

# STEPPING TOWARDS PUBLIC SERVICE LOGIC – CASE STUDY ON DYNAMIC CAPABILITIES IN INNOVATIVE PUBLIC PROCUREMENT

Hannu Torvinen, [hannu.torvinen@oulu.fi](mailto:hannu.torvinen@oulu.fi)

Oulu Business School,  
University of Oulu, Finland

*Competitive paper submitted for the 34<sup>th</sup> annual IMP Conference,  
Marseille, France*

## ABSTRACT

The present case study examines the key dynamic capabilities needed by public procurement units choosing to apply innovative public procurement measures in their purchasing decisions. The means of innovative public procurement change how suppliers are being invited to supply pre-existing solutions in an improved way and open up for new actors such as citizen communities to be more engaged in the purchasing process. Dynamic capabilities refer to the organization's abilities to adapt their competences and resources in transition to new rapidly changing environments like the latter. Furthermore, the study takes a stand on the broader issue of public service organizations' (PSOs') transformation from traditional service providers into managing collaborative relationships where value is co-created in interaction with service end-users. Regardless of who produces the public service or owns the public property, according to public service logic (PSL), it is the service user who unavoidably creates the performance and value of the public service and whose actions should be the locus of interest.

Former research on public procurement has studied, for instance, the crucial operational capabilities for public procurement of innovation (PPI) and synthesized the general concept of dynamic capabilities within public management. The core purpose of present study is to increase understanding on what advances the learning of individual public servants adopting an innovative approach on the purchasing of public services and properties. The findings are based on 25 semi-structured interviews, participant observation and documentation data on the key individuals carrying out innovative school procurement in northern Finland. To analyze the development of operational capabilities by the studied public servants, longitudinal case data was gathered in the two consecutive procurement cases during three year intensive research period.

The key findings of the study reassert the existing evidence on both the deployment of dynamic capabilities by public sector organizations and operational capabilities needed by the procuring PSO. The study's added research propositions suggest learning-by-doing and alliancing as the key dynamic capabilities needed for successful transition and organization-wide experimental culture as the crucial enabler for capability deployment. In addition, the results strongly demonstrate that the development of innovative procurement practices is not restricted by the size and resources of the procurer. Conceptually, study offers a novel exploratory view on capability development within public procurement context. Furthermore, more research is needed on public procurement relationships with end-user's actions and capabilities instead of the procuring PSO or supplier as the focus point.

**Keywords:** public procurement, dynamic capabilities, public services, value co-creation, public-private partnership

## INTRODUCTION

Securing service provision effectively is the main premise for most public sector organizations' existence, regardless whether the public service is composed in-house by the public service organization (hereafter PSO) or outsourced to someone else (Taponen & Kauppi, 2017). As the procurement of goods, services and properties from private suppliers and service providers has increased, so has the interest by policy makers, researchers as well as practitioners to better utilize public procurement in developing innovations, increasing prosperity, and enhancing people's general well-being (e.g. Aho et al., 2006; Uyarra & Flanagan, 2010). To best utilize public procurement's unused innovation potential, interorganizational, multilevel, and cross-sector relationships between a range of stakeholders from the public, for-profit, and non-profit sectors, as well as users and citizens need to be emphasized (Hartley, Sørensen & Torfing, 2013). Following Knutsson and Johansson (2014), innovative public procurement changes how the purchasing organization invites suppliers to offer pre-existing solutions in an improved way and opens up practices for new actors to be engaged in the purchasing process. Whereas some recent studies have for instance dealt with the organizational capabilities crucial for public procurement of innovation (PPI) measures (Valovirta, 2015), suitable management approaches to outsourced service delivery (Taponen & Kauppi, 2017) and innovation training in public-private partnerships (Brogaard, 2017), the focus of the present study lies in the PSO's transition in implementing a new more collaborative approach in their purchasing function.

To understand the learning paths and development of individuals of the PSO into a new high-velocity market space, the terminology of dynamic capabilities (e.g. Teece, Pisano & Shuen, 1997; Eisenhardt & Martin, 2000; Winter, 2003) is applied in the study. Dynamic capability approach has been found applicable also in public management environment (Piening, 2013; Pablo et al., 2007; Bryson, Ackermann & Eden, 2007) and thus within PSOs conducting innovative public procurement in the interest of the present study. According to Piening (2013: 213), "dynamic capabilities can be described as bundles of interrelated routines which, shaped by path dependency, enable an organization to renew its operational capabilities in pursuit of improved performance". Additionally, the context of innovative public procurement is attractive for advancing knowledge on public service management concepts of public service-dominant logic (PSDL) and public service logic (PSL). Based on the widespread ideas on service dominant logic (Vargo & Lusch, 2004; 2008), PSDL tackles the deficiencies of new public management (NPM) and its product-dominant emphasis (Hood, 1991) in the delivery of public services (Osborne, Radnor & Nasi, 2013; Alford, 2016; Osborne et al., 2015). PSL on the other hand further emphasizes the citizen focus of service delivery by claiming: "PSOs do not create value for citizens – they can only make a public service offering. It is how the citizen uses this offering and how it interacts with his/her own life experiences that creates value" (Osborne, 2017: 4). The development in co-production terminology within public service management can also be seen as part of the central research trajectory of value co-creation within SDL research in business and management in general (Pohlmann & Kaartemo, 2017).

The key research question of the present study is: *what are the key dynamic capabilities needed from PSO in transition to innovative public procurement environment?* Secondly, we will take a stand on *what factors enable the PSO to deploy dynamic capabilities that promote their learning?* By these questions, we will study dynamic capabilities from a rather different context and viewpoint than some of the late supplier-centered research on industrial networks (Oinonen et al., 2017; Mitrega et al., 2012; Cabanelas, Omil & Vázquez, 2013). Concluding results of the study will be presented in the form of four research propositions based on an exploratory case study on the key individuals carrying out two consecutive public-private partnership based

school procurement initiatives in northern Finland. In general, the controversy met by practitioners in the implementation of innovative public procurement measures is “how to procure something you don’t know yet exists?” Accordingly, the issue of dynamic capabilities in innovative procurement can be condensed in “how do you learn to procure something non-existent?” The innovative objectives of studied cases show mainly in solutions that break the traditional forms of public school services either through direct space innovations (e.g. a property with no traditional classrooms) and indirect pedagogical innovations (e.g. new collaboration between children of different ages enabled by the space). As our interest lies above all in the transformation of the procuring PSO into a new environment, the learning paths of individual practitioners are examined through longitudinal data gathered on a three year intensive research period between 2014 and 2017.

## LITERATURE REVIEW

The purpose of the study’s literature review is to first present the dynamic capabilities theory that will act as the main lens to our study context. Secondly, we will form a basic understanding of the paradigm change in public procurement from a traditional view (moderately dynamic market space) to a more innovative approach (highly dynamic market space). A synthesis of the covered literature on innovative public procurement and public service logic is presented in *Table 1*, and subsequently utilized in the case analysis to recognize the dynamic capabilities needed by PSOs. Accordingly, as the transition to a new more collaborative and high-velocity market in the context of innovative public procurement takes place, the requirements for new understanding and operational capabilities in the field cannot be disregarded.

A simple definition by Eisenhardt and Martin (2000: 1118) addresses that “dynamic capabilities are best conceptualized as tools that manipulate resource configurations”. Whereas the term capability refers to organization’s capacity to perform a certain activity in a reliable and at least minimally satisfactory manner (Helfat & Winter, 2011), dynamic capabilities tackle the organization’s capacity to create, extend, modify and alter its resource base (Helfat et al., 2009) and operational capabilities (Winter, 2003) into new higher-level capabilities. Thus, it is organization’s operational capabilities that enable it to perform an activity on an on-going basis with the same techniques and scale (Helfat & Winter, 2011) and organization’s dynamic capabilities that let it to adapt the operational capabilities into new and shifting market surroundings. Where some capabilities’ are purposed to integrate resources, some to reconfigure old resources and some to gain and release new resources (Eisenhardt & Martin, 2000). These patterns of capabilities vary according to level of change required by the new market environment ranging from stable and habitual routines in moderately dynamic markets to more unsteady and experiential routines in high-velocity markets (ibid.). Especially under conditions of turbulent change, dynamic capabilities are seen as a critical prerequisite for long-term success (Zollo & Winter, 2002).

Dynamic capabilities emerge from path-dependent processes i.e. their evolution is guided by different learning mechanisms (Teece et al., 1997) and they need to be embedded and studied in context shaped by factors like historical development, learning barriers and micropolitics within the organization (Piening, 2013). A key success factor for PSO lies in identifying and building capabilities that produce most public value for key stakeholders at a reasonable cost and continuously renewing these capabilities to effectively respond to changes in their environment (Bryson et al., 2007). As public sector organizations are often seen facing even more environmental change than the private sector ones (Pablo et al., 2007; Boyne, 2002), more trial-and-error and simple the dynamic capabilities used by them normally are and more

unpredictable are the outcomes PSOs must accept (Eisenhardt & Martin, 2000). Where traditional resource-based view on dynamic capabilities sees rare and unique resources as the source of fresh value-creating strategies and competitive advantage (Teece et al., 1997), PSOs are generally encouraged to spread innovation and best practices and collaborate with other PSOs providing similar services (Rashman, Withers & Hartley, 2009). This view of dynamic capabilities which exhibit commonalities across effective organizations emphasizes the strategic imperative of building dynamic capabilities not in leverage, but change (Eisenhardt & Martin, 2000).

Schapper, João and Gilbert (2006) argue that public procurement has three general objectives: 1) public confidence in the fairness of the procurement, 2) financial efficiency and effectiveness as well as 3) consistence with other policies involved. The key idea of innovative public procurement is to add public agencies' objective for innovation into the mix (Edler & Georghiou, 2007; Rolfstam, 2012). Innovativeness in public procurement can relate both to the development of new technologies and services, as well as process innovations that develop management and work procedures (Uyarra & Flanagan, 2010). Where in regular public procurement, public agencies buy ready-made and ready-planned products or services "off-the-shelf" on the main determinant of price, public procurement for innovation (PPI) occurs when a PSO places an order for the fulfillment of certain functions within a reasonable period of time determining only the objectives on solving human needs or societal problems (Edquist & Zabala-Iturriagagoitia, 2012). In general, innovative public procurement used as a demand-side-oriented tool for stimulating innovation (Aschhoff & Sofka, 2009) widely challenges the contemporary institutional practices and skills in the field (Rolfstam, 2012); i.e. calls for the deployment of PSO's dynamic capabilities in building new operational capabilities. In practice, new capacities for PPI can be built both through formal and informal learning mechanisms such as training programmes, curriculum development, peer learning networks, organizational benchmarking and R&D projects (Valovirta, 2015). Instead of requiring strategically sophisticated understanding of innovative public procurement as a policy (Edquist et al., 2015), the PSO's transformation can also start from a mind-shift of one individual and it might even be an advantage to be small and seemingly insignificant (Knutsson & Thomasson, 2014).

While setting social and economic objectives to public purchasing is valid, they should be primarily pursued with policy instruments other than procurement (Uyarra & Flanagan, 2010). To view procurement within the wider paradigm change in PSOs' policies, public service logic (Osborne, 2017) is utilized as a viewpoint on the studied individuals' change into a new high-velocity procurement environment. Based on the research contributions on public service-dominant logic (Osborne et al., 2013; Osborne & Strokosch, 2013; Osborne et al., 2015; Radnor et al., 2014) combining together the views on service co-production from public administration and from generic service management, the key idea for applying PSL terminology in public service context is a shift in interest from linear product-dominant logic and PSO's actions to reciprocal service co-production and service user as the central locus of service delivery (Osborne, 2017). Motives for the development of PSL theory relate both to the distinctive context and nature of public services compared to private ones as well as specific limitations of SDL theory in illustrating the co-production taking place in public service delivery (Osborne, 2017). Similarly, interorganizational public procurement relationships (Rolfstam, 2012) and value experienced by the service user (Torvinen & Ulkuniemi, 2016) have gradually replaced some of the NPM-originated views on effective public procurement. Enhanced co-production of public services requires a genuine partnership between public service professionals and service users, and calls for new often resource intensive mechanisms to best utilize its potential (Osborne & Strokosch, 2013).

**Table 1. The transition from traditional to innovative public procurement & PSL.**

<b>Conventional public procurement</b>	<b>Innovative public procurement</b>	<b>Public service logic (Public service-dominant logic)</b>
Practitioners do not always have a clear understanding who the client actually is and, therefore, do not know whose needs they are supposed to satisfy (Bovaird, 2007).	Extends public procurement policies longer, wider and deeper through enhanced communication between the focal actors (Georghiou et al., 2014).	Starts from the service user as unit of analysis and explores how public services, and PSOs, can facilitate the co-creation of value by service users (Osborne, 2017).
Product- and service based evaluation; tendering done through ready-planned, complete requirements.	Outcome-based assessment through the procurement user's requirements and needs (Edquist et al., 2015); Success based on the value-in-use formed by value co-creation with end-users (Torvinen & Ulkuniemi, 2016; Grönroos, 2008).	Both private and public value of the service delivery need to be acknowledged (Alford, 2002); public value creation consists of impact that the shared experience has on the quality of relationship between the individual and the public actor (Meynhardt, 2009).
Focus on the formal and contract driven relationship between the procurer and supplier.	Focus on the informal and proactive relationships between procurer, supplier and end-users (Ng, Wong & Wong, 2013).	Focus on the unavoidability of co-production of public services (Alford, 2016).
End-user a recipient of private value i.e. a consumer of the goods, services and properties procured; cf goods-based view (Hood, 1991).	End-user adopts conventional, cooperative, collaborative or controlling role according to the situation (Torvinen & Haukipuro, forthcoming 2018); role similar to lead-user concept (Edler & Georghiou, 2007); the PSO acts as an intermediary (Edler & Yeow, 2016).	Services are consumed in various roles of customer, partner and citizen (Thomas, 2013); public value received as a citizen, private value as a customer, beneficiary or obligatee (Alford, 2002) PSO a facilitator integrating services according to citizen needs (Osborne, 2017).
PSOs can influence the financial savings for the taxpayer community through purchasing.	PSOs can influence the society wider through their purchasing decisions (Knutsson & Thomasson, 2014).	Public services delivery requires the governance of sophisticated public service systems rather than individual PSOs (Osborne, 2010); co-production has potential in generating both individual utility value as well as social, environmental and political value (Bovaird & Loeffler, 2012).
Emphasis on keeping within contemporary procurement procedures and the limits of EU-level and national regulations; intra-organizational processes.	Emphasis on relationship contracting, partnerships, networks and strategic alliances (Lawther & Martin, 2005); interaction within inter-organizational relationships (Torvinen & Ulkuniemi, 2016).	Instead of services created <i>for</i> the public, aim on public services created <i>by</i> the public (Bovaird & Loeffler, 2012); end-user a potential co-producer of value in both service design and delivery (Alford, 2016).
Objectives on public confidence in the fairness of the procurement, financial efficiency and consistence with other policies (Schapper et al., 2006)	Objectives on mobilized product, service & process innovations, better services as well as future references for the suppliers (Lähdesmäki & Kilkki, 2008).	Objectives of cooperation and compliance from service recipients to meet not only people's material but also their symbolic and normative needs (Alford, 2002).
<div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center; width: 30%;"> <p><i>Moderately dynamic market space</i></p> </div> <div style="width: 10%; text-align: center;">  </div> <div style="text-align: center; width: 30%;"> <p><i>High-velocity, high uncertainty driven market space</i></p> </div> </div>		

## RESEARCH CONTEXT

The empirical findings of the present study are based on longitudinally gathered qualitative data on public servants in charge of two innovative school property procurement projects in northern Finland. A summarizing table of the case details and complete case data gathered is found in *Appendix 1* of the present paper. The innovative features of studied procurement cases break largely the traditional habits on acquiring school properties and create innovation both on the core (pedagogical) services provided as well as the working practices of the whole PSO and its procurement functions. The active phases of the first procurement (Procurement I) project took place from 2011 to 2013 and the second project (Procurement II) from 2014 to 2017. The key individuals working in both cases changed their employing PSO between the projects and worked as the mayor and real estate manager of the observed municipality during the second procurement. Both procurement projects follow contractual and working principles of public-private partnership (PPP) seen novel in the procurement of public properties in Finland. Where the supplier of PPP procurement carries a larger liability of the procured object or service for a longer period of time (i.e. the life cycle of the procurement), the procurer's task is to refrain from defining in advance how to reach the targets set for the outcomes of the procurement (Yescombe, 2007). In addition to building, the larger supplier liability in the procured school properties included planning, financing, maintaining and providing support services in the procured school properties. The studied procurement processes represent the first experiences of the studied public servants in key roles of innovative public procurement projects that deviate from traditional contracting and (open or restricted) tendering procedure. As such, the case data offers rich descriptions in the transition and learning by the individuals during the study period.

Following an exploratory case method to study the progression of capabilities within the case projects, the case evidence consists of interview, documentation and observation data gathered between 2014 and 2017. Exploratory case method fits well with our objectives on explanatory and causal investigation on a less explored phenomenon (Yin, 2003) with strengths such as high degree of flexibility and independence regarding to research progress as well as data collection (Streb, 2010). As the primary data for analysis, a total of 25 semi-structured interviews were carried out in three occasions within the study period: 1) after initialization of procurement I (i.e. prior to procurement II), 2) after the tendering phase of procurement II (i.e. preceding the construction phase) and 3) after the construction phase on procurement II (i.e. during the initialization of the property). As the goal was to gain knowledge of dynamic capabilities on an individual level, the two public servants in key managing roles of both procurement cases (city treasurer/mayor and construction engineer/real estate manager) as well as the end-user in a key role of procurement II (school principal) were interviewed a total of three times during all three interview rounds. For longitudinal analysis, imperative was the participant observation conducted in 28 separate events from procurement II's preliminary planning phase in fall 2014 to the property's initialization phase in fall 2017. Participant observation can be seen as an efficient way to develop a holistic understanding of the phenomenon and its context and which is objective and accurate regarding its natural setting (DeWalt & DeWalt, 2002). The data in the form of documentation by the procurer, supplier and end-users had mainly a complementary function providing background for discussions with the informants. The data analysis of the study follows an abductive research approach, where it has been carried out through a continuous dialectic interaction between the existing research knowledge and empirical case insight (Dubois & Gadde, 2002). In practice, the transcribed interviews, observation notes and documentation have been thematically coded with NVivo in two rounds.

## KEY FINDINGS

Studied informants saw the most visible success of procurement I in the attainment of new properties that would have been impossible to finance without the PPP practice used. In procurement II, the participating public servants, end-users and supplier representatives were most satisfied with the partnerships formed and the creative contributions of end-users materialized in the completed property. This sort of development in viewing user engagement as the main opportunity for innovative public procurement measures can be seen as the biggest development of individuals' skills commencing an innovative procurement practice. Key operational capabilities supporting closer interaction found in the case data include abilities to *recognize and integrate relevant stakeholders to collaborate, balance multiple stakeholder views, create and share transparent work processes* as well as *manage multi-organizational alliances and teams*. Where procurement I succeeded rather well in increasing end-users satisfaction on the quality of specific properties procured, further capabilities for early interaction in procurement II also advanced the acceptance of new kind of working methods and co-productive measures in the whole municipality. The case findings also reassert the previous evidence of *effective resource management* and *flexibility* as the key operational capabilities behind successful innovative public procurement initiatives.

Regarding the core interest of this paper, dynamic capabilities with key importance for transition in the studied cases include *routines of learning-by-doing, implanting of failure-approving mindset, alliancing and networking* as well as *continual evaluation of external support needed*. The repeated practices (e.g. steering group meetings and workshops) where involved public servants, end-users and decision-makers with different administrative, technical and pedagogical backgrounds could discuss and combine their views, acted as the core learning mechanism for the PSO. The most important factors enabling the deployment of dynamic capabilities indicated by the case analysis are *favorable organizational culture, strategic instead of operational objectives, former partnerships and alliances* as well as *trust in the development by "non-professionals"*. Most often repeated concept by informants in last two interview rounds was organizational culture. An experiment-supporting culture was especially strong in procurement II, where municipality's collaborative strategy was promoted not only within the partnerships and interaction in the procurement project, but on the level of PSO's all public servants, the school organization as well as elected decision-makers.

## DISCUSSION

As Piening's (2013) extensive literature review on dynamic capabilities in public management presents four propositions to test in further studies within different public sector environments, it seems natural to first reflect these arguments against the present study and specific innovative public procurement context. Our findings corroborate with three out of four of the former suggestions. First, dissatisfaction with contemporary operational capabilities grows the likelihood of deploying dynamic capabilities. In other words, a repeating pattern for developing the PSO's procurement capabilities is: the worse you do both financially and operationally, more willing you are for change. Second, dynamic capabilities tend improve the performance of the organization. Operational capabilities formed during the whole 7 year duration of studied procurement cases, have unambiguously enhanced the overall fitness of both the public servants responsible on future procurements as well as the wider municipal PSO. Third, we concur that likelihood and value of deploying dynamic capabilities grows with environmental turbulence; e.g. shifts in the procuring municipality's age structure, stricter budgetary constraints and changes in the national curriculum and state-of-art procurement practices.

However, our findings disagree with Piening's (2013) suggestion on the negative effect of PSO's publicness in the deployment of dynamic capabilities. In transition to innovative public procurement measures based on interorganizational interaction and objectives to solve human needs or societal problems (Rolfstam, 2012; Edquist & Zabala-Iturriagoitia, 2012), higher degree of publicness is a factor that speeds up and supports the PSO's change rather than makes it less likely. Promotion of publicness and transparency can also be linked to dynamic capabilities needed to follow the principles of public service logic. Instead of relying on their own performance creating the value, the PSO needs publicness to open up their services better to the user community and to understand the citizen as the locus of value creation in public service delivery (Osborne, 2017).

The existing research claims that dynamic capabilities are particularly valuable in turbulent environments where technological, regulatory and competitive conditions are changing rapidly (Eisenhardt & Martin, 2000). The first of the four research propositions set by present study addresses that significant changes are needed from the PSO in their first implementations of innovative public procurement policies. In general, PPI approach requires effective coordination within organization's different administrative functions and units to accommodate different stakeholder needs and strategically understand the policy's objectives (Edler & Georghiou, 2007). In addition, vertical alignment between politically elected policy-makers, PSO's management and operational level end-users is needed (Valovirta, 2015). To maximize both private and public value (Alford, 2002) formed through the procurement, the new role of the PSO as a facilitator (Osborne, 2017) needs to be understood widely by all participating individuals in the procurement. Although forming the dynamic capabilities needed for change can be extremely time and resource consuming, the urgency of novel operational capabilities for managing innovative public procurement cannot be disputed (Valovirta, 2015).

**Proposition 1:** *Adaptation into innovative public procurement can be seen as a transformation from a moderately dynamic to a high-velocity market space and calls for the deployment of dynamic capabilities by the PSO.*

As new working practices for conducting innovative public procurement policy had to be largely reimaged by studied public servants without possibilities for imitation, the most significant dynamic capabilities for the PSO appeared in routines of doing things as experiments. Similar findings of learning-by-doing as the primary mechanism through which organizations build dynamic as well as operational capabilities have been formerly presented by Piening (2011) along with Daniel and Wilson (2003). Building of dynamic capabilities is highly path-dependent and shaped both by PSO's own existing routines, learning barriers and micropolitics (Ridder, Doege & Martini, 2007; Piening, 2013) as well as organizational routines by the supplier organizations and end-user communities. Dynamic capability to network and alliance with partners sharing similar ideas on innovation clearly helps PSO in gaining access to valuable resources and capabilities. Moreover, today's end-users interacted with can turn out extremely conscious and realistic about uncertain future requirements and risks of novel policies (Torvinen & Ulkuniemi, 2016).

**Proposition 2:** *Dynamic capabilities needed for transition to innovative public procurement are highly path-dependent and materialize as continuous learning-by-doing and alliancing routines that effectively utilize the contributions of both collaborating suppliers and end-users.*

Essential for change, is a supportive context that encourages inter-play between trust and learning (Pablo et al., 2007). The former corroborates closely with the present findings where key dynamic capabilities used by the PSO were best enabled by an organizational culture that supports experimenting. To simplify, success in the new high-velocity market space calls for public servants ability to guarantee a failure-approving atmosphere with both the supplier and end-user parties involved. More familiar and willing the stakeholders are for adopting a new mindset, easier is the change for managing individuals of the PSO. From the perspective of PSL, co-production is to be seen as an unavoidable part of user-centered innovative procurement project (cf Alford, 2016). In other words, as the PSO is unavoidably dependent on the relationship with end-user, they should aim to build or utilize existing organizational culture that encourages and facilitates the deployment of dynamic capabilities by users as early as possible.

**Proposition 3:** *Favorable organizational culture enables the deployment of dynamic capabilities throughout the PSO's administrative and user organizations; building and sustaining experimental culture can be seen as a dynamic capability itself.*

It is striking, how closely the details of the present case resemble the ones in Knutsson's and Johansson's (2014) case study on innovation friendly food procurement conducted by Klippan municipality in southern Sweden. Also in procurement I, the change started from the persistence of two key individuals who began questioning some of the contemporary procurement routines in the field. Mainly this meant breaking the generally risk-averse culture of public sector and accepting the risk of later answering to suppliers' or citizens' potential complaints in the market court. Even though the political support for change was first shaky, confidence grew in procurement II simultaneously with the progression of both dynamic and operational capabilities. Just as in Klippan, the key individuals of our study case have also taken an approach on sharing their knowledge to other PSOs both on local and national level. The results by Knutsson and Johansson (2014) and the present study highlight that the PSO conducting public procurement does not have to be massive to re-think their working processes and affect the practices and structure of the larger market.

**Proposition 4:** *Motions that break the risk-averse nature of traditional public procurement and possibly impact the whole market originate from individuals and are not limited by the size and resources of the PSO.*

## CONCLUSIONS

Conceptually this study provides a novel case-based view on innovative public purchasing discussion through the viewpoint of dynamic capabilities. The four presented research propositions emphasize routines of learning-by-doing and alliancing having key importance in pursuit of improved procurement performance and failure-approving, experimental organizational culture throughout the PSO as the most significant enabler for the deployment of these capabilities. Concerning the further applicability of terminology on public service logic (Osborne, 2017; Osborne et al., 2015; Alford, 2016) within discussion on innovative public procurement, we see the core principles and necessary capabilities between innovative public procurement (Edquist et al., 2015; Edler et al., 2005; Knutsson & Thomasson, 2014) and PSL highly harmonious with each other. To provide the citizens a possibility to co-create value-in-use and integrate provided resources independently in their own context, the PSO needs to adopt an experimental mindset where anything can and does act a device for value creation by the user.

The study can aid public managers and societies in their planning of how to implement PSO's transition into a new turbulent market environment. First, the focus in the needs and actions of end-users cannot be emphasized enough when developing the capabilities needed for innovative public procurement measures. Even though the practical discussion on public procurement tends to get stuck on the limitations set by procurement regulation, there is space in the national procurement laws and EU directive to develop more collaborative approaches based on interaction with citizens. Second, just as the balance sheet can be seen as "a poor shadow of a firm's distinctive competences" (Teece et al. 1997: 517), also a small procuring PSO can deploy dynamic capabilities and have impact on the market. As this paper and the study by Knutsson and Johansson (2014) hint, it might even be an advantage to be small, seemingly insignificant and extremely flexible for quick organization-wide learning. Thus, we want to encourage public procurement units not only to fearlessly develop their procurement capabilities but also to openly share their learning.

Our recommendations for future research avenues relate both to further case studies on the field of innovative public procurement as well as on the field public service management. As it is evident that SDL and newly established PSL terminology have only scratched the surface of public procurement discussion, more research on public purchasing relationships and networks from the perspective of actions and capabilities by citizens instead of procuring PSO or supplier is needed. In addition, as drawing conclusions on specific change-enhancing dynamic leadership capabilities was seen impossible within this limited case setting, cross-case comparison on more individuals managing PSO's transition to innovative procurement policies is required. For the purpose of moderation, we also reinforce Piening's (2013) call for further comparative studies between dynamic capabilities on public and private organizations.

## REFERENCES

- Aho, E., Cornu, J., Georghiou, L. & Subira, A. 2006, *Creating an innovative Europe*, European Communities, Brussels.
- Alford, J. (2002). Defining the Client in the Public Sector: A Social-Exchange Perspective. *Public Administration Review*, 62(3), 337-346.
- Alford, J. (2016). Co-Production, Interdependence and Publicness: Extending public service-dominant logic. *Public Management Review*, 18(5), 673-691.
- Aschhoff, B. & Sofka, W. (2009). Innovation on demand-Can public procurement drive market success of innovations? *Research Policy*, 38(8), 1235-1247.
- Bovaird, T. (2007). Beyond Engagement and Participation: User and Community Coproduction of Public Services. *Public administration review*, 67(5), 846-860.
- Bovaird, T. & Loeffler, E. (2012). From Engagement to Co-production: The Contribution of Users and Communities to Outcomes and Public Value. *Voluntas*, 23(4), 1119-1138.
- Boyne, G.A. (2002). Public and Private Management: What's the Difference? *Journal of Management Studies*, 39(1), 97-122.
- Brogaard, L. (2017). The impact of innovation training on successful outcomes in public-private partnerships. *Public Management Review*, 19(8), 1184-1205.
- Bryson, J.M., Ackermann, F. & Eden, C. (2007). Putting the Resource-Based View of Strategy and Distinctive Competencies to Work in Public Organizations. *Public administration review*, 67(4), 702-717.
- Cabanelas, P., Omil, J.C. & Vázquez, X.H. (2013). A methodology for the construction of dynamic capabilities in industrial networks: The role of border agents. *Industrial Marketing Management*, 42(6), 992-1003.

- Daniel, E.M. & Wilson, H.N. (2003). The role of dynamic capabilities in e-business transformation. *European Journal of Information Systems*, 12(4), 282-296.
- DeWalt, K.M. & DeWalt, B.R. (2002). *Participant observation: a guide for fieldworkers*. AltaMira Press, Walnut Creek, CA.
- Dubois, A. & Gadde, L. (2002). Systematic combining: An abductive approach to case research. *Journal of Business Research*, 55(7), 553-560.
- Edler, J. & Georghiou, L. (2007). Public procurement and innovation-Resurrecting the demand side. *Research Policy*, 36(7), 949-963.
- Edler, J., Rigby, J., Hommen, L. & Tsipouri, L. 2005, *Innovation and Public Procurement. Review of Issues at Stake*, Fraunhofer Institute.
- Edler, J. & Yeow, J. (2016). Connecting demand and supply: The role of intermediation in public procurement of innovation. *Research Policy*, 45(2), 414-426.
- Edquist, C., Vonortas, N.S., Zabala-Iturriagagoitia, J.M. & Edler, J. (eds) (2015). *Public procurement for innovation*. Edward Elgar Publishing Ltd., Cheltenham.
- Edquist, C. & Zabala-Iturriagagoitia, J.M. (2012). Public Procurement for Innovation as mission-oriented innovation policy. *Research Policy*, 41(10), 1757-1769.
- Eisenhardt, K.M. & Martin, J.A. (2000). Dynamic Capabilities: What Are They? *Strategic Management Journal*, 21(10), 1105-1121.
- Georghiou, L., Edler, J., Uyarra, E. & Yeow, J. (2014). Policy instruments for public procurement of innovation: Choice, design and assessment. *Technological Forecasting and Social Change*, 86, 1-12.
- Grönroos, C. (2008). Service logic revisited: Who creates value? And who co-creates? *European Business Review*, 20(4), 298-314.
- Hartley, J., Sørensen, E. & Torfing, J. (2013). Collaborative innovation: A viable alternative to market competition and organizational entrepreneurship. *Public administration review*, 73(6), 821-830.
- Helfat, C.E., Finkelstein, S., Mitchell, W., Peteraf, M., Singh, H., Teece, D. & Winter, S.G. (2009). *Dynamic capabilities: Understanding strategic change in organizations*. John Wiley & Sons.
- Helfat, C.E. & Winter, S.G. (2011). Untangling Dynamic and Operational Capabilities: Strategy for the (N)ever-Changing World. *Strategic Management Journal*, 32(11), 1243-1250.
- Hood, C. (1991). A Public Management For All Seasons? *Public Administration*, 69(1), 3-19.
- Knutsson, H. & Thomasson, A. (2014). Innovation in the Public Procurement Process: A study of the creation of innovation-friendly public procurement. *Public Management Review*, 16(2), 242-255.
- Lähdesmäki, K. & Kilkki, S. (2008). New Public Management Principles and Practices in Producing Public Utilities and Services. *Administratie si Management Public*, (10), 114-125.
- Lawther, W.C. & Martin, L.L. (2005). Innovative practices in public procurement partnerships: The case of the United States. *Journal of Purchasing and Supply Management*, 11(5-6), 212-220.
- Meynhardt, T. (2009). Public Value Inside: What is Public Value Creation? *International Journal of Public Administration*, 32(3-4), 192-219.
- Mitrega, M., Forkmann, S., Ramos, C. & Henneberg, S.C. (2012). Networking capability in business relationships — Concept and scale development. *Industrial Marketing Management*, 41 (5), 739-751.
- Oinonen, M., Ritala, P., Jalkala, A. & Blomqvist, K. In search of paradox management capability in supplier–customer co-development. *Industrial Marketing Management* (2018). doi: 10.1016/j.indmarman.2017.09.021.

- Osborne, S.P., Radnor, Z. & Nasi, G. (2013). A New Theory for Public Service Management? Toward a (Public) Service-Dominant Approach. *American Review of Public Administration*, 43(2), 135-158.
- Osborne, S.P. (2017). From public service-dominant logic to public service logic: are public service organizations capable of co-production and value co-creation? *Public Management Review*, 1-7.
- Osborne, S.P., Radnor, Z., Kinder, T. & Vidal, I. (2015). The SERVICE Framework: A Public-service-dominant Approach to Sustainable Public Services. *British Journal of Management*, 26(3), 424-438.
- Osborne, S.P. & Strokosch, K. (2013). It takes Two to Tango? Understanding the Co-production of Public Services by Integrating the Services Management and Public Administration Perspectives. *British Journal of Management*, 24, S47.
- Pablo, A.L., Reay, T., Dewald, J.R. & Casebeer, A.L. (2007). Identifying, Enabling and Managing Dynamic Capabilities in the Public Sector\*. *Journal of Management Studies*, 44(5), 687-708.
- Piening, E.P. (2013). Dynamic Capabilities in Public Organizations. *Public Management Review*, 15(2), 209-245.
- Piening, E.P. (2011). Insights into the Process Dynamics of Innovation Implementation. *Public Management Review*, 13(1), 127-157.
- Pohlmann, A. & Kaartemo, V. (2017). Research trajectories of Service-Dominant Logic: Emergent themes of a unifying paradigm in business and management. *Industrial Marketing Management*, 63 (4), 53-68.
- Radnor, Z., Osborne, S.P., Kinder, T. & Mutton, J. (2014). Operationalizing Co-Production in Public Services Delivery: The contribution of service blueprinting. *Public Management Review*, 16(3), 402-423.
- Rashman, L., Withers, E. & Hartley, J. (2009). Organizational learning and knowledge in public service organizations: A systematic review of the literature. *International Journal of Management Reviews*, 11(4), 463-494.
- Ridder, H., Doege, V. & Martini, S. (2007). Differences in the Implementation of Diagnosis-Related Groups across Clinical Departments: A German Hospital Case Study. *Health services research*, 42(6), 2120-2139.
- Rolfstam, M. (2012). An institutional approach to research on public procurement of innovation. *Innovation*, 25(3), 303-321.
- Schapper, P.R., João, N.V.M. & Gilbert, D.L. (2006). An analytical framework for the management and reform of public procurement. *Journal of Public Procurement*, 6(1), 1-26.
- Streb, C. K. 2010. "Exploratory Case Study." In Encyclopedia of Case Study Research, edited by A. J. Mills, G. Durepos, and E. Wiebe, 372-373. Sage, Los Angeles.
- Taponen, S. & Kauppi, K. (2017). Forget "Blind Leading the Seeing" – Improving Public Service Management. *International Journal of Public Administration*, 40(13), 1114-1128.
- Teece, D.J., Pisano, G. & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, 18(7), 509-533.
- Thomas, J.C. (2013). Citizen, customer, partner: Rethinking the place of the public in public management. *Public administration review*, 73(6), 786-796.
- Torvinen, H. & Ulkuniemi, P. (2016). End-user engagement within innovative public procurement practices: A case study on public-private partnership procurement. *Industrial Marketing Management*, 58, 58-68.

- Torvinen, H. & Haukipuro, L. New roles for end-users in innovative public procurement: case study on user engaging property procurement. *Public Management Review* (2018), doi: 10.1080/14719037.2017.1400581.
- Uyarra, E. & Flanagan, K. (2010). Understanding the innovation impacts of public procurement. *European Planning Studies*, 18(1), 123-143.
- Valovirta, V. (2015). "Building capability for public procurement of innovation." In *Public Procurement for Innovation*, edited by C. Edquist, N. S. Vonortas, J. M. Zabala-Iturriagagoitia, and J. Edler, 35–64. Cheltenham: Edward Elgar Publishing.
- Vargo, S.L. & Lusch, R.F. (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, 36(1), 1-10.
- Vargo, S.L. & Lusch, R.F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68(1), 1-17.
- Winter, S.G. (2003). Understanding dynamic capabilities. *Strategic Management Journal*, 24(10), 991-995.
- Yescombe, E.R. (2007). *Public-private Partnerships: Principles of Policy and Finance*. Elsevier, Amsterdam.
- Yin, R.K. (2003). *Case study research: design and methods*. 3rd ed. edn, Sage, Thousand Oaks.
- Zollo, M. & Winter, S.G. (2002). Deliberate Learning and the Evolution of Dynamic Capabilities. *Organization Science*, 13(3), 339-351.

## APPENDIX 1.

### A summary on case details and gathered data.

Procurement cases		
	Procurement I (2011-2013)	Procurement II (2014-2017)
<b>Starting point</b>	<ul style="list-style-type: none"> <li>- Municipality I a medium-sized, financially challenged PSO (ca. 19000 inhabitants) in need of renovated or new healthy school space, PSO's necessity to avoid extra debt.</li> <li>- Municipality merged as part of the province capital during the procurement.</li> </ul>	<ul style="list-style-type: none"> <li>- Municipality II a small agriculturally oriented PSO (ca. 7000 inhabitants) in need of additional school space due to unusual demographic changes.</li> <li>- PSO facing the largest single investment in their history.</li> </ul>
<b>Procured object &amp; outcomes</b>	<ul style="list-style-type: none"> <li>- Procurement of two schools and a kindergarten (ca. 15000 sqm), key innovations in property locations and novel opportunities for pedagogical collaboration between kindergarten and high school.</li> <li>- PPP practice enabled an alternatively impossible investment on new building instead of renovation.</li> <li>- User satisfaction first average due to problems in initialization, rising afterwards (2014). Varying satisfaction on involvement during procurement process.</li> </ul>	<ul style="list-style-type: none"> <li>- Procurement of innovative school property (ca. 6500 sqm), key innovations in open and multipurpose learning environments that also support the new national curriculum 2016, sustainable energy and maintenance solutions and future flexibility.</li> <li>- The main responsibility (and risk) of innovative pedagogical solutions transferred to the user.</li> <li>- User satisfaction excellent in initialization phase (2017). Sense on of involvement to procurement high in all user groups.</li> </ul>
<b>Tendering &amp; contract</b>	<ul style="list-style-type: none"> <li>- Tendering through a negotiated procedure; the weighing for price set at 60% and for quality at 40%.</li> <li>- Winning supplier in charge of designing, building, financing and maintaining the property (25 years contract).</li> </ul>	<ul style="list-style-type: none"> <li>- Tendering through a negotiated procedure; after competitor's withdrawal during tendering, supplier's offer evaluated in comparison to external calculations.</li> <li>- Supplier in charge of designing, building and maintaining the property (20 years).</li> </ul>
<b>Key objectives</b>	<ul style="list-style-type: none"> <li>- Procurement's goal to break traditional practices and purchase "usable future school space instead of just walls", usability, quality and innovativeness promoted.</li> <li>- Main motivation to develop procurement practice in financial benefits and innovativeness in building solutions.</li> </ul>	<ul style="list-style-type: none"> <li>- Procurement's goal to increase "wellness through education", trust and supplier's references acknowledged throughout the process.</li> <li>- The development of procurement practice seen as part of PSO's larger strategic change and more participatory approach.</li> </ul>
<b>PSO's governing individuals</b>	<ul style="list-style-type: none"> <li>- Key responsibilities on city treasurer &amp; construction engineer (after merge, procurement planner).</li> <li>- A steering group involving public servants.</li> </ul>	<ul style="list-style-type: none"> <li>- Key responsibilities on mayor, real estate manager &amp; new school's principal.</li> <li>- A steering group involving public servants, end-users and elected officials.</li> </ul>
<b>Participated stakeholders</b>	<ul style="list-style-type: none"> <li>- Both formal and informal interaction with school principals, teachers and kindergarten manager (no strategic planning).</li> <li>- Formal interaction with elected officials</li> <li>- Supplier chosen designers in architecture, décor &amp; engineering solutions</li> </ul>	<ul style="list-style-type: none"> <li>- Mostly informal interaction with teachers, students, elected officials and school management group (strategic goals set)</li> <li>- Supplier chosen designers in engineering, décor, acoustics and pedagogical solutions (later withdrawn), collaboratively chosen architect's office</li> </ul>

	<ul style="list-style-type: none"> <li>- Service contractors in maintenance, cleaning, security etc.</li> <li>- Expert consults for legal, financial technical and project management know-how</li> </ul>	<ul style="list-style-type: none"> <li>- Service contractors in maintenance, cleaning, ICT etc.</li> <li>- Expert consults for legal and financial know-how</li> </ul>	
<b>Case data</b>			
	<b>After procurement I (2014)</b>	<b>After tendering of procurement II (2016)</b>	<b>After construction of procurement II (2017)</b>
<b>Interviews</b>	<p><i>7 interviews (50-89 min each)</i></p> <ul style="list-style-type: none"> <li>- PSO: City treasurer, procurement planner</li> <li>- Supplier: Project manager, head of planning</li> <li>- End-users: High school principal, comprehensive school principal, kindergarten manager, principal of procurement II</li> </ul>	<p><i>15 interviews (39-71 min each)</i></p> <ul style="list-style-type: none"> <li>- PSO: Mayor, real estate manager, area architect, school and culture manager, technical manager, 2 members of local council</li> <li>- Suppliers: Project manager, area manager, CBO of withdrawn competitor</li> <li>- End-users: Principal, vice-principal, food service manager</li> <li>- Experts: legal consultant, project mgmt consultant</li> </ul>	<p><i>3 interviews (51-60 min each)</i></p> <ul style="list-style-type: none"> <li>- PSO: Mayor, real estate manager</li> <li>- End-users: Principal</li> </ul>
<b>Documentation</b>	<p><i>From 2009 to 2014</i></p> <ul style="list-style-type: none"> <li>- Planning and tendering documents</li> <li>- Contracts</li> <li>- Memos and meeting records, teacher statements</li> <li>- External reports, news stories &amp; presentations</li> </ul>	<p><i>From 2014 to 2017</i></p> <ul style="list-style-type: none"> <li>- Planning and tendering documents</li> <li>- Memos and meeting records</li> <li>- External reports, news stories &amp; presentations</li> <li>- Blogs by key individuals</li> </ul>	
<b>Observation</b>	<p><i>Participant observation conducted 12/2014-10/2017 (22 months, 28 events)</i></p> <ul style="list-style-type: none"> <li>- 12 management team meetings</li> <li>- 1 construction site meeting</li> <li>- 5 planning workshops</li> <li>- 2 planning meeting</li> <li>- 3 negotiation meetings (1<sup>st</sup> &amp; 2<sup>nd</sup> round)</li> <li>- 4 city council meetings/seminar</li> <li>- 1 supplier's information event for school students</li> </ul>		