become very normative, because many academics point to innovation as a new way of conceptualising politics and transforming governance. In Denmark politicians and public administrators in general have high expectations to overcoming the consequences of the financial crisis with the systematic use of innovation. Bearing the conditions mentioned above in mind, it is not difficult to agree that innovation has become a buzzword in the last years, partly because the increased complexity and fragmentation of the public policies urges public administrators to find new ways of creating and implementing the policies. In academia there is a broad acceptance that a way of coping with wicked problems is to create new innovative policy solutions (Sørensen and Torfing, 2011: 6; Bommert, 2010).

Wicked problems are those problems complex to define that escape simple formulations and simple solutions. The problems are unique, possibly not faced before, the solutions are difficult to find and not just good or bad, but require open discussions. At the same time the existence of wicked problems reflect that the organizations are facing changes or new challenges. Wicked problems occur in a social context meaning that the more disagreement among stakeholders, the more wicked problems there can be. Problems can be classified within three typologies: **I.** *Technical problems* where the issue or problem can be defined and solved. **II**. *Clear problems with unclear solutions*. **III.** *No clear definition of the problem neither one clear solution*. Wicked problems are in between the type II and III, meaning that problems and solutions are not clear, but most often difficult to define. More and more public administrators and politicians are facing wicked problems requiring new leadership and management of skills and functions based on flexibility, adaptability and experimentation (Beinecke, 2009).

Additionally the vagueness of the problems makes them difficult for organizations to tackle and requires new ways of dealing with them. *Dynamic leadership* (Beinecke, 2009), *pluralistic management (*Van de Ven et al, 1999), *transformational leadership and transactional management* (Kanji and Moura e'Sa, 2001) or *innovation management* (Torfing, 2012) are academic proposals on how to deal with new management and leadership roles in times of change and when tackling wicked problems. Management and leadership are extensively discussed in the literature. For some authors there is no distinction between management and leadership and for other authors the distinctions illustrate different roles and functions. Furthermore, concepts on leadership and management are rooted in cultural traditions. In U.S. for example, there is a tradition of using the word leadership instead of

management. However, functions in leadership are classified by different roles, and one of them is a manager. In Denmark there is an acceptance of using the word management for practitioners and politicians, whereas leadership is primarily used for personal characteristics. In this paper the two theoretical concepts are understood differently, depending on the function, yet integrated in the figure of innovation management. In this paper *management* refers to transactional functions (planning, budgeting and efficiency) and *leadership* refers to the transformational functions (motivation, inspiration, establishing direction creation and implementation of change).

New Public Management (NPM) can be explained through a series of different reforms made in the public sector with the purpose of modernizing it. One of the main characteristics of the NPM is the use of economic norms and values and management theories with a high focus on efficiency (Christensen and Lægreid, 2002: 268). However, there is not a clear definition of NPM and it is therefore often seen as a loose collection of ideas, primarily from economic theory. The most important argument of NPM is that the translation of the economic logics of the private sector, based on liberal ideas such a public choice together with more managerialism, will lead to more efficient administration. The main agents behind bringing NPM into practice are public managers and public leaders (Christensen and Lægreid, 1999: 170ff). NPM reforms have been implemented in western countries since the 1980s. However, they fail in many ways in coping with societal problems and more concretely in dealing with wicked problems. This can be explained through the argument that NPM promotes specialization of the tasks and silo thinking. In an era of globalization where the connections between governments are necessary in order to formulate politics and to create economic growth, it is difficult to think, that a country would close its boundaries without taking into account what other countries do to solve similar problems. At the same time, the main drivers of NPM are politicians and public managers; hereby excluding other target groups such as citizens and volunteer associations that could be interested in tackling certain issues. The types of problems that many politicians and public managers face are wicked problems and in many cases with no clear formulation of the problem nor with clear solutions. This means that in order to cope with complex problems, both existing and new actors need to be brought together across different levels and sectors in order to find new solutions. Collaboration across sectors and collaboration with new partners could be a solution to cope with uncertainties, but NPM mechanisms are not facilitating solutions when promoting competition and silo thinking. In response to the dominant thoughts of the NPM emerges an administrative paradigm called New Public Governance (NPG). This approach has another set of values such as innovation, collaboration, learning and trust (Christensen and Lægreid, 2007).

NPG challenges public institutions and administrators to reformulate the values of the public sector. New administrative reforms are often introduced because they open new discussions and contribute to new formulations and conceptualizations of the public sector. The transition from one paradigm to another takes time and is never a clean cut from one year to the next. In practice transitions generate hybrid paradigms that integrate different elements from different approaches. This transition can be exemplified using a metaphor from the archeological strata, where different elements from different periods coexist. NPG emerges primarily as a response to external pressure (Christensen and Lægreid, 2007: 6) and to internal structural constraints. The pressure most often comes from public cuts that challenge the public sector to find new innovative solutions and yet maintaining the quality of the public services with fewer resources.

NPM and NPG reforms are constructed with different values and ideas, and represent different understandings of the public sector. If we agree that the reforms to some degree determine the content and form of the administration, it is not difficult to agree that the roles of political leaders and

administrators are conditioned by the modus operandi of these reforms. Yet one required reflection is on the relation between efficiency promoted by the NPM and the innovation element promoted by NPG. Can these two elements coexist? Or does one exclude the other? The answer of the questions can be elaborated depending on the definition of innovation and the connotations that innovation has on the organization and its employees. Furthermore, the answer depends on the conceptualization of the reforms. If administrative reforms are understood in a transformative way, it is because they combine elements from different approaches in a dynamic way where one influences the other and vice versa (Christensen and Lægreid, 2007: 2 and 7) then it is evident that different elements will coexist.

The structure of the paper is a division in four sections. The first section provides a conceptual framework for defining innovation in the public sector. The second section focuses on the idea of innovation as a journey and elaborates on the innovation phases. The third section explains the new roles of managers in managing innovation, and the fourth and last section underlines the main conclusions.

Conceptual framework for defining innovation in the Public Sector

In the last years innovation has acquired popularity in most Western countries. Maybe because OECD sees innovation as a way of overcoming economic and societal challenges (OECD Innovation Strategy: Key findings, 2010). Or maybe because citizens around the world are tired of public cuts in citizens' welfare and thereby pressing politicians to finding new ways of solving problems. Or rather because private business expressions disseminate and diffuse into the public sector. Innovation is also a buzz word because it is seen as an instrument to rethink the public administration system and reconnect politics and administration (Osborne, 2010). However, innovation is difficult to define precisely, because it is a container concept used for different purposes and interests and there is not consensus for one sole definition (Bland et al 2010). Innovation is often considered a **black box** in between expectations, wishes and outcomes (Van de Ven, Polley, Garud and Venkataraman, 1999: IX).

Furthermore innovation can be a powerful concept used strategically and instrumentally by politicians, administrators, private counsellors, students, citizens, etc. in order to frame discourses. Innovation is often understood as a **normative concept** because of its positive attributions to improving quality in the public sector (Mulgan and Albury, 2003; Moore and Hartley, 2008: 4) and as a **method** to increase legitimacy of government actions, because innovation can bring together citizens, stakeholders and other interest actors (Moore and Hartley, 2008). Innovation is normally viewed as a good thing, among other things because any new idea must be useful and able to solve a problem. In general, new ideas that are not perceived as useful are normally not called innovations, but mistakes. However, the usefulness of an idea can only be determined after the innovation process is completed. In this sense innovations cannot be named innovations until the process is completed and evaluated (Van de Ven 1999: 11; Unger, 2005:21).

Defining innovation is difficult because the concept depends on the context where it is nurtured. Innovation is easily mistaken with positive effects such as increased public value and advances in public goods (Bland et al, 2020:2). Increases in public value, effectiveness and qualitative improvements are understood as normative concepts and as criteria for evaluating the outputs and outcomes of innovation. In other words the normative elements of innovation in this paper are not considered to be determinants for innovation, but as consequences of innovation. This assumption affects the way in which innovation is understood, defined and operationalised. Incorporating normative elements as the ones mentioned above in the definition of innovation create analytical problems, because the normative concepts can vary from context to context and are therefore not possible generalize. Moreover innovation can be both **positive and negative** and in order to know the consequences and effects of innovation, it is necessary to make an ex post evaluation of innovation. Innovation per se does not mean and does not lead to more effective policies or services, but innovative input to policies and services can lead to more effective outcomes (Moore and Hartley, 2008). The difficulty of defining innovation in the public sector reflects among other things the importance of doing it within a particular context (Bland et al 2010).

Nevertheless innovation can be also understood as goal in it self and for innovation purposes; and not as much as an instrument to improve, change, create and implement new ideas. This is a typical misunderstanding about innovation, which is possible to find in innovation literature and in practitioners' daily discourses. If innovation is understood as a goal in itself, then it is easy to judge innovation with normative criteria: innovation is good, bad or successful, and hence to establish criteria for innovation performance. In doing so, there is a risk of forgetting to explain the reasons and

purposes of innovation (the 'why' of innovation) and concentrate attention on explaining only the achievements of innovation (the 'what' of innovations). The point here is not that establishing criteria for evaluating innovation is a mistake, but to understand innovation only as a product and not as a process is a mistake. Yet it seems more interesting in the field of politics and public administration to think innovation as an instrument to achieve political, economic and societal purposes and to find solutions to existing wicked problems.

Another misunderstanding or pit fall about innovation is thinking of the concept only in general terms and forgetting the fact that innovation is **contextual.** What is innovation in one context is not necessarily innovation in other contexts and vice versa (Sørensen and Torfing, 2011). Although an idea or practice may already exists in one context it will still be new if translated to another context. The contextual dimension of innovation implies processes of translation or adaptation of the ideas or practices into new contexts. Innovation is not just creating new ideas but also **implementing** them (Eggers and Singh, 2009: 17 and 23; Sørensen and Torfing, 2011; Hartley, 2005; Mulgan and Albury). So until the ideas are implemented into new practices it is not possible to talk about innovation.

At the same time, innovation requires a **collective effort** of considerable duration and greater resources held by the people involved in the process. Most innovations are too complex for one person to accomplish individually and this is why people are seen as creators and facilitators of innovation. This means that people have to be recruited, organised and directed. However people can also be understood as inhibitors of innovation (Van de Ven, 1999: 13 and 22). One of the most interesting things about innovation is that knowledge and information set the foundations for the innovation process. Knowledge grows when it is shared and the process of exchanging knowledge and information is shaped by the interactions of those involved in the process (Bland et al, 2010:6). This means that innovation implies a **process of socialisation** (Sundbo and Fuglsang, 2002: 7 and 14) in order to exchange ideas and share knowledge. This explains why collaboration is thought to enhance innovation and why the management of innovation is thought to be crucial for facilitating the innovation process.

Innovation has the **potential** of opening new doors, reformulating old problems, breaking with policy deadlocks (Sørensen and Torfing, 2012: 3), bringing new actors together and formulating and implementing new ideas. It has to be understood as a refreshing and a stimulating drink on a hot summer day. Innovation can have different forms depending on the purpose and on the source. In this way it is possible to find governance innovations, service innovations, costumer innovation, collaborative innovation, employee innovations, etc. The types of innovation usually appear in the same context (Mulgan and Albury, 2003; Hartley, 2005:27ff; Roberts and Bradley, 1991: 212).

According to Van de Ven et al (1999) innovation is understood as a **journey;** referring to a process of creation and implementation of new ideas. The innovation as a process is understood as temporal sequence of events in the development and implementation of the ideas. In this process organisations should shift structures and strategies in order to adopt innovations, because each stage of innovation requires different attitudes, strategies and organisational conditions accordingly (Bland et al, 2010:4). Another feature of innovation is that innovation is **intentional** and not random (Sørensen and Torfing, 2011). Innovations rarely happen by chance (Dombrowski, 2007). The intentional element of innovation means that it has a purpose/s. And despite that the innovation process or journey can involve exploration of new ideas, openness, creativity, learning and chaos, it always includes strategic elements; especially in later phases such as implementation or dissemination. Furthermore, innovation as a process is not self-generating and **requires management** and leadership to establish an organisational innovation capacity based on ideas of experimentation and tolerance towards **"smart**

failures" (Teofilovic, 2002: 9). The management of innovation (innovation management) is indispensable for innovation and more particularly for collaborative processes (Ansell and Gash, 2012) because only innovation managers can facilitate and drive the necessary social interactions (Bland et al, 2010:12). However one of the tricky aspects of innovation is that the relationship between the intentional actions and the outcomes achieved is unclear. Concrete actions can have unexpected results and that is why creating outcome preferences and expectations can increase the causal relationship between intentional actions and the outcomes achieved (Van de Ven et al, 1999:88).

As mentioned before, innovation can have different meanings and it can be complicated to navigate and put innovation into practice when the basic understandings are not clear from the beginning. Therefore it is recommendable to specify the type of innovation that one is referring to, and to be conscious that innovations in the public sector are not the same as innovations in the private sector. **Innovations** in the **public and private sector** differ from each other because the two sectors have different ontologies. The public sector is characterised by a high level of complexity, because it often includes different policy areas and different persons with different preferences, working for the purpose of producing public value. On the one hand, the purpose of innovation in the public sector is to spread the services and governance improvements among the population in order to raise the public value. On the other hand, innovation in the private sector is characterised by competitive advantages, incentivising alliances between strategic partners and restricting the sharing of good (Hartley, 2005). For some authors like Bland et al (2010: 3) the public sector innovations must be about doing something worthwhile and not just something new. According to these authors, the task of the public sector is to **create public value and public good**. At the same time the authors argue that the failures of innovation can have deeper consequences for the citizens than the failures of innovation in the private sector.

There is a general idea, that there is a lack of innovation in the public sector compared with the private sector (Albury, 2005: 52). However, according to Eggers and Singh (2009) the problem of innovation in the public sector is not the absence of innovation, but that many innovations in the public sector are episodic instead of systematic. According to Jæger 2002, innovations are not reserved for the private sector and can normally be found in the public sector as incremental changes. One of the challenges that the public sector at least in Denmark is facing, is not about creating innovation, but about the establishment of an innovative culture within the organisation that can systematically work with innovation. A solution to this problem is to think strategically about innovation and create an innovative culture within the organisation that will support changes by creating and implementing new solutions

Collaborative innovation is mentioned above as a type of innovation, but is more adequately used as a driver of innovation for all types of innovation and in all phases of innovation to foster innovation. In this sense, collaboration has a methodological dimension when it is used to enhance innovation in the public. Collaboration can accelerate the innovation processes (Sørensen and Torfing, 2012), because innovation is best workable and the purposes easier achieved, when it is exercised together with other persons. The generation of knowledge and information are namely one of the pillars of innovation, and collaboration has the potential of bringing together a diversity of actors (Innes and Booher, 2003) and contributing to the sharing of knowledge (Teofilovic, 2002: 16) necessary for innovation (Bland et al, 2010). However, collaboration does not lead to innovation per se (Sørensen and Torfing, 2011, Roberts and Bradley, 2010). Collaboration can be defined as the process of working together within a specific time frame (Roberts and Bradley, 2010:211 and 219) and illustrates the relational dimension of the

actors. Collaboration includes social elements as trust, mutual understanding, shared meaning, learning and creativity (Innes and Booher, 2003).

Once elaborated a conceptual framework for explaining innovation the following **definition for innovation** is proposed with the purpose of integrating different perspectives and incorporate the descriptive elements of innovation:

Innovation is the complex process of creating and implementing new ideas to a particular context with the intentional purpose improving the quality of public policies and services.

The **criteria for evaluating**[1] the innovation outputs and outcomes can be: **1.** Compare the initial *purposes of innovation* set by the organization with the effects achieved. **2.** Use criteria based on *social capital* such as empowerment, collaboration and learning to evaluate the organizational development. **3.** Efficiency terms, e.g. if the labor costs have been reduced or the administrative procedures simplified. **4.** Quality terms, e.g. if innovation has improved the quality of the services, improved the citizen's satisfaction or staff satisfaction. **5.** Digital technologies, e.g. if the digital services have been improved and the users have improved their access to digital technologies. **6.** Organisational terms, e.g. if the shared communication or information has been improved and increases the capacity to innovate satisfactorily. In general politicians, strategic managers, administration, institutional leaders, and citizens may evaluate the innovation outputs and outcomes differently. The different evaluating forms show the gain of the actors and the fact that innovation can have different purposes. Public innovation can for example improve efficiency, effectiveness, job satisfaction or the overall quality of the public services (Sørensen and Torfing, 2012: 850ff). The term **successful innovation** refers to the innovations that are perceived having desirable results according to the preferences of the actors involved in the process (Sørensen and Torfing, 2012: 851). Much of the innovation theory is derived from new product development with a technological innovation. Innovation in such a context is easily observed and detected, whereas innovations in governance and services are more ambiguous, because they are not physical objects, but sets of qualitative changes in the relations between the affected parts (Hartley, 2005: 27). This means that the criteria for evaluating the outputs and outcomes of innovation are much more difficult to identify and evaluate.

It is recommendable to define innovation descriptively and not normatively based on neutral elements that permit elaborating a general definition of innovation (Sørensen and Torfing, 2011). For particular and prescriptive features of innovation, it is recommendable to go to the field and conduct qualitative interviews and make observations in order to explain how is innovation constructed, understood and applied within a specific context. At the same time trying to be descriptive and not normative could be understood as a normative discursive act in itself. In praxis the innovation discourse in Denmark is in general terms constructed around the positive dimension of innovation, which makes it even trickier to conceptualize innovation. In other words, innovation has problems passing the 'no-test' of determining what is not desirable about innovation; which is best illustrated with the lack of innovation failures in the public debate. However distinguishing between the descriptive and normative dimensions of innovation can also be an exercise of reflecting about what innovation can be, and the consequences of such theoretical choices.

[1] The last 4 points are inspired by Bloch, 2010.

Treating innovation theoretically goes **across disciplines,** because it includes elements from anthropology, public administration, politics or sociology. Yet in the organizations, innovation should be understood as a **discipline** in the organization such as for example planning and budgeting. And like these disciplines, innovation requires a *methodological view* (Eggers and Singh, 2009). This paper has no intention to approach the methodological dimension of innovation, because it would require another paper. However briefly, the **methodological tools** proposed to approach innovation are**: 1.** Create an accurate definition of innovation differencing between the descriptive and normative elements. **2.** Conceptualize and operationalize innovation using the innovation phases. **3.** Manage innovation. **4**. Go to the field in order to understand how innovation has been introduced, understood and operationalized in the organization and evaluate innovation regularly.

The **triggers of innovation** are diverse. They can be as a *response to an economic crisis* (Sørensen and Torfing, 2011), because crisis create opportunities to innovate or in many cases reinforces it. The crisis trigger shows a reactive character of government rather than a proactive (Walters, 2001:15 and 17). Another trigger of innovation can be *frustration with the status quo* of policies or services (Walters, 2001). When politicians, managers or citizens are frustrated of the results of policies or services, and when these frustrations surge, it can be derived as a pressure to find new ways and to innovate. At the same time *internal and external shocks* can act as triggers of innovation, because many innovative ideas do not become innovation until some form of shock occurs. In this context, shocks need to be understood as a concentration of efforts from different stakeholders (Van de Ven et al, 1999:29). Wicked problems are public policy problems that are difficult to define and solve with traditional methods and most often require innovative solutions (Sørensen and Torfing, 2012: 848).

At the same time innovation is **affected *externally*** by the interests of stakeholder, changes in the economic and political environment. ***Internally*** innovation is influenced by organizational culture, managerial skills and visions and individual motivation (Teofilovic, 2002: 9). Innovation is sometimes seen as an optional luxury that carries extra expenses. However innovation has a great potential to keep up with public needs and expectations. Without innovation the costs of the public services would raise faster than the rest of the economy. Therefore the alternative to innovation is claimed to make people work harder (Mulgan and Albury, 2003: 5).

The Innovation journey

The innovation process can be conceptualized and operationalized trough different phases. Thinking innovation as a process based on different innovation phases help to diminish the chaos that innovation embraces and to convert innovative ideas into smart solutions. As Eggers and Singh suggest (2009: 17), focusing on the phases will help to enhance successful innovation. The actors involved in the different phases do not need to be the same for all phases and the methods used in each phase are normally different because each phase has different purposes. As innovations are not linear but complex the innovation stages are not developed in a simple sequence of phases, but rather as a messy and complex progression of events. The innovation process is characterized by being dynamic, uncertain, open, ambiguous and as "a process of becoming". Furthermore the creation and implementation of new ideas often occur through linking and integrating the "new" with the "old" (Van de Ven, 1999: 3, 23, 24 and 35).

As mentioned above collaboration in all the phases between different actors has the potential of accelerating the innovation process. In each phase, the management aspect of innovation is important in accordance with more or less emphasis on collaboration. Management has important influence on how innovation is institutionalized in the organization and hence influences the results achieved (Van de Ven et al, 1999). Furthermore, each phase can be treated independently, but the phases are interdependent. This means that each treatment of the phases will affect the innovation development and the results. In the different phases of the innovation process, **participants learn** by discovering and testing (Van de Ven et al 1999:13).

In the early stages of the innovation process, the organisations should be more open, diverse and decentralised than in the implementation stages which most often require more centralisation and closeness (Bland et al, 2010: 4). The number and name of the innovation phases can differ from scholar to scholar, but they mostly have the common intention to provide a methodological frame for the practice of innovation (Explain scholar's views in short). My proposal for the innovation phases is inspired by Eggers and Singh (2009) and extended with more phases. The innovation phases suggested are: 1. *Identification of the wicked problem and reflection of the purpose of innovation. 2. Idea generation. 3. Idea selection. 4. Implementation. 5. Institutionalization. 6. Evaluation of the innovation process.* The mentioned phases can be illustrated in the following figure.

[[figure comes]]]

Explanation of the innovation phases

1. Identification of the wicked problem that the organization wants to tackle *and reflect on the purpose of innovation*. Eggers and Singh (2009) do not treat this phase independently, but as part of the idea generating phase. However, I think that it is relevant to have a starting phase where innovation is conceptualized in connection with an existing problem or challenge. The argument of starting the innovation process with the identification of a wicked problem becomes stronger, when innovative ideas are meant to solve wicked problems (Bland et al, 2010:10). Furthermore, by starting thinking about the wicked problem early gives the possibility for the organizations to consider the 'why' and 'how' of innovation and hence to diminish the complexity of the innovation process and increase the possibilities of reaching successful innovation. At the same time mapping the challenges can help to consider which relevant actors can be brought to the process. Wicked problems are difficult to solve with only one disciplinary approach. It is therefore recommendable to tackle the problems interdisciplinary and from different angles, so they can be covered extensively and hence pinpointed. This means that one needs to be open to accept new forms of approaching the problems. At the same time wicked problems are best tackled by incorporating new voices into the discourse.

2. Idea generation. In this phase the ideas are brainstormed and explored. It is important to emphasize that the actors involved in the idea generation phase need to have the possibility and freedom to propose creative ideas even though some persons (especially those with leadership or management responsibility) find the ideas too deviant or with no sense. *Empowerment* incentives creative thinking and facilitates the information sharing among public managers and employees (Teofilovic, 2002: 16).

3. Idea Selection. In this phase the most interesting/innovative ideas are revised and selected. Innovative ideas are not necessarily those that are easy to implement, but those that can change old routines qualitatively, bring new actors together and challenge the existing structure of organizations. It is common that the ideas selected are based on old logics and parameters inside the organization and that the creative and different ideas are discarded. Thinking out of the box, being open and choosing ideas with innovative potential instead of choosing ideas based on how well they fit into the organization can increase the innovative level. The possible lack of resources to develop a concrete idea should not be seen as a barrier for selecting the idea, but rather as a possibility to finding new partners for collaboration in order to include the missing resources.

4. Implementation (idea conversion). In the implementation phase or idea conversion phase, the ideas selected are revised, further developed and executed. Innovation is not just a process of generating creative ideas, but also a process of implementing the ideas. This phase distinguishes innovation from novelty. For many people engaged in the innovation process this is one of the most difficult phases, because the transformation of the ideas into new practices implies a shift from the abstract level to a concrete level. In this phase the ideas have become concepts and will take the form of services, programs, strategies, policies, etc. Understanding how changes work in the organization and to develop strategies to support and lead change, can help to convert the ideas into concrete policies or services. This includes thinking in the institutional design where the ideas will be implemented and try to adapt the context to the innovation ideas. Flexible and dynamic organizations will respond to uncertainty positively, and will be able to make corrections in implementing innovation instead of waiting for project failures. Furthermore, focusing on outcomes as real objectives instead of planned outcomes to be executed also help to overcome implementation problems (Eggers and Singh, 2009: 23 and 25).

5. Institutionalization. In this phase innovation is spread through the organization/s and to the affected stakeholders. Networks for example can help to spread knowledge (Eggers and Singh, 2009: 9). For a successful dissemination, it is recommendable to gain support from all the affected stakeholders and to break down organizational silos in order to reduce organizational unwillingness to change (Eggers and Singh, 2009: 26). Story telling about innovation is a recommendable method for spreading innovation and to construct successful episodes with innovation. Successful innovation stories will encourage organizations and employees to work with innovation. However, innovation does not always succeed. And by telling stories of unsuccessful innovation could be positive in order to reflect upon what worked and what not – to learn about the innovation process. This implies understanding failure as a learning process and accepting failure as a possible outcome of innovation.

6. Evaluation of the innovation process. Evaluation of the innovation process once concluded is necessary in order to learn and create future possibilities of creating successes and for working with innovation. This can be done by elaborating a criteria model based on the expected purposes and intentions of innovation and the obtained results once the innovation phase is concluded. If the outputs and outcomes of innovation are desirable, then it will be possible to talk about **successful innovation**. But if the outputs or outcomes are not desirable, then it will not be possible to talk about successful innovation but only about innovation. It is recommendable to evaluate innovation regularly in order to learn from the process and create an innovation culture.

Conceptualizing innovation as a process has several advantages on understanding how innovations emerge, develop and terminate over time in specific context. **First of all**, the process of innovation can be traced within existing organizational frames (Bland et al 2010: 3). **Secondly** the study of innovation through different phases can help to understand the causes, determinants and effects of innovation in relation with the management of innovation. **Thirdly**, the conceptualization of innovation phases is a potential tool for managing innovation and to reduce the innovation uncertainty. **Last but not least,** understanding innovation as a process provides a road map for analyzing innovation and then develop prescriptions to undertake the innovation process (Van de Ven, 1999: 21).

By explaining the innovation phases it is possible to remark that innovation combines elements of exploration (creativity and exploration) and exploitative elements (strategic thinking and planning). Innovation can be understood as a temporal sequence of events and activities that create and transform creative ideas into services, products, new methods for the organization, strategies, policies, etc. (Van de Ven et al, 1999; March 1991; Aagard 2011). The innovation phases or stages need to be understood as rational attempts to make innovation more tangible. However in praxis the phases can appear simultaneously creating loops from one phase to another.

While organizations should shift their strategies and structures according to the different challenges that the innovation journey requires, public managers should change their skills and roles depending on the innovation stage. This means that persons engaged in the management of innovation should understand how the innovation process work (Aagaard, 2010) and be aware about the particularities of different stages in order to apply different methods and in order to change roles. The idea of changing the management roles go hand in hand with the dynamic, flexible and unpredictable nature of innovation. On the other side organizations need to be prepared with an institutional capacity to cope with innovation.

Innovation Management

Innovation management refers to the management of innovation and is a new concept, which has emerged within the innovation practice (Torfing, 2012). Managing innovation is a crucial element in order to achieve desirable outcomes and outputs and to obtain successful innovations (Ansell and Gash, 2012). However innovation management cannot ensure the success of innovation, but it can influence its probabilities and reduce the uncertainty of the innovation process (Van de Ven et al 1999). In the innovation literature there is a high degree of consensus in accepting that managers play an important role in facilitating the innovation process and the social interactions in an innovation process. However there is a lack of studies elaborating on the roles of the managers engaged in the innovation processes, and how the roles change according to the innovation phases. This gap in the literature can be overcome by doing field work in specific contexts in order to collect evidence on the innovation manager's roles.

Innovation management is an **open concept** that does not necessarily refer to a concrete person or management level. This idea is particularly interesting because it contradicts the "hero innovation" role of managers institutionalized with the NPM. According to the logics of NPM, public managers are the ones responsible of innovation and efficiency (Aagaard, 2011: 7 and 8). Within the NPM reforms politicians and public managers with budgeting or responsibility of human resources are normally the ones engaged in driving NPM rationales. Innovation management is a broader concept giving the possibility to drive innovation with a broad spectrum of employees. The role of politicians and public managers as the only ones being able to frame discourses, ensure the organization values, efficiency and drive innovation has shifted. This means that politicians and strategic managers should be open to share power and develop trustful relations.

NPM is criticized for undermining public service motivation, learning and trust, and for promoting competition and silo thinking (Aagaard, 2011). However innovation opens up new organizational and maneragialist constructions and possibilities. The assumption of the NPM that more managerialism will lead to a more efficient administration cannot be taken for granted. NPM reforms are hierarchical because those with leadership responsibilities are normally considered the drivers of the reforms. At the same time NPM promotes specialized tasks (Christensen and Lægreid, 1999:180 and 181) and undermines collaboration across sectors. The administrative culture need to develop the ability of recognizing all employees as potential drivers of innovation. One of the greatest challenges for public organizations is to maintain both organizational innovation and efficiency (Aagaard, 2011, 8 and 10).

Another characteristic of innovation management is that it is a **pluralistic management,** because it includes different roles for different innovation phases. Pluralistic management encourages diverse perspectives for learning and discovering (Van de Ven et al, 1999: 97 and 117) and finding solutions to complex problems. The roles are dynamic, not static and change over time and over situations. The roles can be **1. Initiator. 2. Facilitator. 3. Critic. 4. Catalyst.** The roles are inspired from Ansell and Gash (2012), Sørensen and Torfing (2011) and Van de Ven et al. (1999). The pluralist dimension of innovation management contrasts with the idea of generic management of NPM, because NPM argues that all management faces similar challenges without differentiation between the purposes and tasks (Christensen and Lægreid, 2002:269).

Although innovation management is a new concept, as referring to the management of innovation, it has similar characteristics with concepts as *dynamic leadership, transformational leadership, transactional management* and *pluralistic management*, because they all have the purpose of managing

complex issues with innovative and flexible methods. Dynamic leadership refers to a type of leadership characterized by flexibility, adaptability and experimentation (Beinecke, 2009: 3). Transformational leadership explains how leaders can initiate, develop and implement changes in organizations. It is based on creating a vision and developing closer relationships based on trust and commitment. On the other hand transactional management refers to effective management, to the ability of managers on setting goals and negotiating ideas. Although transformational leadership and transactional management can be understood separately they are complementary and functions best when they are meet (Kanji and Moura e'Sa, 2001: 705). Pluralistic management refers to the diversity of perspectives and roles necessary to make uncertain and ambiguous decisions. Different roles can help to tolerate new ideas, manage different perspectives, to stimulate organizational learning and to increase adaptability during the innovation process (Van de Ven et al, 1999: 97ff).

Innovation management brings the possibility for embracing the **hard elements** of management characterized by effective management and goal setting and the **soft elements** of leadership characterized by vision, values and behaviors elements (Kanji and Moura e'Sa, 2001). The innovation process includes both *exploration elements* like experimentation, creativity, flexibility and discovery and *exploitation elements* like choice, efficiency, selection, implementation and execution (March, 199 and Sørensen and Torfing 2011). Management of innovation is important, because it reduces the complexity of the innovation process and can be understood as a tool to enhance innovation. Innovation management makes a difference in order to achieve the expected results and make innovation successful.

Concluding remarks

In general it is necessary with further academic research based on empirical data in order to provide more concrete solutions to innovation challenges. At the same time to develop concrete methodological considerations about innovation in the interplay between the different phases. While NPM focuses on results and efficiency, NPG seem to point to the input side of the public administration and processes to balance the administration system. The following conclusions are structured around the conceptual assumptions about innovation, the innovation process and innovation management.

Conceptual assumptions about innovation
When speaking of innovation it is interesting to mention that it is a controversial concept because there is not a consensual definition among academics and because of the high expectations of politicians, practitioners and academics. This has constructed the positive and normative myth of innovation. In this paper innovation has been explained integrating different ideas as an exercise of synthesising the potentials, consequences and misunderstandings on innovation. The paper appeals for a distinction between normative and descriptive elements and for a definition of innovation constituted primarily by descriptive elements. The normative dimension of innovation is interesting but controversial and requires empirical evidence.

Another interesting idea about innovation is that it challenges the existing structure of organisations and the modus operandi of the individuals. Innovation at the same time relies on the exchange of knowledge and information and therefore has more favourable thriving conditions in collaborative contexts. Collaboration emphasise the social interactions between the actors and that the nature of these interactions can affect the development of the innovation.

Innovation is not self-generating and requires management and leadership to be introduced into the public sector and to manage innovation. Innovation management and collaboration are recommendable to pair in all innovation phases. One of the differences between innovation and traditional decision making process or project management is that innovation cannot be 100% planned or predicted. The innovation process is an explorative and learning process. In general innovation can bring together politics and administration separated by the NPM. Furthermore, innovation does not only put emphasis on the output side of the organisation but also on the input side.

The innovation process

Conceptualizing innovation into different phases can help to reduce the chaos and uncertainty of the innovation process and serves as a practical tool for managing innovation. However, working with innovation requires personal and organizational flexibility to change decisions (when necessary), openness and the will to explore new ways of thinking and working. The different stages of innovation require different methods, skills and managers' roles. The first phases require more creativity, learning and exploration while the last phases require more structure and centralization. A deep understanding of the nature of the innovation journey can help to overcome problems.

Innovation management

Innovation management is a new type of management emerging with the new practices of innovation. It is characterised by being an open concept, because in principle, all employees without distinction of their position in the organisation with knowledge about innovation can be innovation managers and learn the required skills. This idea contradicts the exclusive role that the NPM gives to politicians and to public managers as being the only ones responsible for the organisation efficiency and innovation.

Innovation management is also characterised by being pluralistic as it embraces different roles according to the innovation phases, emphasising flexibility and dynamisms, which is opposed to the generic role of managers as generic for all types of functions. The pluralistic dimension of innovation can give rise to problems of accountability when the power balance is 'stirred'.

References

Agranoff, R. and McGuire, M. (1999): "Big Questions in Public Network Management Research", Journal of Public Administration Research and Theory, Vol. 3, pp. 295-326.

Ansell, C. and Gash, A. (2012): "Stewards, mediators, and catalysts: Toward a model of collaborative leadership", *The Innovation Journal: The Public Sector Innovation Journal,* Vol. 17, No. 1, pp. 1-21.

Bland, T., Bruk, B., Kim, D. and Lee, K. (2010); "Enhancing Public Sector Innovation_Examining the Network-Innovation Relationship", *The Innovation Journal: The Public Sector Innovation Journal,* Vol. 15, No. 3, pp. 1-17.

Bloch, C. (2010): "Towards a conceptual framework for measuring public sector innovation", in Measuring innovation in the public sector in the Nordic countries (ed.): *Toward a common statistical approach* ("Copenhagen Manual").

Beinecke, R. (2009): "Introduction: Leadership for wicked Problems", *The Innovation Journal: The Public Sector Innovation Journal,* Vol. 14, No. 1, pp. 1-17-

Bommert, B. (2010): "Collaborative Innovation in the Public Sector", *International Public Management Review,* Vol. 11, Issue 1, pp. 15-33.

Christensen, T. and Lægreid, P. (1999): "New Public Management: Design, Resistance or Transformation? A Study of How Modern Reforms Are Received in a Civil Service System", *Public Productivity & Management Review*, Vol. 23, No. 2, pp- 169-193.

Christensen, T. and Lægreid, P. (2002): "Symposium on Accountability, Publicity and Transparency. New Public Management: Puzzles of Democracy and the Influence of Citizens", *The Journal of Political Philosophy,* Vol. 10, No. 3, pp. 267-295.

Christensen, T. and Lægreid, P. (2007): *Transcending New Public Management- The transformation of Public Sector Reforms*. Hampshire: Ashgate.

Dombrowski, C., Kim, J., Desouza1, K., Braganza, A., Papagari, S., Baloh, P. and Jha, S. (2007): "Elements of Innovative Cultures", *Knowledge and Process Management*, Vol. 14, No. 3, pp. 190-202.

Eggers, W. E og Shalabh Singh, K (2009): The Public Innovation's Playbook: Nurturing bold ideas in government (Harvard Kennedy School).

Halvorsen, T. (2005): "On innovation in the Public sector" in Halvorsen, T., Hauknes, J., Miles I. and Røste, R. (eds.): Innovation in the Public Sector. Publin Report, nr.D9.

Hartley, J. (2005): "Innovation in Governance and Public Services: Past and Present", *Public Money and Management*, Vol. 25, pp. 27-34.

Jensen, K., Jensen, J., Digmann, A. and Bendix, H. (2010): Principper for Offentlig Innovation. Fra Best Practice til next Practice. København: L & R Business.

Jæger, B. (2002): "Innovations in public administration. Between political reforms and user needs" in Sundbo, J. and Fuglsang, L (eds.): Innovation as strategic Reflexivity. Routledge.

Kanji, G. and Moura e'Sa, P. (2001): "Measuring Leadership Excellence", *Total Quality Management*, Vol. 12, No. 6, pp. 701-718.

Moore, M. and Hartley, J. (2008): "Innovations in Governance", *Public Management Review*, Vol. 10, No. 1, pp. 3-20.

March, J. G. (1991): "Exploration and Exploitation in Organisational Leraning", Organisation Science, Vol. 2, Special Issue, pp. 71-87.

Mulgan, G. and Albury, D. (2003): *Innovation in the Public Sector*. London: Cabinet Office Strategy Unit.

Osborne, S. (2010): The New Public Governance- Emerging perspectives on the theory and practice of public governance. New York: Routledge.

Roberts, N. and Bradley, R. (1991): "Stakeholder Collaboration and Innovation: A Study of Public Policy Initiation at the State Level", Journal of Applied Behavioral Science, Vol.27, No. 2, pp. 209-227.

Sundbo, J. and Fuglsang, L. (2002): *Innovations as Strategic Reflexivity*. London: Routledge.

Sørensen, E. and Torfing, J. (2011):" Enhancing Collaborative Innovation in the Public Sector", Administration *&* *Society*, Vol. 43, No. 8, pp. 842-868.

Sørensen, E. and Torfing, J. (2012): "Introduction: Collaborative Innovation in the Public Sector", The *Innovation Journal, The Public Sector Innovation Journal,* Vol. 17, No. 1, pp. 1-14.

Teofilovic, N. (2002): "The reality of innovation in Government", The *Innovation Journal, The Public Sector Innovation Journal,* Vol. 7. No. 3, pp. 1-29.

Torfing, J. (2012): "Ledelse af samarbejdsdrevet innovation i kommunerne" in Torfing, J. (eds.): *Ledelse efter kommunalreformen*, second edition. København: Jurist-og Økonomforbundets Forlag.

Unger, B. (2005): "Problems of Measuring Innovative Performance" in Casper, S. and van Waarden, F. (eds.): *Innovation and Institutions*. United Kingdom: Edward Elgar, pp. 19-50.

Van de Ven, A.H., Polley, D. E., Garud, R. and Venkataraman, S. (1999): *The Innovation Journey*. New York: Oxford University Press.

Walter, J. (2001): "Understanding Innovation: What Inspires it? What Makes it Succesful?", *The Pricewaterhousecoopers Endowment for The Business of Government*.

Wise, L. (1999): The Use of Innovative Practices in the Public and Private Sectors: The Role of Organisational and Individual factors", Public productivity & Management Review, Vol. 23., No. 2, pp. 150-168.

Aagaard, P. (2010): "New ways in Public innovation?", *CLIPS Working Paper* No. 2. Roskilde University.

Aagard, P. (2011): "Organisational Ambidexterity: How to be both Innovative and efficient in the Public Sector" *CLIPS Working Paper* No. 5. Roskilde University.

Web links

OECD Innovation Strategy: Key Findings, 2010. Available at: http://www.oecd.org/sti/45326349.pdf