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**End-user engagement within innovative public procurement practices: A case study on
public-private partnership procurement**

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ABSTRACT

The purpose of this paper is to establish a model for an end-user engagement process within innovative public procurement practices. Even though the importance of the public service end-user has been recognized by researchers and policy makers for some time, there's a genuine lack of commonly acknowledged user engagement tools for both procurer's and supplier's practical implementation. We focus on the way value creation can be enhanced through actively engaging end-users as co-creators of value in public procurement. The study employs an intensive single-case methodology, where the findings are based on qualitative data gathered on a Public–Private Partnership (PPP) -based school property procurement in Finland. The end-user's value potential does not rest only with creating individual user value but also with increasing e.g. the public service's social, environmental and political value. Our findings support the existing theoretical understanding according to which the most significant end-user value is achieved through interactive dialogue in the design phase of the public procurement project. The most significant advantages of active end-user engagement are especially seen in the usability of the provided public service. Study results also indicate positive effects of end-user's independent value creation and the sensation of involvement in the user's individual value experience.

Keywords – user engagement, public procurement, public–private partnership, public–private–people partnership, value co-creation, collaborative innovation

1. Introduction

The infrastructure and services procured by the public sector can be seen as a necessity to preserve society's economic and social structures (Lähdesmäki & Kilkki, 2008). During the last few decades, public procurement managed through traditional bidding practices has faced significant pressures to change because of notable shifts in the public procurement environment. Noteworthy drivers for the emergence of new public procurement practices include larger demand for public services due to aging, cuts in funding due to scarce financial resources, and new services formed through technological advancements (Pekkarinen et al., 2011; Jamali, 2007; Krtalic & Kelebuda, 2010). Aligned with these changes, various more market-based public procurement tools have been introduced to procurement practitioners, ranging from public finance initiatives to various public-private partnership and pre-commercial procurement options. There is still a lot of untapped opportunities in learning across public sector procurement and private sector purchasing (Arlbjørn & Freytag, 2012).

Both policy makers and researchers have taken increasing notice on the substantial potential for public procurement in developing innovations and thus enhancing people's well-being in general (Aho et al., 2006; Edler & Georghiou, 2007; Uyerra & Flanagan, 2010). Public procurement seen as a demand-side-oriented tool for stimulating innovation (Aschhoff & Sofka, 2009) thus challenges current institutional practices and skills in the field (Rolfstam, 2012). Innovation is a meaningful issue for both the public and private sectors (Hartley, 2005). Innovativeness in public procurement aims both at the development of new technologies and services as well as at process innovations that develop the management and work procedures in use (Uyerra & Flanagan, 2010; Aschhoff & Sofka, 2009). Our study emphasizes inter-organizational, multilevel, and cross-sector collaboration between a range of stakeholders from the public, for-profit, and non-profit sectors, as well as users and citizens (Hartley, Sørensen &

Torring, 2013). This logic of collaborative innovation is very similar to networked business settings, where innovation is conceptualized as interactional, networked and systematic (Håkansson & Olsen, 2012).

Georghiou et al. (2014) sees that harnessing this innovation potential requires a systemic approach, extending public procurement policies longer, wider and deeper. The first step in extending the scope of public procurement policies lies in enhanced communication between the focal actors. Thus, it is the inter-organizational interfaces, such as end-user engagement in innovative public procurement procedures, that are instrumental to innovations materializing. Rolfstam (2012: 303) defines public procurement of innovation (PPI) as “purchasing activities carried out by public agencies that lead to innovation”. Even though our view on innovative public procurement follows the same objective of creating new innovative solutions, our definition emphasizes also the innovative practices that restructure the interaction between all focal actors within the procurement process. That is, innovative public procurement practices change the way suppliers are being invited to supply pre-existing solutions in an improved way (Knutsson & Thomasson, 2014) and open up practices for new actors to be engaged in the purchasing process.

Existing research as well as the practice of public procurement has for long acknowledged the importance of the interaction with the service user (Bryntse, 1996). Even though the end-user involvement has been acknowledged as impacting positively on the innovativeness of the public service, more research on the means of end-user involvement in public procurement is needed (Kallio, Lappalainen & Tammela, 2013). According to Bovaird (2007), public procurement practitioners do not always have a clear understanding of who the client actually is and, therefore, do not know whose needs they are supposed to satisfy. As a result, neither

the procurer nor the suppliers are able to properly estimate the possible cost savings from systemic innovations. The systematic process of activating end-users in the public procurement process has not been consistently explored in the former literature and the terminology on the phenomenon can be seen as heavily fragmented into different fields of study, from innovation policies (e.g. Edler et al., 2005) to property management (e.g. Majamaa, 2008).

The purpose of the present paper is to describe the end-user engagement process within innovative public procurement practices. To accomplish this, we employ the theoretical concepts of value co-creation, as developed within research on private sector buyer–seller relationships, and apply them to the empirical context of PPP-based school procurement project. While in traditional public procurement bidding practices, the role of the end-user has to a large extent been regarded as more a recipient of the value delivered, by employing the concepts of value co-creation, we will examine the end-user of a public service as an active participant in the value creation process. This is in line with the existing theoretical understanding of value creation generated in business relationships (e.g. Vargo, Maglio & Akaka, 2008). The present study focuses on the viewpoints of procurer and supplier directing the engagement activities towards procurement end-users. More case studies on innovative procurement projects are needed to better understand public authorities' opportunities to influence society through their own purchasing decisions (Knutsson & Thomasson, 2014).

Co-creation of value represents one of the core processes through which to achieve sustainable performance in the marketplace (Vargo, Maglio & Akaka, 2008). It can be seen as joint creation of value by allowing the customer to co-construct a personalized service experience to suit his/her own context (Prahalad & Ramaswamy, 2004b). The end-customer's value experience is generated in all processes that increase the well-being of the customer and form value-in-use

at some level (Grönroos & Voima, 2013). In the present paper, we employ the value co-creation approaches of Prahalad and Ramaswamy (2004a; 2004b) and Grönroos (2013; 2008; 2011), as these suit the context of public procurement particularly well in terms of involving both the supplier and end-user partners in the procurement actions formerly managed single-handedly by the procurer.

By employing the term end-user engagement in the study, the process is emphasized as a set of active value co-creation activities. We regard the end-user engagement in public procurement is not simply a sequential process of solving and fulfilling the users' needs, but a continuous set of actions that aim to expand the role of service end-users by binding them into the value-adding process as co-creators of value. The definition is to an extent on a par with the terms *user participation*, *user involvement* and *co-production of public services*, which however focus more on the intention of end-user co-creation rather than the deeper knowledge of its means. To describe the end-user engagement process, we address the following research questions:

RQ1: *What is the main objective for the end-user engagement process in innovative public procurement projects?*

RQ2: *What are the value co-creating activities out of which the end-user engagement process is formed?*

To find answers to the research questions, we will first examine the existing theoretical knowledge related to new public procurement practices from an end-user oriented perspective and form a preliminary understanding of the structure of focal relationships within innovative public procurement practices. To identify the value creating activities within the procurement process, we then discuss the theoretical notions of value co-creation adapted from the private-

sector setting. Next, the case method used in the empirical research is explained and the data gathering processes are described. Third, we will present the key findings of the case analysis organized according to the tentative research model. Fourth, the paper introduces the end-user engagement model thus formed. Finally, we will present conclusions regarding the study's theoretical and practical contribution as well as the implications for further research.

2. Theoretical foundation

2.1. Towards innovative public procurement practices

Public procurement is not a static or standard activity and its context is constantly redefined and impacted by surrounding social, economic and political trends. One of the current paradigms of public procurement is encouragement to abandon its traditional practices of doing business and to move closer to relationship contracting, partnerships, networks and strategic alliances (Lawther & Martin, 2005). A widely shared opinion by public procurement experts is that traditional procurement methods and strict control of practices can be harmful, as they have the potential to smother both innovativeness and the cost-effectiveness of the procurement projects (Baily, 2008: 87). The lead idea behind closer collaboration in public procurement is that no single actor has all the knowledge, overview, information or resources to solve the complex and diversified problems encountered (Lawther & Martin, 2005). A market-based approach to public procurement opens opportunities both for mobilizing innovation and at the same time better achieving public policy goals and delivering a better service to citizens. The strict national and EU-level regulation aims to ensure equality and transparency in the procurement process, but can also work as barrier in the implementation of innovative public procurement procedures. A good example of this is the effect of complicated legislation that is seen to inhibit smaller suppliers from participating in more complex tendering processes and

larger procurement projects, thus reducing the competition and innovation in the specific market (Karjalainen & Kemppainen, 2008).

The significant interest for innovation policy writers in developing public procurement practices can be rationalized in public procurement's immense resources and unused potential for creating innovative solutions (Aho et al., 2006; Edler & Georghiou, 2007). Innovations are necessary for improved public sector productivity and new more cost-effective operations (Lee, Olson & Trimi, 2012). Van de Ven (1986) defines innovation as the development and implementation of new ideas by people who over time engage in transactions with others within an institutional context. The innovations are determinant on interaction with others, which requires always being exposed to suggestions for change and therefore to problems with different priorities (Håkansson & Waluszewski, 2007). In networked innovation, developing the relationships with customers is just as important as the relationships with suppliers (La Rocca & Snehota, 2014). The view is also consistent with the ideas of a collaborative innovation approach applied in the present study (Hartley, Sørensen & Torfing, 2013).

Public–Private Partnership (PPP) has been among the most popular innovative procurement models for rearranging public purchasing, especially in large public infrastructure acquisitions (Ng, Wong & Wong, 2013). In PPP procurement projects, the supplier carries a larger liability of the procured object or service for a longer period of time, also referred to as the life cycle of the procurement. In other words, the public sector sets end targets for the outcomes of the procurement, but does not define in advance how to reach these goals (Yescombe, 2007). Sharing the project responsibilities delivers the best qualities and know-how of both procurer and supplier, instead of only one party, as with traditional public procurement practices (Krtalic & Kelebuda, 2010). Within infrastructure projects, the larger supplier liability can include for

instance planning, financing, maintenance, and support services related to the procured property.

Common advantages seen for the implementation of PPP practices include improvements in cost-effectiveness, quality, efficiency, risk assessment and transparency throughout the procurement process (Majamaa et al., 2008; Yescombe, 2007). It has been suggested that PPPs encourage innovative solutions within both public infrastructure as well as in service acquisitions (Hoppe & Schmitz, 2013). Even though the potential for innovative procurement methods to yield innovativeness is usually acknowledged in the selection of the procurement procedure, a decision to choose the innovative procurement procedure is most often justified with the financial savings that can be achieved (Uyarra et al., 2014). Neglected end-user perspectives in a PPP project lead to solutions that are unsuitable for actual service users, thus generating financial losses to both procurer and supplier through higher adjustment costs and lower life cycle payments caused by user dissatisfaction (Satish & Shah, 2009; Ng, Wong & Wong, 2013).

If the procurement practice was chosen chiefly on the basis of value gained by the users, cooperation, commitment and networks would more often be considered as the prime benefits of the model, rather than the financial arguments (Lähdesmäki & Kilkki, 2008). Other notable barriers seen for innovative public procurement projects include a lack of interaction between actors, the use of rigid as opposed to outcome-based specifications, low competences of procurers, and poor management of risk (Uyarra et al., 2014). An active approach to end-user collaboration can be seen as a promising solution to tackle all of these problems. According to Uyarra et al. (2014) both procurer and supplier can be blamed on the possible hindrances; procurers often miss out on fully capturing innovation through procurement, whereas the

suppliers cannot see the public sector's full potential as an intelligent customer. In addition, increased collaboration within actors can take a lot of time and resources that makes the process ineffective (Hartley, Sørensen & Torfing, 2013).

2.2. End-user's role in the procurement

Further examination of end-users' role in procurement processes reveals some basic issues. Bovaird and Loeffler (2012) and Ng, Wong and Wong (2013) see public services' new image as much more user oriented than the traditional view, focusing on the dyad between the procurer and supplier. This view emphasizes that public sector services are not only created *for* the public nowadays, but the trend is to aim for public services created *by* the public. This is partly possible because of the development in assisting IT technology but also because a society of taxpayers are more willing to participate in public services co-creation than before. The end-user's value potential can be seen not only in generating individual utility value but also in increasing the service's social, environmental and political value (Bovaird & Loeffler, 2012). However, in practice, even when the private supplier is encouraged to gather user's creative contribution in the procurement, the high novelty risks often restrain the ideas from becoming finished solutions (Hoppe & Schmitz, 2013).

From the procurement process perspective, the early detection of user requirements and needs guides the procurement initiative towards better usability, efficiency and innovativeness from day one (Satish & Shah, 2009; Majamaa et al., 2008). In addition to a creative mind, users can bring other resources to the procurement, for example, by positively influencing other users and lowering public opposition (Bovaird & Loeffler, 2012). According to Ng, Wong and Wong (2013) opposing opinions and community resistance are the biggest causes for the failure of unsuccessful PPP initiatives. User's task in PPPs is also to display one's satisfaction and

dissatisfaction towards the service offered (Jamali, 2007). Noteworthy is also the fact that public procurement end-users tend to affect the conditions of service delivery more than in the purchasing of goods and act as constant assessors of service quality in action (Bryntse, 1996).

In our study, we see the focal relationships within public procurement as a triad between the public procurer, the private supplier and the end-user of the public purchase (Havila, Johanson & Thilenius, 2004; Majamaa et al., 2008). The triadic nature of relationships means that none of the dyads in the triad can be examined in isolation, but that the success of the procurement is conditioned by all of the triad actors and their interconnections. So the relationship between the public procurer and the supplier is highly dependent on the relationships that exist between the end-user and the procurer (e.g. needs definition) as well as the supplier (delivery of the service). Especially important for such triadic relationships are social bonds and trust, particularly at the operational level (Holma, 2012).

An example of an end-user focused concept following this triadic view on public procurement is the Public–Private–People Partnership (4P) model discussed in property management research (Majamaa et al., 2008; Ng, Wong & Wong, 2013). The principles of 4P suggest that in addition to the supplier and the procurer dyad, “*the people*” i.e. the end-user, should be considered as a third equal partner within the procurement process. The definition of people includes all the individuals impacted by or interested in the procurement, from the core users of the property and services to the whole taxpayer community (Ng, Wong & Wong, 2013). The perceptions of Majamaa et al. (2008) and Ng, Wong and Wong (2013) about the relationships inside the procurement triad complement each other closely. While the business relationship between the procurer and supplier is considered to be formal and contract driven, the end-user’s direct relationships to both supplier and procurer are held to be informal and proactive (Ng,

Wong & Wong, 2013). In addition, Majamaa (2008) sees the user-supplier relationship as functioning along two different channels: both informally in a direct interaction, as well as through an indirect and more formal interaction transmitted by the procurer party.

Salmi and Heikkilä (2015) see the company's relationships with public officials carrying a supportive but necessary intermediary role in public-private nets. Also in PPPs, the importance of the procurer organization can be seen mainly as a facilitator of PPP projects; most cooperation with the user should be left to the supplier that is best qualified for it (Satish & Shah, 2009). An informal and proactive approach to the end-user assures that the procurement fulfills the social needs set down for the project (Ng, Wong & Wong, 2013). End-user-centric planning should be launched in procurement projects as soon as possible. User participative procedures are especially important in the design phase of the procurement, but they can also add value in the building-, operating- and maintenance stages of the project (Ng, Wong & Wong, 2013). The design stage is where the most important decisions affecting the use of the property are conducted; unsuitable resolutions in this phase are very expensive or impossible to repair later in the process (Majamaa et al., 2008).

Existing studies indicate that the end-user of public procurement can be seen as rather similar to a competent customer in a private market setting (Majamaa et al., 2008). Discoveries made about the public procurement end-user reflect the definition of von Hippel's (1986) lead user concept; lead users share a wide knowledge of the specifics of the product or service they use intensively on a regular basis and are able to present strong needs that will become general in the marketplace both now and in the future. It is also suggested that lead user interaction may shorten the development cycle time of innovations (Alam, 2006). While the lead user concept is originally regarded from the private sector manufacturer's point of view, the framework is

also considered suitable for public sector environments (Edler & Georghiou, 2007). The presence of lead users is especially important in the development phase of the procurement because of their ability to identify different technologies, user's personal dependencies, and the future needs of their own industry better than so-called traditional users.

As a difference between public and private sector end-users, public agencies have both an operational incentive to pay attention to individual client's needs and a need to serve the social goals of a wider public (Hartley, 2005). From a social-exchange perspective, government organizations need cooperation and compliance from service recipients to meet not only people's material but also their symbolic and normative needs (Alford, 2002). According to Alford (2002), private customer value alone has limited validity in depicting the customers in a public sector context, and the challenge faced by public administrators is to understand the nature of the public in the different roles of customer, partner and citizen and how to interact with the public in each of these roles (Thomas, 2013).

2.3. Principles of value co-creation

The creation of value can be summarized as the "core purpose and central process of economic exchange" (Vargo, Maglio & Akaka, 2008: 145). Payne et al. (2008) describe co-creation as a recursive process in which co-creation opportunities induce a consumer learning experience that can motivate further co-creation activities and improve co-creation outcomes. Thus, from this perspective, the user's role evolves from value receiver to a partner of co-designing and co-producing the public service procured (Bovaird & Loeffler, 2012). In value co-creation, the market becomes a forum where co-creators of value exchange their unique value-in-use to form the most shared value for all parties (Prahalad & Ramaswamy, 2004a). The context-specific

and unique nature of value experience means that the value is always born as a combination of a specific time, place and situation (Grönroos, 2008; Vargo & Lusch, 2004).

The core idea in the value co-creation approach is in achieving value-in-use that is generated in all processes, which increase the well-being of the customer on some level, and can be both physical, financial, emotional, social and environmental (Grönroos, 2008; Nordin & Kowalkowski, 2010). Value-in-use tends to contextually change over time and in terms of customers' goal-related constructs (Macdonald et al., 2011). Value co-created in a public sector environment can be seen as either user, community, social, environmental or political value (Bovaird & Loeffler, 2012). The creation of innovative solutions is directly attached to value co-creation with the end-customer (Lee, Olson & Trimi, 2012). A private-sector marketing term related to value co-creation and supporting the conceptualization of end-user engagement in our study is the concept of customer engagement. According to Sashi (2012: 264) "customer engagement expands the role of customers by including them in the value adding process as co-creators of value".

Prahalad and Ramaswamy (2004a) have suggested a DART model, according to which the four key principles (or building blocks) of value co-creation include *1) Dialogue*, *2) Access*, *3) Risk assessment* and *4) Transparency*. Achieved value-in-use is maximized through promoting these four principles across all interaction with customers. To enhance the understanding of innovative public procurement practices, we take these four value co-creation principles to understand the end-user engagement activities that generate most value for actors in the public procurement triad. Even though value co-creation has been mainly researched within joint activities in dyadic relationships, it is also useful to apply in triadic relationships, especially

when the service provider has a direct interaction both with the intermediary and the end customer (Nätti et al., 2014). Fig. 1 illustrates the DART concept's original focal points that were used as a basis in the analysis of our study to identify and categorize activities in the end-user engagement process. Fig. 1 also displays the tentative interpretation on the public procurement triad described in section 2.2.

In the end-user engagement context, 1) the input given to *dialogue* advances the user's opportunity to share their personal opinions and discuss the usability of their ideas; 2) sufficient *access* to project information enables users to extend their impact within the procurement from using the public service to independently modifying and expanding it; 3) *risk assessment* of the user engagement process allows the supplier and the procurer to better analyze the ratio of the benefits to the risks of the activities; and 4) aiming for *transparency* increases comprehensive openness of the procurement to the user interface (Prahalad & Ramaswamy, 2004a). Additionally, we want to add the principle of *reflexivity* (Leavy, 2012) to the DART model, as applied to an innovative public procurement setting; future risks assessment within PPPs requires long-term commitment from the actors, and by cherishing reflexive learning and decision-making throughout the whole project, the procurement organization can better reach the benefits of user contribution. Noteworthy is that value co-creation's four key principles complement each other closely and function in combinations; attention given to one principle increases the value of others as well (Prahalad & Ramaswamy, 2004a).

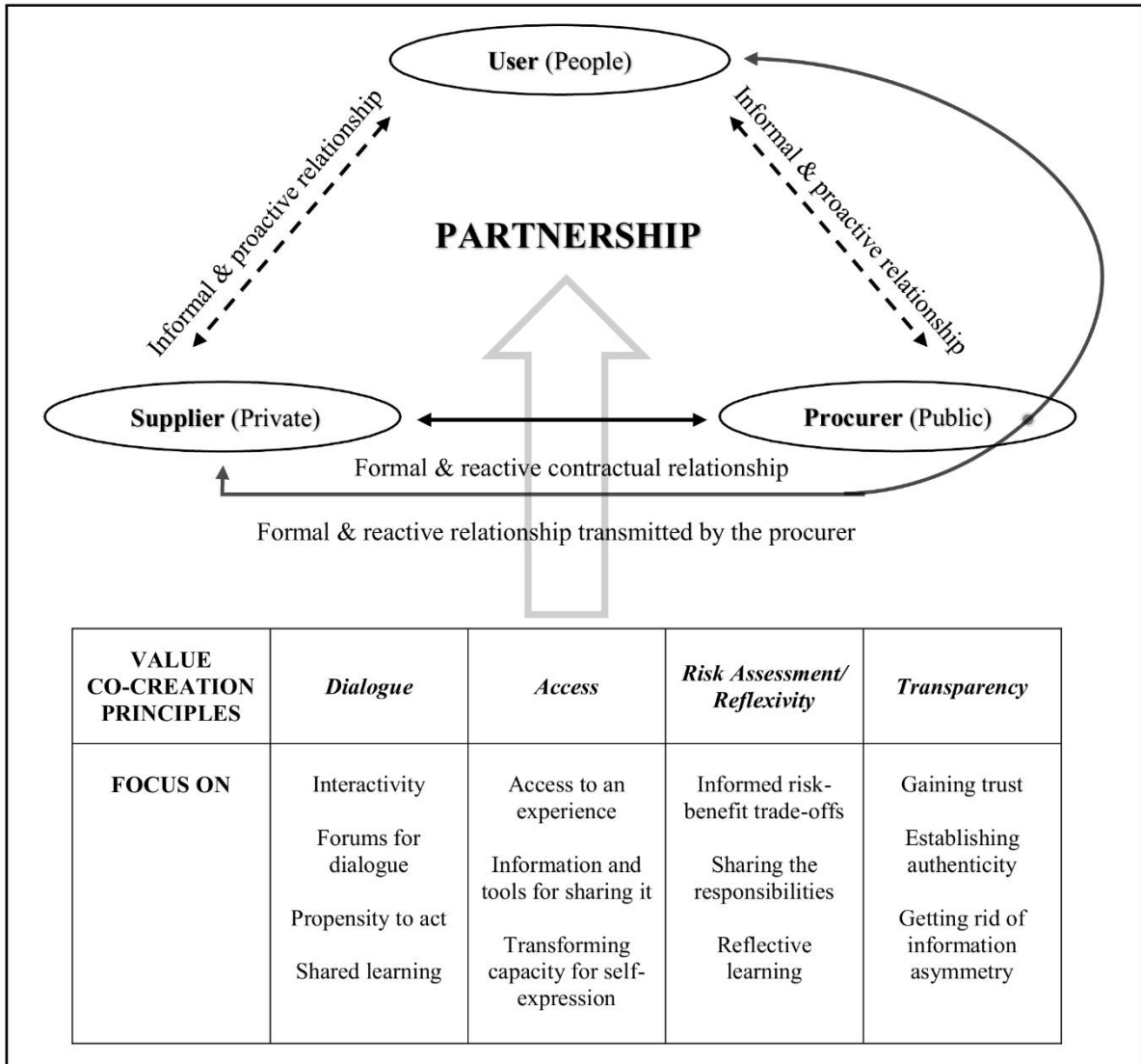


Fig. 1. Tentative model on a user-engagement process in innovative public procurement.

3. Research Method

For our empirical research approach, we adopted a qualitative single-case research strategy. The theoretical insight about end-user engagement within innovative public procurement is modest based on the existing research. Thus, a qualitative approach and the case-study method allow for an exploratory and flexible approach to the studied phenomenon because of unstructured problems (Ghuri & Grønhaug, 2005). Case research is considered to be particularly well suited to exploring decision-making and behaviors in intersectional

relationships (like the procurer, supplier and end-user triad) between individuals (Halinen & Törnroos, 2005). In addition, as the vast majority of former research built around the DART-model employ quantitative methods, the present study extends the knowledge related to the four key principles and their interplay through the use of a qualitative research approach that enables a thorough examination of the principles within their context.

After an initial examination of the key literature on the subject, we identified a public school property procurement project in Finland as our empirical case. The case was selected as it represents a specific innovative procurement project conducted using the PPP procurement practice and in which implementation of end-user engagement activities was intentionally emphasized throughout the procurement process. The empirical data that were collected include interviews and secondary data. The study analysis follows an abductive research approach, as it is carried out through a continuous dialectic interaction between the existing research knowledge and empirical case insight (Dubois & Gadde, 2002).

3.1. Description of the case

The studied case represents a medium-sized PPP-based school property procurement. At the time of the main data collection in 2014, the project was in the second year of its 25-year contractual maintenance phase. The project's total coverage entails about 15 000 square meters of public space and consists of two school buildings and a kindergarten. The agreed PPP contract transfers the responsibilities of designing, building, financing and maintaining the building to the supplier. The procurer city acts as a tenant of the properties owned by the financing bank until 2039, when the city has the option to claim the buildings for themselves. The complex set of contractual instruments in the project consists of service contracts, blanket

agreements, building contracts, rental agreements, call option agreements, as well as subcontracting agreements between the supplier and their own service partners.

The PPP model came originally into consideration for the project to avoid additional debt in a financial situation of high investment needs; the municipality might have not been able to procure the properties at all without a market-based procurement option. The initial proposal of utilizing the PPP model was later reinforced in the decision-making process by expert consulting. The eventual objectives set for the initiative included not only economic goals but also aims related to the end-user needs, by improving the usability and quality of the procured properties, promoting innovative solutions, developing the local market and creating genuine partnerships. The procurer's goal to enhance the organization's procurement know-how of innovative market-based procurement techniques has already been utilized in two other PPP-based school procurement initiatives in the area.

The final decision on the use of an innovative procurement practice was delayed until after tendering with four potential supplier candidates. Tendering was conducted according to a negotiated procedure as is typical for PPP procurements. Bids were evaluated according to their full economic effects, the weighting for price set at 60% and for quality at 40%. The winning bid from a major domestic construction company ranked first on both the price and quality criteria. Besides the procurer, supplier and end-user, the actors involved in the procurement process included the building and decor architects, engineering offices, expert consultants and subcontractors providing food, cleaning, security and maintenance services.

In general, the public procurement system in Finland is considered to be decentralized, with the establishment of some centralized procurement structures. Public procurement is generally

perceived as a tool for supporting the core activities of public agencies. Thus, although innovative public procurement as a field is debated in Finland as in most of the EU, the discussion on new procurement policy is mainly focused around issues such as price and efficiency (Edler et al., 2005). The case project in this study is considered both the first PPP property procurement in northern Finland and the first smaller scale PPP project in Finland in general.

3.2. Data collection

The interview data were gathered through semi-structured, open-ended interviews of relevant key informants in the case project from all three parties of the public procurement triad: procurers, suppliers and end-users. As the basic aim of the study is to generate data that give an authentic insight into key informants' experiences, the most prominent method to achieve this kind of data is through open-ended interviews (Silverman, 2011). The principal interview data consists of seven key informants deemed most knowledgeable about end-user interaction in the case initiative: two from the procurer organization, two from the supplier company and three from the end-user community. Taking into account the large group of end-users eventually operating in the properties, the interviewed users were also chosen because of their role as core-users passing the procurement information to their subordinates and other users of the properties. The interviews conducted lasted between 50 and 90 minutes each. These interviews were subsequently transcribed and all the data were analyzed by organizing it based on the themes provided by the theoretical framework. The gathering and analysis of new case data were continued in the research process until the point where theoretical saturation was reached; i.e. where fresh interviews no longer produced new insights (Silverman, 2011).

Furthermore, secondary data in the form of documentation was used. The benefits of documentary data rest upon their ability to represent the naturally occurring phenomenon directly without reacting to the study process or the researcher's bias (Payne & Payne, 2004). The secondary data used consisted of documents produced and archived by the procurer and supplier organizations in every phase of the procurement so far, as well as memos from all meetings that the end-user was participating in (Table 1). Interesting additional data on end-user's independent value creation were also received from statements on the planning proposals documented by the end-users of the high school themselves. Altogether over 50 various documents (ca 500 pages) were used as both preparing and complementing the primary data. An advantage of studies within public sector organizations are their built-in requirements for transparency, which assures that the procurer needs to save a large set of naturally occurring data to be made available to different stakeholders interested in the projects. The applicability of textual data in qualitative business research is generally based on the principle of transparency (Eriksson & Kovalainen, 2008).

Table 1. Overview of the case data

Interview data			
Actor	Interviewee	Running time	
Procurer 1	Procurement Planner	1 h 29 min	
Procurer 2	City treasurer	1 h 6 min	
<i>Supplier 1</i>	<i>Project manager &</i>	<i>1 h 17 min</i>	
<i>Supplier 2</i>	<i>Head of planning</i>		
End-user 1	High school principal	59 min	
End-user 2	Kindergarten manager	50 min	
End-user 3	Comprehensive school principal	50 min	
Secondary data			
Producer	Document (<i>Quantity</i>)	Date	Page count
Procurer	Call for bids	2010	18 pages

	City council records (2)	2009-2011	10 pages
	Final project report	2010	19 pages
	City's procurement agenda	2011	27 pages
	Seminar presentations on the innovative practices used in the project (3)	2012-2014	49 pages
	Project comparison report (External consultant)	2014	35 pages
Supplier	Winning offer & appendices (descriptions of:)	2010	42 pages
	✓ Designs		
	✓ Organizational structure		
	✓ Maintenance plan		
	✓ Service plan		
	✓ Energy efficiency plan		
	✓ Risk management plan		
	✓ Project innovativeness		
	✓ Quality management		
	Design data (drawings & notes)	2010	15 pages
	Methods of construction reports (2)	2010	20 pages
	Quality assurance plan	2010	14 pages
End-user	Teachers' statements (2)	2010-2011	9 pages
Procurer /Supplier	Tendering negotiation memos (16)	2010	64 pages
	✓ 1 st round		
	✓ 2 nd round		
	✓ 3 rd round		
	✓ 4 th round		
Procurer /Supplier	Planning meeting memos (5)	2011	ca 85 pages
/End-user	Steering group meeting records (13)	2013-2014	ca 65 pages
	Collaboration group meeting record	2013	4 pages

4. Case Analysis

The data indicates that the procurement coalition's shared willingness to create "usable future school space instead of just walls" originates already from early phases of the procurement planning. The first contact with core end-users took place long before the actual procurement decision had been made and user dialogue was kept to a minimum only in the information-sensitive tendering phase of the procurement. Even though both the procurer and supplier assimilated the idea of establishing usability through intimate end-user cooperation, the actual

methods and procedures for engagement were very little planned beforehand by both parties. Value-creating user engagement and shared understanding of the case project can be seen as largely resulting from friendly personal relationships developed between individuals over time. As a notable deviation from the former PPP literature, interaction in the case initiative took place much more often within multiprofessional groups than in traditional one-to-one encounters. Apart from the tendering phase, all common meetings in the project involved at least one end-users' representative. Thus, the casual discussion in groups functioned both as a channel to share end-user ideas and to evaluate the viability and costs of these ideas in an efficient manner.

We talked and decided with the supplier (at the start), that when there's any decision-making that somehow affects the user, we will bring them into the discussion somehow.
(Procurer 1)

We wanted to forget the juxtaposition and work together no matter what the situation [...]
We are running a common errand here, which unfortunately isn't the case in the traditional public procurement projects. (Supplier 1)

The structure of the relationships in the case project follows closely the lines of the tentative model presented. The procurer's personal relationships with the end-user have become very friendly and informal over time. Whereas the interaction between the end-user and the supplier takes place both through 1) direct and informal personal relations and 2) occasional formal contacts transmitted by the procurer representative. The procurer saw this more formal transmission channel as highly important to their role in redirecting user's and supplier's viewpoints towards shared positive outcomes and ensuring that the end-user is truly heard

through every phase of the procurement process. Although the relationship between the procurer and the supplier was first of all controlled by the PPP contract, collaboration in the buyer–seller relationship also became, over the years, closer and more informal than expected.

(Procurer 1) knew what had been agreed upon and was a specific filter between us and the end-user who might have wanted everything that wasn't possible [...] She kind of filtered the knowledge and comments we got from the user interface. (Supplier 1)

The innovations identified in the case procurement originated generally either from the proposal of the supplier or from a speculative suggestion by the end-user. The most significant innovative solutions are attached to the fundamental positioning of the properties and novel joint use opportunities offered to the end-user communities. These innovations have also enabled closer contact between the high school and the kindergarten, enabling unique cooperation and potential pedagogic innovations. Our findings indicate, that 1) user-originated innovations had more significance for user's value experience than supplier- and procurer-originated solutions and 2) the innovations that improved usability and functionality the most originated from end-user ideas. Usability of properties was enhanced most by innovative technical solutions of different sizes; moreover, the supplier's effort to pay attention to small-scale detailing proved to be a surprisingly cost-effective way of improving end-user's value experience. End-user's experience on the usability of the plans was eventually decisive also for the quality criteria in the bidding phase.

And that's how it should be, when the interaction is genuine, the supplier should be able to catch half a word from the end-user, discuss the approach to it and generate an idea that in a sense is theirs when it's brought to the table. (Procurer 2)

An interesting new finding in our case analysis was the significance of user's feeling of involvement. To begin with, all three interviewed user informants felt that they and their subordinates had been very much heard during the procurement process and had a real opportunity to make a difference. Interestingly, the empirical data shows that even engagement activities and user dialogue that did not lead to any innovative solutions or better usability of the property had a positive influence on the satisfaction experienced by users. This improvement in user value – born sometimes merely from the sensation of involvement – led again to higher returns for the supplier due to the satisfaction-based payment mechanisms of the PPP contract. Acknowledging end-user's sensation of involvement can be seen to be present in all value co-creating engagement activities in the categories of dialogue, access, risk assessment/reflexivity and transparency.

That (feeling) is really crucial, and that is something we also aim for. Whereas we can't take everything into account, it's important that the users feel that they got everything they wanted. Of course there are individuals with "on-off"-views that judge our work if there's one thing missing. Especially with the second school, it's clear that some people feel that they didn't have enough impact. (Supplier 1)

4.1. Dialogue

The case findings indicate dialogue-related activities were the most significant source of shared understanding and value-in-use in the end-user engagement process. The first preliminary end-user dialogue was launched by the procurer already in the pre-planning stage of the project, when end-users were given a task to define the functional perimeters for the school space that needed to be procured. The first dialogue between the supplier and the end-user took place in

the negotiation phase, where all four potential suppliers were given the opportunity to independently contact the users and modify their plans according to the user consultation. Even though the dialogue forms within the case procurement were rather one-dimensional – the mutual user dialogue took place almost entirely in the group meetings provided – user informants saw the interaction in the group as adequate for making their contribution to the planning. In addition, our tentative presumption about the special attention needed for acknowledging the individuality of end-users did not in the end play a crucial role in the project; users felt comfortable sharing their own individual opinions without significant recognition given to their background.

Providing the end-users with sufficient freedom of choice in the case procurement's planning phase discussions can be seen as most crucial for the positive effects on the usability of the properties. Even though a significant amount of dialogue has taken place in the later building and maintenance stages of the procurement, it was apparent that the further the procurement progresses, the less chances there are to adjust the procured property according to the user contribution. Dialogue in the maintenance phase of the procurement focuses more on optimizing the quality of support services attached to the PPP's service contract.

My feeling is that after we got to know each other, we really could debate matters quite openly. (End-user 2)

We really got to have an influence. There was just recently a teacher who said to me: "Could it be they asked about our opinions too much? Would it be better that someone else than the teachers made the decisions?" (End-user 1)

4.2. Access

In general, the amount of information distributed was seen as sufficient for end-user engagement; user informants felt they did not have any use or time for any more information than they were given during the process. The procurement information outside the project group meetings was mostly shared through simple email distribution. Even though access to further procurement information through an (industry standard) IT system was given to the user, it did not eventually deliver a lot of extra value to the end-user experience. It is important to point out that considering the expertise of the end-users was mostly focused in the educational field, property end-users might not be qualified to recognize the potential of novel IT tools (e.g. 3D illustration) in the engagement process.

Our findings indicate that mistakes in user training caused the largest user-engagement-related problems during the case procurement process. Modern school properties and innovative procurement projects without exception require a certain level of user orientation, both to the operation of the building and to the procurement practice used. The data indicates that not enough resources were given to the initialization phase of the high school/kindergarten property that was finished first. This view was further verified by the finding that problems encountered seemed visibly mended in the user training for the second primary school property, leading to an improved user's value experience.

The users' independent value creation proved to be especially significant for the emergence of user-led innovations in the case procurement. Prominent examples of user's independent value creation in the case procurement were self-organized school visits and teacher meetings set in motion completely by the core users within their own user community. Especially high school teachers' domestic school visits generated significant value to the project without any specific

effort from the procurement coalition. In addition, it is good to acknowledge that the importance of user encouragement proved quite insignificant in the case procurement in general. Engaged end-users became enthusiastic about responsibilities given to them with very limited systematic pushing. Thus, end-users were competent to recognize the improved usability achieved through their involvement, which itself was an adequate incentive to invest in the engagement process.

They (the end-users) created a culture of commitment themselves. Sure (Procurer 1) and our whole group suggesting trying to involve the whole community in the planning, but we didn't give them ready tools for it. They created a good spirit to engage their own crowd there themselves. And without those very people, we wouldn't have had such good results.
(Procurer 2)

4.3. Risk Assessment & reflexivity

End-user-attached risks identified by the procurer of the case initiative included a lack of innovative procurement know-how, contradictions between a user's wishes and the supplier's planning freedom, as well as resistance from public officials, local government or the surrounding community. All key informants shared a common view that the school environment would encounter considerable changes during the 25-year life cycle of the PPP procurement: for example, a transition away from classroom teaching. In addition to future flexible building solutions and detailing, the supplier of the case procurement can be seen to be active in responding to user feedback to the best of their ability. Most of the risks on the procurement life cycle were contractually transferred to the supplier, as their capability and resources for responding to user feedback and bearing identified future risks were better than the procurer's. For instance, while after the first year of the maintenance phase, the supplier

replaced an underachieving maintenance service provider because of end-user dissatisfaction immediately after, the procurer informant felt that with a traditionally owned school property, they would have been stuck with a mediocre service contractor for several years to come.

It is worth noticing that some of the future risks can also be carried by the end-users themselves. Our findings demonstrated that end-users were surprisingly conscious and realistic about uncertain future requirements and expenses that they might face to assure the future functionality of the properties. Reflexive implementation of end-user engagement also developed the procurement know-how of the whole procurement coalition; both procurer and supplier of the case procurement have already utilized some of the knowledge gained in other upcoming public procurement projects. The challenges are related in how to conserve the tacit know-how possessed by individual people at the organizational level. In addition, our findings indicate that this know-how in end-user engagement is not bound only to PPPs or other innovative public procurement projects of the procurer or supplier, but some of the engagement actions can be applied to traditional public procurement projects as well.

The target was to say with every space what will be done, who will be involved, how often will it be done and what practices will be used. This process was supposed to give architects and designers the best possible description of the work day in our school or kindergarten property both now and in the future.” (Final report 2010)

If needed, sure I would be part of this again. Again more competent this time [...] I have no complaints about the PPP model. I think it shouldn't matter to the end-user if the property is managed by (the procuring city) or (the supplier). I'd say that many things run better with the private supplier. (End-user 3)

4.4. Transparency

Informants see the core relationships within the case project becoming very informal as the procurement has progressed. These close relationships can be seen as crucial for any value co-creation to take place. Noteworthy is that personal relationships in the case project formed more as a result of continuous interaction over the years rather than requiring a lot of systematic planning. The trust and openness between the core end-users, the city's procurement planner and supplier representatives was an outcome of the same people regularly meeting each other over a long period. It is arguable whether this kind of stability could have been reached in procurement projects with a larger procurer or supplier organizations conducting the user engagement process. Even though the supplier organization went through more alterations than the procurer city during the different project phases, end-user interviews indicate that keeping a few of the supplier representatives as permanent members of the procurement coalition had significant positive effects on the user's value experience.

Even though the case procurement and its novel procurement practice didn't receive a lot of opposition from the larger taxpayer community, the project nevertheless encountered some heavy resistance from decision-makers and officials at the municipal level; an appeal concerning the PPP practice that was eventually used called for a postponement of the beginning of the property's building phase for six months. A significant reason for the lack of opposition at the end-user level can be credited to transparency related end-user engagement activities. Even though the procurement organization drafted a PR-plan and put together a few official briefings and bulletins during the process, a larger impact on the moderately smooth progression of the procurement was due to the transparent interaction between the interested end-user communities on a more personal level.

You can't emphasize enough that when the chemistry between people is functioning, the project also advances nicely and you achieve things that you couldn't do if the combinations of people are too different. These kinds of (PPP-) projects are not suited to highly task-oriented people. (Supplier 1)

That is how we constantly had the discussion, not with a specific plan, but influencing on a personal level. In practice, not as a procurer to the user, but as one human being to another human being. (Procurer 1)

5. Empirically elaborated model of end-user engagement within innovative public procurement

Based on the empirical analysis, we elaborated on the theoretical framework by proposing an empirically grounded model of end-user engagement within innovative public procurement practices (See Fig. 2). The core of the model lies in the value co-creating user engagement activities. First, the activities were identified by utilizing both the former literature on innovative public procurement practices and the empirical data gathered from the case procurement. Second, activities were evaluated and categorized according to the four principles of value co-creation used in the DART model (Prahalad & Ramaswamy, 2004a). The most important activities for establishing value-in-use in the procurement are highlighted in bold. Both *informal* and *formal* relationships between the actors follow the conceptual understanding of the literature on the 4P-model (Majamaa et al., 2008; Ng, Wong & Wong, 2013). One of the main benefits behind the PPP model is that all actors can focus their efforts according to their own best competencies and knowledge.

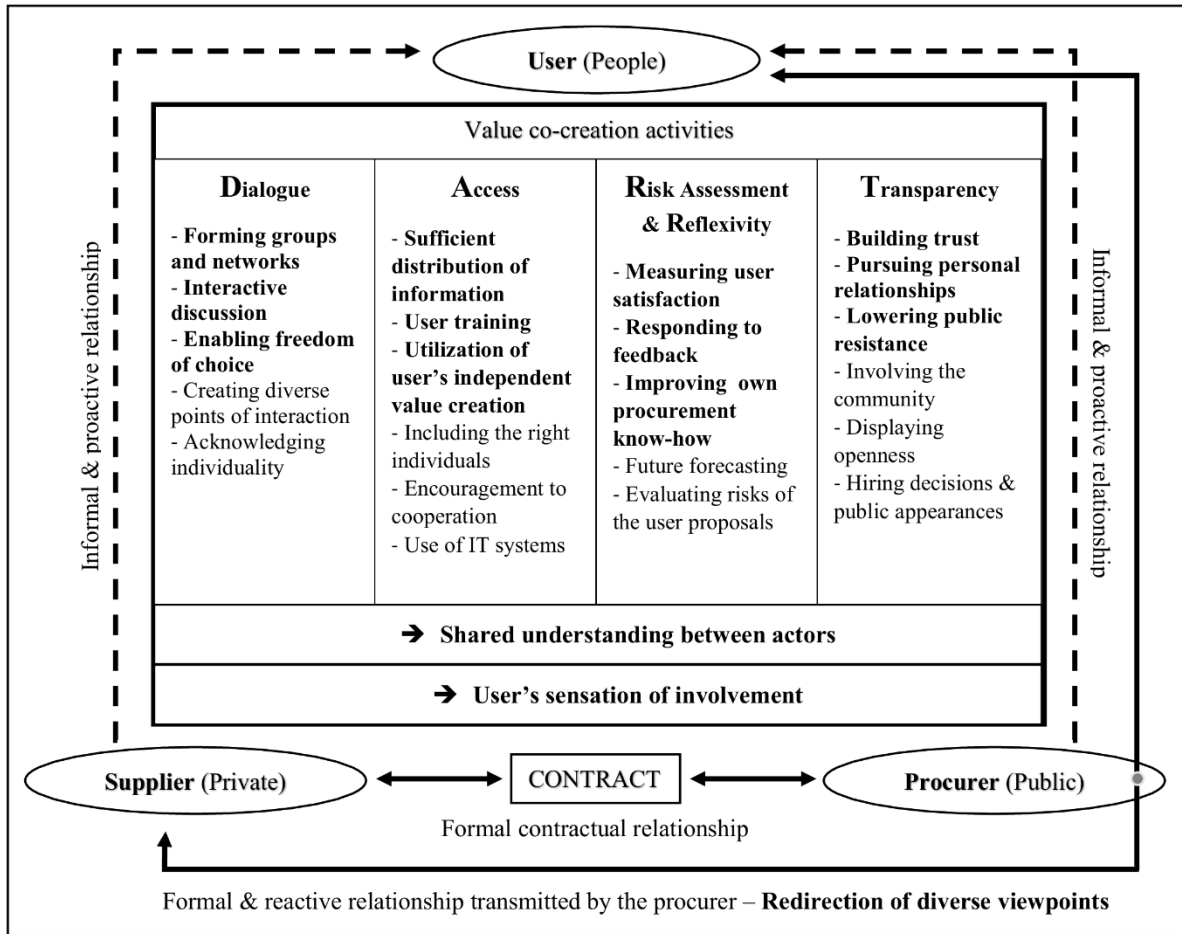


Fig. 2. End-user engagement within innovative public procurement.

Based on our analysis, the most vital purpose for end-user engagement is generating value-in-use that adds to the well-being of the user at some level that is either physical, financial, emotional, social or environmental (Grönroos, 2008; Nordin & Kowalkowski, 2010). Value-in-use emanates from all four principles of value co-creation. In addition, creation of value-in-use is supported by *shared understanding between actors* and *user's sensation of involvement* that originate from all value co-creation activities. Most crucial for the user's individual value-in-use are the engagement activities that improve the usability of the procurement. Tangible instruments for enhanced usability include user-led innovations, better overall quality, and detailing of the procurement. Usability can also be seen as the most crucial element for determining user satisfaction with the public property and service and thus the financial success

of the procurement supplier. The view that increased usability is a mandatory prerequisite for public procurement end-user engagement certainly corroborates with Grönroos' (2008) view about practical value-in-use as a necessary binding feature for value co-creation to take place.

Dialogue related end-user engagement activities represent a direct interaction between the end-user and the project's procurer and supplier organizations. By direct interaction, we refer to all value-creating processes by which the end-user's and procurement coalition's resources interact through a mutual dialogic process (Grönroos & Voima, 2013). The most significant dialogue-related activities to reach valuable end-user interaction are 1) *forming multiprofessional groups and networks for open dialogue to take place*, 2) *emphasizing the interactiveness of the discussion* and 3) *enabling end-users to have sufficient freedom of choice*. Dialogue can be seen as the most important source for the usability of the procured facilities and services.

While dialogue represents a direct interaction in the value co-creation process, user engagement activities in the *access* category represent a generated indirect user interaction. Indirect interaction refers to situations in which the end-user interacts with only the resources provided by the procurer or supplier without reciprocal dialogue taking place (Grönroos & Voima, 2013). According to our findings the most important access-related activities for public procurement practitioners to acknowledge are 1) *sufficient distribution of procurement information*, 2) *comprehensive user training* and 3) *utilization of the user's independent value creation*. The findings on direct and indirect interaction support those of Nissen, Evald and Clarke (2014) in emphasizing the importance of a balance between collaborative and cooperative interaction forms of sharing knowledge in the context of public-private innovation partnerships.

Our study indicates that engagement activities in risk assessment/reflexivity and transparency categories have less influence on the value-in-use generated by the end-user engagement process. Engagement related to the *risk assessment and reflexivity* of public procurement consists of activities that emphasize the continuity and reactivity of public procurement. The most important activities to minimize end-user-related procurement risks are 1) *the measurement of end-user satisfaction*, 2) *an efficient response to end-user feedback* and 3) *the continuous improvement of the organization's procurement know-how*.

Transparency related engagement activities pursue comprehensive openness between the actors in the procurement triad. According to our findings, the most significant activities that enhance the transparency of the procurement towards both core users as well as the broader taxpayer community are 1) *building trust between actors* 2) *generating lasting personal relationships* and 3) *lowering public resistance*. As creating a stimulating environment for the interaction between the actors from different fields can take a lot of time (Lundberg & Andresen, 2012), it is imperative to start building the cooperative relationships between actors early enough in the procurement process.

Based on our analysis, we argue, that a significant obstacle for end-user engagement process lies in the management of user attention with engagement activities. The more specialized, insulated, and stable the individuals' task in the process is, the less likely they will recognize the need for change and the space for innovation (Van De Ven, 1986). Even though end-users in the procurement projects hold a strong expertise in their own industries, they're often not capable of recognizing the opportunities and tools that they can be engaged with to influence the outcomes of procurement. Based on our case findings, the way users recognize the need for

innovation and how user ideas get implemented into innovative solutions depends largely on how the engagement activities are communicated to the people.

6. Conclusions

This study investigated the nature of the end-user engagement process within innovative public procurement practices. The traditional public procurement practices provide limited support for market discussion and the need for more market-based practices for developing innovations has garnered the attention of both researchers and public policy makers for some time now. Innovative public procurement can be seen as a redistribution of responsibilities and risks by enabling new kinds of interaction, information flows and collaboration to be formed within the procurement triad of procurer, supplier and end-user. Even though the importance of end-user's involvement in the procurement process has been largely acknowledged, descriptions of the actual end-user engagement activities conducted by the procurer and supplier have been partial. The evidence from our case study reasserts the proposition of an informal and proactive approach to user engagement having genuinely positive impacts on innovativeness, customer satisfaction, and the financial success of public procurement projects.

The present study set out to apply value co-creation theory derived from the private sector to the setting of public sector procurement. The DART framework (Prahalad & Ramaswamy, 2004b; 2004a) was used to illustrate end-user engagement activities in the public procurement environment. Within value co-creation, the user's role evolves from a value receiver to a partner in co-designing and co-producing the public service procured (Bovaird & Loeffler, 2012). We firstly asked what is the main objective for the end-user engagement process in innovative public procurement projects (*RQ1*). On the basis of the study, we argue that the lead objective for value co-creative end-user engagement is the generation of value-in-use through

increased usability of the procurement. Similar to private sector customers (Macdonald et al., 2011), the end-user of public procurement can also understand and articulate the concepts of value-in-use in terms of their own usage process. It is crucial to acknowledge end-user's own independent value creation, which can have a significant or even the most essential role on the usability achieved in the procurement interaction. The procurer's and supplier's important task here is to facilitate this self-directed value creation by providing the end-user with sufficient access to procurement information as needed.

Second, we asked what value co-creating activities constitute in the end-user engagement process (RQ2). We suggest that the engagement activities revolve around the four value co-creation principles of *dialogue*, *access*, *risk assessment/reflexivity* and *transparency*. The evidence suggests that the most essential engagement activities for end-user's value experience relate to an interactive *dialogue* during the project's planning phase. A noteworthy contribution of our case study was that instead of bilateral discussion, valuable end-user dialogue more often took place in the shared encounters with the procurement triad and other interest groups. Besides forming valuable groups and networks, influential dialogue focuses on emphasizing interactivity and freedom of choice in all user interaction. In other words, value co-creation occurs most explicitly in collaborative situations, where procurer, supplier and end-user participate as equal partners. Rich dialogue is best supported by giving the users sufficient access to the procurement information and enabling their independent value creation (*access*). Further user engagement activities identified in the study related to *risk assessment/reflexivity* as well as the *transparency* of the innovative procurement. The input given to one activity usually increases the value of other engagement activities as well. Based on the study, we argue that through these user engagement activities enabled by innovative procurement practice, the

public procurer is able to generate value-in-use that would be difficult or even impossible to achieve in a traditionally organized procurement project.

The contributions of this paper spread in the fields of public procurement, joint value creation and collaborative innovation policies. The main contribution of the research paper can be seen as yielding a more profound description of end-user engagement in a particular PPP procurement setting. Based on the present study, our view is that by default, 1) the public procurer's responsibility is to supervise the procurement contract and transfer the different views of end-user and supplier; 2) the supplier is in charge of delivering the desired property and services; and 3) the end-user's task is to share their specialized knowledge of using the public property and service.

Even though our paper's relevance is most apparent for the specific research fields in public procurement and public sector management, we want to address the importance of value co-creation with end-users in regard to the purchasing fundamentals in all business environments. The end-user engagement process described also acts as a characteristic example of an interactive interface crucial for advancing a collaborative innovation strategy and as an instance of value co-creation theory applied in a distinctive business environment. Our general take on innovation policies suggests that the active implementation of end-user engaging activities can even further speed up the trend towards a collaborative innovation approach.

6.1. Managerial implications & future research

As the decisive practical implication of the study, we want to emphasize the importance of understanding end-user engagement both within the emergent innovative procurement policies and more traditional procurement practices in use. Although we suggest the development of

innovative public procurement policies to better serve the end-user engagement process, nothing prevents the practitioners from also applying ideas of value co-creation within contemporary policy. Thus, while there is so much variance between procurement practices and their combinations in use, for decision-makers and procurement practitioners, the most important matter is a mindset that recognizes the public as an active partner ready for interaction. To put it briefly, the simple practical advice drawn from the key findings of this paper is: Give the users a voice (*Provide access*) and let them be heard (*Enable dialogue*)!

On specific procurement projects, we want to give a second reminder of the importance of user's sensation of involvement at the foreground of the engagement process. In conditions where a user's individual contribution will not ultimately materialize in the final outcomes of the procurement, even the mere feeling of being involved can have a positive impact on user satisfaction and, for example, lower the project resistance from the user community.

The present study also puts forward several further research opportunities concerning the relatively novel innovative public procurement practices. For instance, during the study process we discovered that the very definition of an end-user in the public procurement environment needs further conceptualization. As addressed by Thomas (2013), the dual challenge of public administration is to understand both the nature of the public in different roles and how to interact with the public in each of these roles. As the present study has tackled above all else the second challenge of interaction activities in the end-user engagement process, a vital future research direction lies in an examination of the different roles end-users take in the process. The user engagement framework constructed will serve as a basis for a future prospective end-user-oriented study using network role theory.

As the triad perspective has proved suitable for research on innovative public procurement, further research on the subject is necessary. Besides the procurement competencies and resources of the procurer and supplier organizations, the end-user engagement process is always influenced by all the interconnections between the focal actors in the procurement triad. A particularly interesting future study would, for example, consider how the power hierarchy in the relationship between the procurer and supplier affects the relationships in the end-user interface.

Although the premise of the present study was concentrated on applying the value co-creation literature in an innovative public procurement environment, we also see relevant gaps for further research that contributes more to the field of innovation policies, while applying network and interaction perspectives. We also call for more research in terms of new interactive technology and methods (e.g. 3D-modelling) that can also be used to form innovations in a public procurement setting; more research focused on these novel technological instruments as the means for end-user engagement is needed.

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References

Aho, E., Cornu, J., Georghiou, L. & Subira, A. (2006). *Creating an innovative Europe. Report of the independent expert group on R&D and innovation appointed following the Hampton Court Summit*. Brussels: European Communities.

- Alam, I. (2006). Removing the fuzziness from the fuzzy front-end of service innovations through customer interactions. *Industrial Marketing Management*, 35(4), 468-480.
- Alford, J. (2002). Defining the Client in the Public Sector: A Social-Exchange Perspective. *Public administration review*, 62(3), 337-346.
- Arlbjørn, J.S. & Freytag, P.V. (2012). Public procurement vs private purchasing: Is there any foundation for comparing and learning across the sectors? *International Journal of Public Sector Management*, 25(3), 203-220.
- Aschhoff, B. & Sofka, W. (2009). Innovation on demand—Can public procurement drive market success of innovations? *Research Policy*, 38(8), 1235-1247.
- Baily, P. (2008). *Procurement principles and management*. 10th ed. edn. Harlow: Prentice Hall Financial Times.
- 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.
- Bovaird, T. (2007). Beyond Engagement and Participation: User and Community Coproduction of Public Services. *Public administration review*, 67(5), 846-860.
- Bryntse, K. (1996). The purchasing of public services: Exploring the purchasing function in a service context. *European Journal of Purchasing and Supply Management*, 2(4), 193-201.
- Sashi, C.M. (2012). Customer engagement, buyer-seller relationships, and social media. *Management Decision*, 50(2), 253-272.
- Dubois, A. & Gadde, L.-. (2002). Systematic combining: An abductive approach to case research. *Journal of Business Research*, 55(7), 553-560.
- Edler, J., Rigby, J., Hommen, L. & Tsipouri, L. 2005, *Innovation and Public Procurement. Review of Issues at Stake*, Fraunhofer Institute.
- Edler, J. & Georghiou, L. (2007). Public procurement and innovation-Resurrecting the demand side. *Research Policy*, 36(7), 949-963.
- Eriksson, P. & Kovalainen, A. (2008). *Qualitative methods in business research*. Los Angeles: Sage.
- 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.
- Ghauri, P.N. & Grønhaug, K. (2005). *Research methods in business studies: a practical guide*. 3rd ed. edn. Harlow: Financial Times Prentice Hall.
- Grönroos, C. (2011). Value co-creation in service logic: A critical analysis. *Marketing Theory*, 11(3), 279-301.

- Grönroos, C. (2008). Service logic revisited: Who creates value? And who co-creates? *European Business Review*, 20(4), 298-314.
- Grönroos, C. & Voima, P. (2013). Critical service logic: Making sense of value creation and co-creation. *Journal of the Academy of Marketing Science*, 41(2), 133-150.
- Håkansson, H. & Olsen, P. (2012). Innovation management in networked economies. *Journal of Business Market Management*, 5(2), 79-105.
- Håkansson, H. & Waluszewski, A. (2007). *Knowledge and innovation in business and industry: the importance of using others*. London: Routledge.
- Halinen, A. & Törnroos, J.-. (2005). Using case methods in the study of contemporary business networks. *Journal of Business Research*, 58(9), 1285-1297.
- Hartley, J. (2005). Innovation in governance and public services: Past and present. *Public Money and Management*, 25(1), 27-34.
- 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.
- Havila, V., Johanson, J. & Thilenius, P. (2004). International business-relationship triads. *International Marketing Review*, 21(2), 172-186.
- Holma, A.-. (2012). Interpersonal interaction in business triads-Case studies in corporate travel purchasing. *Journal of Purchasing and Supply Management*, 18(2), 101-112.
- Hoppe, E.I. & Schmitz, P.W. (2013). Public-private partnerships versus traditional procurement: Innovation incentives and information gathering. *RAND Journal of Economics*, 44(1), 56-74.
- Jamali, D. (2007). A study of customer satisfaction in the context of a public private partnership. *International Journal of Quality and Reliability Management*, 24(4), 370-385.
- Kallio, K., Lappalainen, I. & Tammela, K. (2013). Co-innovation in public services: Planning or experimenting with users? *Innovation Journal*, 18(3), 1-16.
- Karjalainen, K. & Kemppainen, K. (2008). The involvement of small- and medium-sized enterprises in public procurement: Impact of resource perceptions, electronic systems and enterprise size. *Journal of Purchasing and Supply Management*, 14(4), 230-240.
- 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.
- Krtalic, S. & Kelebuda, M. (2010). The role of the public-private partnership in providing of public goods: Possibilities and constraints. *Fifth International Conference of the School of Economics and Business in Sarajevo (ICES2010). Proceedings*, 1-19.

- La Rocca, A. & Snehota, I. (2014). Relating in business networks: Innovation in practice. *Industrial Marketing Management*, 43(3), 441-447.
- 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.
- Leavy, B. (2012). Masterclass Collaborative innovation as the new imperative - design thinking, value co-creation and the power of "pull". *Strategy and Leadership*, 40(2), 25-34.
- Lee, S.M., Olson, D.L. & Trimi, S. (2012). Co-innovation: Convergencomics, collaboration, and co-creation for organizational values. *Management Decision*, 50(5), 817-831.
- Lundberg, H. & Andresen, E. (2012). Cooperation among companies, universities and local government in a Swedish context. *Industrial Marketing Management*, 41(3), 429-437.
- Macdonald, E.K., Wilson, H., Martinez, V. & Toossi, A. (2011). Assessing value-in-use: A conceptual framework and exploratory study. *Industrial Marketing Management*, 40(5), 671-682.
- Majamaa, W. (2008). *The 4th P - People - in urban development based on Public-Private-People Partnership*. Espoo: Helsinki University of Technology.
- Majamaa, W., Junnila, S., Doloid, H. & Niemistö, E. (2008). End-user oriented public-private partnerships in real estate industry. *International Journal of Strategic Property Management*, 12(1), 1-17.
- Nätti, S., Pekkarinen, S., Hartikka, A. & Holappa, T. (2014). The intermediary role in value co-creation within a triadic business service relationship. *Industrial Marketing Management*, 43(6), 977-984.
- Ng, S.T., Wong, J.M.W. & Wong, K.K.W. (2013). A public private people partnerships (P4) process framework for infrastructure development in Hong Kong. *Cities*, 31, 370-381.
- Nissen, H.A., Evald, M.R. & Clarke, A.H. (2014). Knowledge sharing in heterogeneous teams through collaboration and cooperation: Exemplified through Public-Private-Innovation partnerships. *Industrial Marketing Management*, 43(3), 473-482.
- Nordin, F. & Kowalkowski, C. (2010). Solutions offerings: a critical review and reconceptualisation. *Journal of Service Management*, 21(4), 441-459.
- Payne, A.F., Storbacka, K. & Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of Marketing Science*, 36(1), 83-96.
- Payne, G. & Payne, J. (2004). *Key concepts in social research*. London: Sage.

- Pekkarinen, S., Hennala, L., Harmaakorpi, V. & Tura, T. (2011). Clashes as potential for innovation in public service sector reform. *International Journal of Public Sector Management*, 24(6), 507-532.
- Prahalad, C.K. & Ramaswamy, V. (2004a). *The future of competition: co-creating unique value with customers*. Boston: Harvard Business School Press.
- Prahalad, C.K. & Ramaswamy, V. (2004b). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5-14.
- Rolfstam, M. (2012). An institutional approach to research on public procurement of innovation. *Innovation*, 25(3), 303-321.
- Salmi, A. & Heikkilä, K. (2015). Managing relationships with public officials — A case of foreign MNCs in Russia. *Industrial Marketing Management*, 49, 22-31.
- Satish, D. & Shah, P. (2009). A Study of Public Private Partnership Models. *IUP Journal of Infrastructure*, 7(1), 22-37.
- Silverman, D. (2011). *Interpreting qualitative data: a guide to the principles of qualitative research*. 4th edition. edn. Thousand Oaks: Sage.
- Thomas, J.C. (2013). Citizen, customer, partner: Rethinking the place of the public in public management. *Public administration review*, 73(6), 786-796.
- Uyarra, E., Edler, J., Garcia-Estevez, J., Georghiou, L. & Yeow, J. (2014). Barriers to innovation through public procurement: A supplier perspective. *Technovation*, 34(10), 631-645.
- Uyarra, E. & Flanagan, K. (2010). Understanding the innovation impacts of public procurement. *European Planning Studies*, 18(1), 123-143.
- Van de Ven, A.H. (1986). Central problems in the management of innovation. *Management Science*, 32(5), 590-607.
- Vargo, S.L. & Lusch, R.F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68(1), 1-17.
- Vargo, S.L., Maglio, P.P. & Akaka, M.A. (2008). On value and value co-creation: A service systems and service logic perspective. *European Management Journal*, 26(3), 145-152.
- von Hippel, E. (1986). Lead users: A source of novel product concepts. *Management Science*, 32(7), 791-805.
- Yescombe, E.R. (2007). *Public-private Partnerships: Principles of Policy and Finance*. Amsterdam: Elsevier.