

THE 4TH P - PEOPLE - IN URBAN DEVELOPMENT BASED ON PUBLIC-PRIVATE-PEOPLE PARTNERSHIP

Wisa Majamaa



TEKNILLINEN KORKEAKOULU
TEKNISKA HÖGSKOLAN
HELSINKI UNIVERSITY OF TECHNOLOGY
TECHNISCHE UNIVERSITÄT HELSINKI
UNIVERSITE DE TECHNOLOGIE D'HELSINKI

THE 4TH P - PEOPLE - IN URBAN DEVELOPMENT BASED ON PUBLIC-PRIVATE-PEOPLE PARTNERSHIP

Wisa Majamaa

Dissertation for the degree of Doctor of Science in Technology to be presented with due permission of the Faculty of Engineering and Architecture for public examination and debate in TUAS House in auditorium AS2 at Helsinki University of Technology (Otaniementie 17, Espoo, Finland) on the 14th of November, 2008, at 12 o'clock noon.

Publisher:
Helsinki University of Technology
TKK Department of Structural Engineering and Building Technology
PL 2100
02015 TKK
Tel +358 (9) 451 1
Fax +358 (9) 451 3758
elsa.nissinen@tkk.fi

© Wisa Risto Majamaa

Cover picture: Matti Kuronen

ISBN 978-951-22-9584-5 (printed)
ISBN 978-951-22-9585-2 (pdf)
ISSN 1797-481X

HELSINKI UNIVERSITY OF TECHNOLOGY P.O.Box 1000, FIN-02015 HUT, http://www.hut.fi/		ABSTRACT OF DOCTORAL DISSERTATION	
Author		Wisa Risto Majamaa	
Name of the dissertation The 4 th P - People - in urban development based on Public-Private-People Partnership			
Date of manuscript		20.3.2008	Date of the dissertation
		14.11.2008	
<input type="checkbox"/> Monograph		<input checked="" type="checkbox"/> Article dissertation (Summary + original articles)	
Faculty		Faculty of Engineering and Architecture	
Department		Department of Structural Engineering and Building Technology	
Field of research		Construction Economics and Management	
Opponent		D.Sc. (Tech.) Marja Naaranoja	
Pre-examiners		Professor Mari Vaattovaara, University of Helsinki Assoc. Professor Colin F Duffield, The University of Melbourne	
Supervisor		Professor Jouko Kankainen, Helsinki University of Technology	
Instructor		Adjunct Professor Seppo Junnila, Helsinki University of Technology	
Abstract			
<p>The topic and the scope of this dissertation is the inclusion of the end-users' perspective into Public-Private Partnership (PPP) based urban development processes. The examined and developed 4P-based urban development process is by its nature a strategic Public-Private-People Partnership (4P) of local government and public land owners (Public), developers and private land owners (Private), and end-users (People) for good living environment and separate customer relationships.</p> <p>The empirical study is based on communicative planning theory and on a theory of rational consumers. Also a residential choice and an innovation theory - where end-users are the primary stakeholders in the innovation process - are discussed in this study. The qualitative study includes two levels of PPP-based urban development process. A general level of urban development process in its early stages - planning and design - and a more detailed level - purchasing process of PPP-based real estate service delivery projects. The research methods used in this study are multiple case study and action research.</p> <p>The dissertation found that the inclusion of the end-users' perspective in the PPP-based, or, more likely, in the 4P-based urban development processes is both possible and rewarding. The results show that it is possible to identify and categorise the end-users' perspective in a more detailed level of PPP-based urban development process, i.e. in a real estate service delivery, and to transfer the knowledge to the general level of PPP-based urban development process. It is also argued that the developed 4P-based urban development process increases the participation of the potential end-users, and creates a new kind of end-user orientated knowledge for the process.</p> <p>Engaging the end-users in development processes opens previously unseen potential for including consumerist possibilities for cities and developers. In this context, the 4P-based urban development process has created possibilities for engaging new pro-active and positive participation methods and solutions, not only for the early stages of urban development process (planning and design), but also for construction, operation and management of local economic and social infrastructure. The more concrete practical value and implication of this dissertation is the developed framework to include end-users' perspective into purchasing process of 4P-based real estate service delivery projects.</p>			
Keywords: Public-Private Partnerships, Urban planning, Urban development, Public procurement, Customer.			
		Number of pages: 83	
ISBN (printed) 978-951-22-9584-5		ISBN (pdf) 978-951-22-9585-2	
ISBN (others)		ISSN 1797-481X	
Publisher		TKK Structural Engineering and Building Technology	
Print distribution		TKK Structural Engineering and Building Technology	
<input checked="" type="checkbox"/> The dissertation can be read at http://lib.hut.fi/Diss/			

TEKNILLINEN KORKEAKOULU PL 1000, 02015 TKK, http://www.tkk.fi/	VÄITÖSKIRJAN TIIVISTELMÄ
Tekijä	Wisa Risto Majamaa
Väitöskirjan nimi	Asiakasnäkökulma kumppanuusmallisessa kaupunkikehityksessä
Käsikirjoituksen jättämispäivämäärä 20.3.2008	Väitöstilaisuuden ajankohta 14.11.2008
<input type="checkbox"/> Monografia	<input checked="" type="checkbox"/> Yhdistelmäväitöskirja (yhteenvedo + erillisartikkelit)
Tiedekunta	Insinööritieteiden ja arkkitehtuurin tiedekunta
Laitos	Rakenne- ja rakennustuotantotekniikan laitos
Tutkimusala	Rakentamistalous
Vastaväittäjä	Tekniikan tohtori Marja Naaranoja
Esitarkastajat	Professori Mari Vaattovaara, Helsingin yliopisto Assoc. Professor Colin F Duffield, The University of Melbourne
Työn valvoja	Professori Jouko Kankainen, Teknillinen korkeakoulu
Työn ohjaaja	Dosentti Seppo Junnila, Teknillinen korkeakoulu
<p>Tiivistelmä</p> <p>Tämän väitöskirjatutkimuksen aiheena on loppukäyttäjien näkökulma kumppanuusmallisessa kaupunkikehityksessä. Luonteeltaan tämä tutkittu ja kehitetty 4P-malliin (Public-Private-People Partnership) perustuva kaupunkikehitysprosessi on paikallishallinnon ja julkisen sektorin maanomistajien (Public), yksityisten yritysten ja maanomistajien (Private) sekä loppukäyttäjien (People) välinen strateginen 4P-kumppanuus, jonka tavoitteena ovat hyvä asuin ympäristö ja mahdollisimman monipuoliset asiakassuhteet eri osapuolten välillä.</p> <p>Empiirinen tutkimus perustuu osallistuvan suunnittelun teoriaan ja rationaalisten kuluttajien teoriaan. Tutkimuksessa käsitellään myös teoriaa asuinalueen valinnasta ja innovaatioteoriaa, jossa loppukäyttäjät ovat innovaatioprosessin ensisijainen sidosryhmä ja toimivat itsekkin innovaattoreina. Tutkimus käsittelee kaksi julkis-yksityisen kaupunkikehitysprosessin (Public-Private Partnership) tasoa. Yleisellä tasolla tarkastellaan kaupunkikehitysprosessin alkuvaiheita ja yksityiskohtaisemmin julkis-yksityiseen kumppanuusmalliin pohjautuvien kiinteistöinvestoinnin sisältävien palvelujen toimittamiseen liittyvää julkista hankintaprosessia. Tutkimusmenetelminä on käytetty tapaustutkimusta (multiple case study) ja osallistuvaa tutkimusta (action research).</p> <p>Tutkimuksen keskeinen havainto nykykäytännöstä on suoran asiakaskontaktin puuttuminen julkis-yksityisestä kaupunkikehitysprosessista yleisellä tasolla, jota vahvistaa yksityiskohtaisempi havainto julkisen hankintaprosessin alussa etsityn asiakasnäkökulman hukkaamisesta päätöksentekovaiheessa.</p> <p>Tutkimuksen tulosten perusteella voidaan sanoa, että loppukäyttäjien näkökulmat on mahdollista sisällyttää 4P-perustaisiin kaupunkikehitysprosesseihin. Tulokset osoittavat, että kiinteistöinvestoinnin sisältävät palvelujen toimittamiseen liittyvät kumppanuusmalliset hankintaprosessit mahdollistavat loppukäyttäjän näkökulman tunnistamisen ja luokittelun. Tämä kuluttajateoriasta johdettu luokittelu soveltuu käytettäväksi myös yleisellä tasolla kaupunkikehitysprosessia. Kehitettyjen 4P-perustaisen kaupunkikehitysprosessien todettiin lisäksi tuovan prosessiin uudenlaista loppukäyttäjätietoa sekä lisäävän potentiaalisten asiakkaiden osallistumista kehitysprosessiin.</p> <p>Loppukäyttäjien kytkeminen osaksi kaupunkikehitysprosesseja avaa aiemmin havaitsematta jääneitä mahdollisuuksia asiakaslähtöisyyden lisäämiseen. Tässä yhteydessä 4P-perustainen kaupunkikehityksen prosessi on tuonut mahdollisuuksia esittää uusia proaktiivisia ja positiivisia osallistumistapoja ja ratkaisuja sekä kaupunkikehitysprosessin varhaisvaiheissa, että myös paikallista taloudellista ja sosiaalista infrastruktuuria rakennettaessa, käytettäessä ja hallittaessa. Tässä tutkimuksessa esitetään lisäksi käytäntöön sovellettavaksi tarkoitettu asiakaslähtöinen viitekehys 4P-perustaisen projektin julkiseen hankintaan.</p>	
Avainsanat: Julkis-yksityinen yhteistyö, kumppanuus, kaupunkikehitys, kaupunkisuunnittelu, julkinen hankinta, asiakas.	
	Sivumäärä: 83
ISBN (painettu) 978-951-22-9584-5	ISBN (pdf) 978-951-22-9585-2
ISBN (muut)	ISSN 1797-481X
Julkaisija	TKK Rakenne- ja rakennustuotantotekniikan laitos
Painetun väitöskirjan jakelu	TKK Rakenne- ja rakennustuotantotekniikan laitos
<input checked="" type="checkbox"/> Luettavissa verkossa osoitteessa http://lib.hut.fi/Diss/	

*Tiedonpuussa asuu kyy.
Joka sitä lähestyy,
ikuisesti onneton
epäilyksen uhri on.
Autuas, ken omin päin,
elää, kuolee lailla täin!*

Lauri Viita (1947, Betonimylläri)

ACKNOWLEDGEMENTS

This thesis is a result of my work at YIT Construction Ltd. and studies in two inspiring universities. I have been privileged to work in one of the world's leading construction companies and study in two universities on the opposite location of the globe, The Helsinki University of Technology and The University of Melbourne. While Helsinki University of Technology has been my home base The University of Melbourne invited me for a year as Visiting Academic and provided the perfect atmosphere to finish my studies.

I am grateful to the opponent of my Dissertation D.Sc. (Tech.) Marja Naaranoja and to the pre-examiners, Professor Mari Vaattovaara (University of Helsinki) and Assoc. Professor Colin F. Duffield (The University of Melbourne), who have provided me with valuable comments and suggestions for improvements.

I am also extremely thankful to my supervisor, Professor Jouko Kankainen, who caught me to his doctoral team while I was finishing my Master's degree in The Lappeenranta University of Technology several years ago. Working with Jouko and his team has always been great fun, and as I can not thank all of the team members separately, I wish to thank all of them collectively. However, some of them deserve a special mention. First, I owe special thanks to Lic.Sc. (Tech.) Juha-Matti Junnonen. You lead me past the first papers and gave some hope to manage the rest. Secondly, great thanks with big "G" to my instructor, Adjunct professor Seppo Junnila, without your knowledge and help at the end this would have been much more difficult to finish.

The University of Melbourne was a great place to write most of the papers and engage to deep conversations about the topic and everything else what is important or not so important in man's life with fascinating colleagues like, Dr. Chris Heywood, Dr. Peter Raisbeck, and Dr. Hemanta Dolo. Chris, I owe you much about the idea to come to Melbourne, and all the co-operation and help with my papers and studies generally. Without you I would not have learned how to write articles in general, or how to do it in Academic English. Peter, I like to thank you and your wife Jennifer for all the hospitality you gave to our family while us where in Down Under. We will not forget the search for Easter eggs at Mornington Peninsula, the Crampies and all the other runs we did together. Hemanta, it was a pleasure to work with you. Melbourne is a place worth of visiting. I would like also to thank all the academic and professional staff and post graduate students of the Faculty of Architecture Building & Planning - still working with your thesis at the 4th floor - for the friendship and hospitality that you showed to me and my family during our visit in OZ.

YIT has been my employer during this millennium and has provided an innovative and challenging place to test some of the ideas of this dissertation in practice. I am deeply grateful to President of the YIT Construction Ilpo Jalasjoki for all the confidence on me and my work you that you have had during these years. I also owe much to my first superior, Pentti Hannonen, who recommended continuing studies after the Master's, and who was also a great mentor for me on the first steps of my professional career in YIT. My luck with the superiors continued when I started to work with Adjunct professor Juha Kostiaainen in the YIT's Research & Development unit. Together we developed YIT's Community Creation Concept and worked with the company's first residential master planned areas, Espoonkartano and Hista, which are also the main case-areas in my dissertations. Juha has also been a great academic mentor, colleague and friend for all these years, thanks' for it. I am also grateful to Matti Kuronen, who participated on some of the articles and has always been ready to help me with all kind of tasks. Matti, it has been a great time to work with you, now it's my turn to help you to finish your thesis. Among all the other colleagues in YIT, I would also like to thank my YIT's swimming club Kuutti's members Sakari Toikkanen, Heikki K. Hannukkala and Hannu Lokka for keeping me fit both physically and mentally during the work.

Writing doctoral thesis is not an easy task for a simple engineer. During the years I have got some outside help from my academic friends. For academic "thinking", I am grateful to Adjunct professor Risto Vilkkko and to Dr. Seppo Tuomivaara. For getting the idea of the 4th P, People, I am deeply grateful to conversations with Drs. Aija Staffans and Anna Koitsalo-Mustonen. You both are good examples of incredible "womanpower". I would also like to thank Aija for pre-reading and commenting to my thesis before the examination.

I have been extremely fortunate to have Finnish Funding Agency of Innovations (Tekes) and several Finnish organizations and companies as sponsors to my research project. I would like to thank all of the research partners and their representatives in the steering group: Satu Haaparanta and Sampsa Nissinen (Tekes), Ensio Hakkarainen (Confederation of Finnish Construction Industries RT), Jani Saarinen (The Finnish Association of Building Owners and Construction Clients), Erkki Aho (Senate Properties), Vesa Salmela (PricewaterhouseCoopers), Juha Kostiaainen (YIT Construction Ltd) and Heikki Laukala (City of Espoo). To Heikki, I also owe big thanks for the PPP conversations and tutoring to the "public way of thinking" during past years. I also deeply appreciate the financial support from Kunnallisalan Kehittämissäätiö and Finnish Association of Civil Engineers.

Life is not only work and research. I would like to thank my friends, especially my Majava-mates for all the friendship and both academic and some not so academic - but even more inspiring - conversations under the night sky full of stars during the trips to outback at the most beautiful Finnish autumns. Finally would I like to give my warmest thanks to my parents and my family for all the support during the long period of my studies from The Helsinki Technical Institute to The Lappeenranta University of Technology and finally to The Helsinki University of Technology.

My dearest wife Karoliina, no more degrees, I promise.

On the 2nd of October 2008, ready for annual outback trip with Majava-mates.

wm

LIST OF APPENDED PAPERS

This thesis is based on the following Papers: three international peer-reviewed journal papers, three reviewed international conference papers and one national peer-reviewed journal paper.

- I. Majamaa W., Kuronen M., Raisbeck P. & Heywood C., 'Including future inhabitants in urban development process in Finland', accepted to be published in *International Journal of Housing Markets and Analysis*.
- II. Majamaa W. 2004, 'Julkis-yksityinen yhteistyö rationaalisen kuluttajayhteisön näkökulmasta (in English: Public Private Partnership from the perspective of a group of Rational Consumers)', *Kunnallistieteellinen aikakauskirja*, No. 2, pp.150-166.
- III. Majamaa W. 2005, 'Evaluation of proposals for PPP projects from the perspective of a group of rational consumers', in Kähkönen K. & Sexton M. (Eds.) *Combining Forces - Advancing Facilities Management & Construction through Innovation Series*, in Tulla, K. (Ed.) Vol. IV, Section II, pp. 200-213, 11th Joint CIB International Symposium June 13-16, 2005, Helsinki, Finland.
- IV. Majamaa W., Junnila S., Doloi H. & Niemistö E. 2008, 'End-user oriented Public-Private Partnerships in Real Estate Industries', *International Journal of Strategic Property Management*, Vol. 12, No. 1, pp. 1-17.
- V. Kuronen M. & Majamaa W. 2006, 'The Problem of Future Inhabitants - Finnish Context', in *CIRM 2006 Contemporary Issues in Retail Marketing - Destinations and locations: Exploring the Multiple Identities of Place*, pp. 97-103, The 2006 Annual Manchester Metropolitan University Conference on Contemporary Issues in Retail Marketing 6th and 7th September 2006, Manchester, England.
- VI. Majamaa W., Kostianen J. & Kuronen M. 2007, 'Residential housing based on consumer's lifestyles', in Wakefield R. & Blismas N. (Eds.) *XXXV IAHS World Congress on Housing Science 2007*, pp. 103 (Abstract only), full paper on CD of conference proceedings, 4-7th September 2007, Melbourne, Australia.
- VII. Majamaa W., Heywood C., Kuronen M. & Kostianen J. 2008, 'A consumer orientated technique for planned residential developments', *International Journal of Housing Markets and Analysis*, Vol. 1, No. 3, pp.231-245.

Contribution of the author to Papers from I to VII is as follows:

- I. The author of this dissertation is responsible for initiating and writing the paper. M.Sc. Kuronen has also participated in writing and commented on author's text. Drs. Raisbeck and Heywood have provided comments on both the contents and the text.
- II. The author is fully responsible for writing the paper.
- III. The author is fully responsible for writing the paper.
- IV. The author is responsible for initiating and writing the paper. Adject professor Junnila and Dr. Doloj have provided comments on both the contents and the text of the paper. Ms. Niemistö has assisted with the case material.
- V. The author is responsible for initiating the paper. Writing the paper has been done mainly by M.Sc. Kuronen. Author has also participated in writing and provided comments on both the contents and the text of the paper.
- VI. The author is responsible for initiating and writing the paper. Adject professor Kostiainen has also participated in writing and commented on author's text. M.Sc. Kuronen has provided comments on the text of the paper.
- VII. The author is responsible for initiating and writing the paper. Dr. Heywood and Adject professor Kostiainen and M.Sc. Kuronen have also participated in writing and commented on author's text.

TABLE OF CONTENTS

PREAMBLE.....	1
1 INTRODUCTION.....	3
1.1 Public-Private Partnerships (PPPs) in public sourcing.....	3
1.2 Urban development in Finland.....	6
1.3 Scope and definitions of the Research.....	9
1.4 Practical Problem, Research Question and Research Problem.....	10
1.5 Research approach.....	11
1.6 Structure and main results of the Dissertation.....	12
2 RESEARCH DESIGN AND METHODS.....	17
2.1 Research design.....	17
2.2 Research methods.....	20
2.3 Research theories.....	23
2.3.1 Urban theories.....	23
2.3.3 End-users as rational consumers.....	26
3 CASE PRESENTATION.....	29
3.1 Case selection for the pre-study of the urban development processes.....	29
3.2 Case selection for multiple case study of purchasing processes of PPP- projects.....	29
3.3 Case selection for the action research of the 4P-based urban development process.....	31
4 RESULTS.....	33
4.1 Pre-study of the PPP-based urban development processes.....	33
4.2 Multiple case study of purchasing processes for PPP-projects.....	35
4.2.1 A theoretical framework.....	35
4.2.2 An improved framework.....	37
4.2.3 Multiple case study.....	39
4.3 Action research for 4P-based urban development process.....	42
4.3.1 4P-based participation process.....	42
4.3.2 The two-phase internet questionnaire - a new participation method for urban development.....	44
4.4 Interpretation of the results.....	47
5 DISCUSSION.....	51
5.1 Contribution of the research.....	51

5.2 Building the 4th P into Public-Private-People Partnership (4P) based urban development process	52
5.3 Suggested framework for Public-Private-People Partnership (4P) projects	56
5.4 Evaluation of the research	59
5.5 Future Research	63
6 CONCLUSIONS.....	65
REFERENCES.....	67
REFERENCES.....	67
APPENDIX 1.....	81
APPENDED PAPERS I - VII AND THE ENGLISH TRANSLATION OF THE PAPER II.....	83

PREAMBLE

This dissertation is a result of a university-industry collaborative research project. The work with Public-Private Partnerships (PPPs) in real life cases has provided the initiating idea for this research and for all the research papers on which the dissertation is based.

The author's previous work at the industry, in the field of PPPs and residential urban development, has provided both research material and professional background applicable to these studies. Author took part in 2000-2003 in the purchasing process of one of the real estate service delivery PPP-projects case studied in this research, *Kaivomestari*. The criteria used for final decision-making at *Kaivomestari*, initiated author's interest in observing PPPs from the end-users perspective and inspired me to investigate the possibilities of end-user orientated partnerships also at the level of urban planning in urban development processes. The City of Espoo, location of the *Kaivomestari* project, the residential urban developments of the *Espoonkartano* area, and the action research case of this study - *Hista* - has been a pioneer in the field of PPPs in Finland and a solid partner, providing valuable material to examine.

The Helsinki University of Technology and its *Laboratory of Construction Economics and Management* has provided an objective laboratory from which to externally observe the cases, and provided the means to see the *Community Creation Concept (3Cs)*, developed together with colleagues at the time of this research and considered in this research, from a new perspective. The work has also considerably benefited from a stay at *The University of Melbourne's, Faculty of Architecture, Building & Planning*, where it was extremely helpful to test the findings and results of the research in an international context in close partnership with its capable academic staff.

When investigating research on the professional topic of your own, through cases you have been involved with and through action research; the fear of blindness and concerns about objectivity may arise. However, hopefully by understanding and recognising this possibility, the risk is avoidable. The great benefits thoroughly knowing your topic and partly developing what you later have observed definitely justify this kind of method.

The 4th P - People - in urban development based on Public-Private-People Partnership

1 Introduction

1.1 Public-Private Partnerships (PPPs) in public sourcing

Governments are globally searching for more effective ways to produce and maintain economic and social infrastructure facilities and better public services - the important elements of a quality living environment and urban regional competitiveness in a global world. Since the Second World War the governments, as a public sector body, have had primary responsibility for building and maintaining their Welfare States. The expansion of public service provision continued till the late 1980s and early 1990s, when a world-wide economic recession made expenditure cuts necessary and created pressure to make public service provision more efficient and to evaluate the quality of public goods (Kiander, 2001; Allen, 1997). In a situation where many governments had budgetary pressures from the growing demand of services, Public-Private Partnerships (PPPs) were introduced as a synergistic way to reach a "win-win-win" situation that benefits all participants - public sector, private sector as well as the general public - in the long term (Wong, 2006; McQuaid 2000; Kernaghan, 1993; Kouwenhoven 1993). In the construction and real estate industry the use of PPPs has usually been approached as single projects and as the way to plan, design and implement, and maintain the technical parts of the project. In this study, the PPP is interpreted more widely as a way to build up, not only the technical parts, but also a social approach to the end-users of the public and private services - the citizens.

Since the economic recession in the early 1990s, the member states of the European Union (EU) have increasingly been reforming their public services and discussing alternatives for producing future public services for their citizens (Bode, 2006; European Commission, 2004a). Public-Private Partnerships (PPPs) are considered as one solution for producing quality, cost-effective public services related to the real estate industry, and PPPs have had an important role in the EU's Internal Market Strategy (European Commission, 2004b & 2003a). PPPs are seen as a possible approach for increasing public services' diversity and quality, and at the same time, using taxpayer's money more effectively (European Commission, 2003b; HM Treasury, 2003; Piekkola, 2003). The use of PPPs has also been justified by invoking experiences of its benefits compared to the traditional public service production (Nisar, 2007; Zhang, 2006 & 2005; Earl & Reagan, 2003; IPPR, 2001). According to the World Bank (2007), benefits from PPPs can be achieved in four main areas:

- Increasing efficiency in the execution of projects;
- Enhancing implementation capacity;
- Reducing risk for the public sector; and
- Mobilizing financial resources by freeing scarce public funds for other uses.

Simultaneously, the extents of benefits from private sector participation, and public authorities' uncertainty about the quality of the PPP services have also been under critical discussion (Shaoul, 2005; Kuntaliitto, 2003; Kanninen & Määttä, 2001).

Recently, discussion of PPPs' benefits has moved from "Value-for-Money" (VFM) and cost-effectiveness to innovative development of public service structures in partnership with the private sector and general public - the end-users of the services (Yliherva, 2006; Demirag et. al., 2004; Brunila et al., 2003; CIC, 2000). Wong (2006) has highlighted the general public as a primary stakeholder in a feasibility study for PPPs-based infrastructure projects, and Brunila et al. (2003) state the consumerist point of view, where the customer satisfaction and innovativeness are the key elements, to be the primary target in developing future public services in Finland. The general public becomes important also through their residential choice as globalization and changes of work and workplaces move from "space of places" to the "space of flows" in the networked society (Castells, 1996) and competition between cities and city-regions has become a worldwide issue (Kotler & Lee, 2007; Helenius-Mäki, 2002; Kotler et al., 1999).

Another important issue in the context of residential choice and urban regional competitiveness are the elements of competitiveness. To be competitive and successful, an urban region needs to possess features and elements which allow it to take part in competition, and a capability to convert this potential compared to the other competitors (Linnamaa, 1999; Barney & Hesterley, 1996). In research at the *Sente*¹, urban region competitiveness has been modelled as consisting of six elements:

- Infrastructure;
- Firms;
- Human resources;
- Quality of living environment;
- Institutions and the development networks; and
- Membership in the networks (Kostiainen, 2002; Sotarauta, 2001; Linnamaa, 1999).

The concept has evolved in the *Sente's* research projects and two more elements: Creative tension and Image have since been added to it to form a "competitiveness cube" (Figure 1, below).

¹ Tampere University Research Unit for Urban and Regional Development Studies.

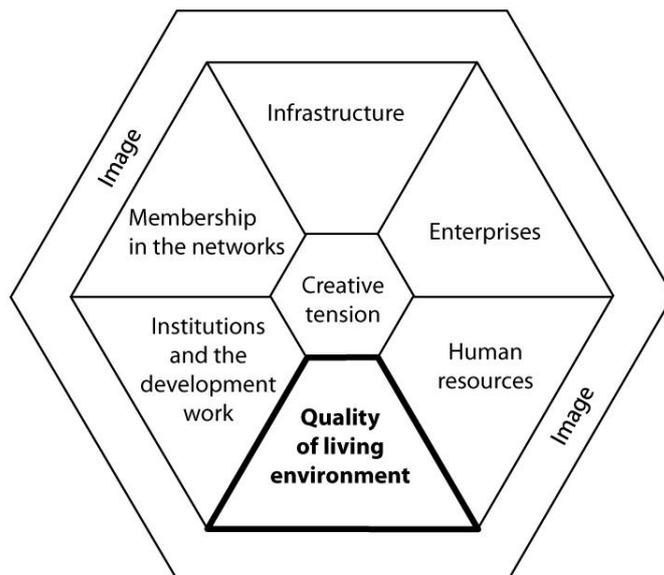


Figure 1. The competitiveness cube and its eight elements of urban region competitiveness and the cube of "Quality of living environment", in it which is of interest of this study (after Kostianen 2002 & Sotarauta 2001).

The focus of this study is on the 'Quality of living environment' as one of the eight elements of urban regional competitiveness. Previous research indicates a framework where Finnish regions and cities do not stand out and therefore contain a huge potential for increased competitiveness (Sotarauta, 2001). The Qualitative living environment element of the cube can be divided to three stages:

- Physical environment, which is linked to the urban development processes of desirable neighbourhoods;
- PPP-based real estate service delivery is strongly related to the local private and public services and economic issues; and
- The perspective of the end-user in local service delivery is one way to create and maintain social environments (Linnanmaa, 1999).

While this study examines the use of PPPs and the end-users' role in urban development processes in Finland, this framework is useful to understand the connection between urban development and real estate service delivery processes, as well as the development of quality living environment and urban regional competitiveness.

Urban regional competitiveness in the network society has recently been studied specially from the perspective of quality and skilled experts and their choices in social and cultural living environments (Andersen et al., 2006; Florida, 2002 & 2005; Sotarauta, 1999). Both at international and local levels an increasing number of people exercise consumer residential choice because they want, or can afford it. It has also been

noted that people, especially experts, are not moving after a job anymore and that companies are more likely to move to places where they can find the employees (Friedmann, 2005; Florida, 2002; Sotarauta, 1999). This puts urban regions, cities, developers and the real estate industry into competition for inhabitants, taxpayers, experts and customers (Friedmann, 2005; Sotarauta, 1999 & 2001; Breheny, 1999; Rogerson, 1999; Willoughby, 1995).

In this new situation cities are actively looking for new concepts and partnerships to create desirable suburbs and neighbourhoods - living environments. Urban development processes have a key role in creating more desirable living environments - with quality economic and social infrastructure to attract local and global flows and to make places that form nodes for these flows. The end-users' role and perspective in PPP-based urban development processes that create desirable living environments to increase urban regional competitiveness is interesting. In urban development processes, communicative and participative planning is used to involve stakeholders in the planning and development processes. But does it really cover all the stakeholders? According to Van Herzele (2004), communicative planning emphasizes more *future seeking* than *future defining* actions, as it was preceded by rational planning theories (Taylor, 1998; Healey, 1993). A great deal of practical and theoretical problems in participative urban development processes seem to relate to knowledge and its management (Rubinstein-Montano, 2000; Khakee et al., 2000). Also, whose knowledge is included in participation is an issue. It seems obvious that one vital source of knowledge in participatory urban development processes are the existing inhabitants, but especially in "greenfield" development processes it could be that it is the future inhabitants - the end-users' of the forthcoming neighbourhood - who to date, have been overlooked (Gunder, 2003; Huxley, 2000). As customer satisfaction and innovativeness are seen as the key elements in PPP-projects (Wong, 2006; Demirag et al., 2004; Brunila et al., 2003) and participation of all the stakeholders - including end-users - as the key element in urban development processes (El-Gohary et al., 2006; Van Herzele, 2004; Gunder, 2003; Huxley, 2000) an interesting topic is how the end-users' perspective is considered in PPP-based urban development processes.

1.2 Urban development in Finland

In the global context, Finland can be seen as an immature urban system, because the level of urbanization is approximately 20 percent lower than in, for example, the neighbouring Sweden and Denmark (UNESCO, 1999). However, in Finland this situation is changing with increasing migration to urban areas - especially to the Helsinki metropolitan area. Indeed, Helsinki's metropolitan area is now one of the fastest growing metropolitan areas in Europe. It is predicted that in the next 50 years Greater Helsinki's population will grow from the present 1.3 million to over 2 million

(Greater Helsinki Vision 2050). It represents one fourth of the population and one third of the GDP of Finland (Helsinki Region Portal 2007). It is clear that this kind of growth will require significant investments in economic and social infrastructure and public services that will be hard to fund with existing tax revenues. In Finland, special land-use contracts and PPPs have been used to speed up urban development processes and to finance economic and social infrastructure for new residential areas. Land-use contracts, where economic infrastructure costs are divided between private landowner and municipality - the Finnish form of local government - have been widely used in Finland, even before 1999 when they were written into the new *Finnish Land Use and Construction Act* (Kuronen, 2005).

In many countries, including Finland, urban development has been strongly connected to rationality and power and there have traditionally been two main players in residential area development, local government and the developer (Hillier 2002; Mäntysalo, 2002; Flyvbjerg, 1998). The development of residential areas has been strictly regulated by authorities and relied on local government's monopoly in urban planning (Gunder & Mouat, 2002; Forester, 1998). By the year 2000, the *Finnish Land Use and Construction Act* (MRL, 1999/132) had been fully renewed. This *Act* was originally formulated during the post-war era and was formed by, as well as relying on, strong central government and active land policy (Peltonen et al., 2006). The old version of the *Act* was based on the idea that local governments (municipalities in Finland) carried on an active land policy, meaning they either owned or purchased the land before making detailed plans. In contrast to the British planning system, where transition from active land-policy to private land development took place in the 1980s (Healey, 1998), Scandinavian and Continental European planning systems are different. Due to these differences in legislation, urban planning systems and cultures in different European countries it is not likely that they merge in the foreseeable future, not even with the help of EU-level legislation (Kurunmäki, 2005). In the British planning system, loose plans strengthen the political power and ease land-use changes (Kurunmäki, 2005). Conversation about loose or tight detailed plans and urban development processes goes on in Finland, as well in the rest of the Europe (Rinkinen, 2007), but the Finnish system is somewhere between an administration-based and an evolutionary market-based planning system.

The main objective of the revised *Finnish Land Use and Construction Act* was to strengthen the role of public participation and local decision-making (Peltonen et al., 2006; Kurunmäki, 2005). This participation involved all parties, with landowners, authorities, and relevant Civil Society Organisations (CSOs) recognized as implicit stakeholders in the urban development process. The urban planning department of the municipality has the role of a professional player, and it is legally responsible for the

actual planning. In undertaking this role the planning department should adopt an objective stance in mediating issues between the other stakeholders. This reflects an incrementalist planning theory view of the planner's role (Mäntysalo, 2005). Moreover, the main participating parties in urban development process are still other municipal departments, such as social and health services, or the education department (Kothari, 2001). To underline the importance of participation, the *Act* insists on compiling a separate "Plan for Participation and Impact Assessment" (PPIA); this includes the process plan required in the beginning of project (Kurunmäki, 2005). Despite the good intentions of this law, participation has become an act of faith in development, something that is believed in but rarely questioned (Clever, 2001). This is why very little criticism has been directed towards the management of participation organizations involved in participation. Rininen (2007) has also pointed out that the *Land Use and Construction Act* does not provide each local government with standard urban development processes. As a result, detailed planning processes differ a lot across local governments, and even within individual cities. Nowadays, differences in urban development processes can be seen as impacting upon strategic choices such as whether or not the municipality competes for new inhabitants and taxpayers.

The urban planning system in Finland consists of three stages - Regional Plans, General Plans that cover usually specific areas of a municipality, and Detailed Plans - which are needed in urban areas before any construction work can take place. Municipalities are responsible for making and approving but not executing the General and Detailed Plans. Therefore, municipalities' planners aim to achieve a static situation by making tight plans (Mäenpää et al., 2000). In the Helsinki metropolitan area, the typical public-led, detailed, planning process consists of three phases:

- Defining objectives and formulating the PPIA;
- Making a Draft plan for comments; and
- Making a Plan proposal.

This is then approved, first by the City Planning Committee, then the City Board, and, finally, in the City Council. In all of this, the usual methods of participation employed include public hearings, and the possibility of giving a written opinion regarding a plan at specific stages in the process as an organization or as an individual or at certain period of time. Discussions are not usually recorded, but the opinions expressed are thought to be received directly by the planners. This kind of participation leads to an adversarial and defensive approach (Healey, 1998). This situation is hampered by the lack of active methods of participation, and, as a result, the 'Not In My Back Yard' (NIMBY) phenomenon is the most common mode of participation.

1.3 Scope and definitions of the Research

It is important to clarify that the “people” have diversified roles in a complex PPP-based urban development processes. As citizens, people can have the public roles of taxpayers, decision makers, administrative subjects, stakeholders in the planning processes etc.. From the point of PPP people can also be seen as consumers of public and private services and customers of the public and the private sector. And for most people are seen from the end-users perspective of public and private services. However, this study also aims to express the various roles of people - end-users of public and private services. It is the inclusion of the end-users' perspective into Public-Private Partnership (PPP) based urban development processes that is of interest and the scope to this research.

There has been a lack of end-users' perspective and participation in discussion about Public-Private Partnerships (PPPs) and its benefits (Ahmed & Ali, 2006; Kaya, 2004; Akintoye et al., 2003). Studies of PPPs have mostly related to infrastructure projects and the real estate industry, and have been regressive, concentrating on technical and economic issues (EIC, 2003; HM Treasury, 2003; European Commission, 2003b; TTF, 2000), public sector benefits (Shaoul, 2005; Edwards & Shaoul, 2002; Gaffney & Pollock, 1999; Tiong & Alum, 1997), and analysis of the risks of cases and the contracts (Nisar, 2007; Martinus et al., 2006; Grimsey and Lewis, 2002; Thobani, 1998). Also, the needs and perspective of end-users have been noted as crucial points in urban development (El-Gohary et al., 2006; Van Herzele, 2004), and in end-user orientated and innovative development of today's public services delivery and welfare society (Trentmann, 2007; Yliherva, 2006; Brunila et al., 2003). However, the participatory planning processes used for urban development (Forester, 1998 & 1999; Taylor, 1998; Healey, 1993 & 1998), and the evaluation processes and the evaluation criteria used for PPP-based real estate service delivery purchasing have not included end-users as stakeholders, and have, therefore, not been developed from the end-users' perspective (Mattar & Cheah, 2006; Wong, 2006).

The urban development process is a complex, interactive, and time-consuming process (Pryke, 1995). It generally begins with the notion to undertake an urban development project, which is then followed by various stages that can be broadly categorised into a planning and design, construction, and operation and management stages (Adams, 1994; Gore & Nicholson, 1991; Healey, 1991). It also involves numerous stakeholders whose decisions and influences determine the pattern and trajectory of the development process (Innes, 1998; Healey, 1998 & 1993). In this study, the end-users' perspective is examined at a general level of Public-Private Partnership (PPP) based urban development process at the stages of planning and design, and at a more detailed level of PPP-based real estate service delivery through the purchasing process which includes

the whole development cycle. In the Public-Private-People Partnership (4P) based urban development process developed in this research the General Plan or Detailed Plan are the visions and foundations to create the tangible implementation of local economic and social infrastructure - the living environment. This study examined one of the key elements of desirable living environments - the end-users' perspective and its phenomena - through the PPP-based urban development process. In this research, the end-users include the existing and the future inhabitants as the potential customers of public and private sectors in PPP and 4P-based urban development processes in greenfield areas. In this study the greenfield areas are defined as those areas - usually agricultural and rural areas - that have not been developed as for any urban purpose.

1.4 Practical Problem, Research Question and Research Problem

This research examines the 4th 'P' - People - in Public-Private-People Partnership (4P) based urban development processes. Because the research aim - the inclusion of the end-users' perspective into the Public-Private Partnership (PPP) processes - is related to a real life context, I have followed Booth et al.'s (1995) path to solve this practical problem through the help from research answers. However, in search for that answer, a problem of other kind arises: namely a research problem defined by what it is you do not know or understand but feel you should know. Hence, one is asked to pose and solve the original practical problem. The process is presented in Figure 2, below.

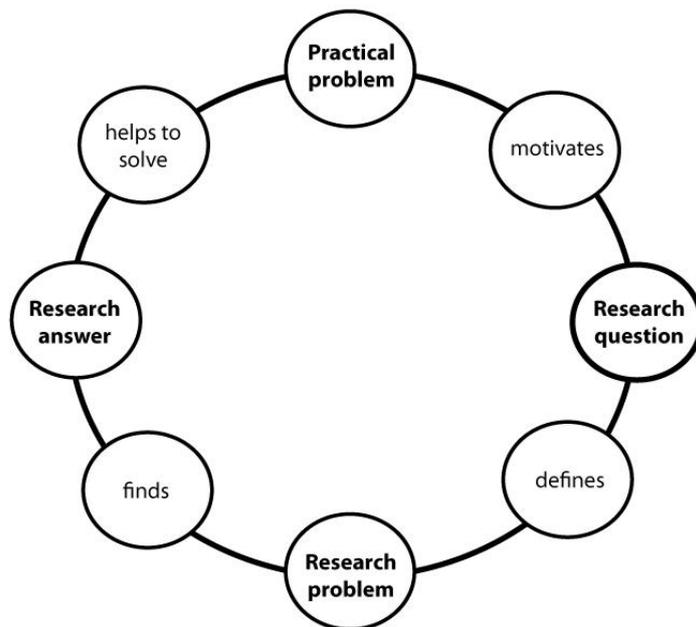


Figure 2. Practical problem and research problem (applied from Booth et al., 1995).

There has been a noticeable lack of the crucial end-users' perspective in the urban development process for creating more desirable living environments. This provided the real life practical problem of this research:

- The end-users' perspective should be included in the PPP-based urban development processes for more desirable living environments.

This practical problem motivated the development of the research question:

- How can the end-users' perspective be included in PPP-based urban development processes?

The research question was answered through sub-questions;

1. How has the end-users' perspective been considered and what has been the end-users' role in the existing PPP-based urban development processes?
2. How has the end-users' perspective been managed through the purchasing processes in the existing PPP-based urban development processes? and
3. How can the elements of the end-users' perspective be identified and categorised in PPP-based urban development processes?

These research questions define the research problem of this study:

- To develop the Public-Private-People Partnership (4P) based urban development process which includes the end-users' perspective.

Finding the answers to the sub-questions helped to form the answer to the research question which helped to solve the original practical problem. The practical implications established the framework for involving the end-users' perspective in 4P-based urban development processes.

1.5 Research approach

The research was based on a multiple case study and action research. It included analysis of two existing PPP-based urban development projects, five existing real estate service delivery purchasing processes, and action research part with one real life 4P-based urban development project. With the available data from these cases being mostly qualitative the research approach was hermeneutic and the process was iterative whereby each phase of the research provided knowledge and informed its later stages.

The research approach was based on following main stages:

- Two Finnish Public-Private Partnership (PPP) based urban development processes were pre-studied to understand the end-users' position and status as stakeholders in existing PPP-based urban development processes. While the role of end-users' participation and perspective is noticed to be crucial (El-Gohary et al., 2006; Van Herzele, 2004), there was a lack of end-users' involvement - especially the future ones - in PPP-based urban development processes.
- The urban development process at its general level is a complex phenomenon, and because the end-users' perspective was partly missed at the first stage of the

urban development process - planning and design - the study was continued in a more detailed level of PPP-based urban development - a real estate service delivery. As the end-user's involvement and perspective has been noticed as crucial (Trentmann, 2007; Yliherva, 2006; Brunila et al., 2003) the purchasing processes of the existing PPP-based real estate service delivery projects were studied to ascertain how the end users' perspective has been considered and managed through the purchasing processes of these projects.

- A theoretical framework to locate the end-users' perspective in PPP-projects was developed and tested in practice. The purchasing processes of five Finnish PPP-based real estate service delivery projects were analysed to develop an improved framework for identify and categorise the end-users' perspective in PPP-based projects.
- The results and knowledge - the end-users' perspective - from the detailed real estate service delivery level were transferred to the general level of PPP-based urban development processes. At the higher urban development process level, the Public-Private-People Partnership (4P) based participation and development processes - based on the end-users' perspective - was studied and developed by action research in one residential greenfield 4P-based urban development project in Finland.
- Through the developed 4P-based participation method was examined increased participation of the potential end-users and identified their perspective in the urban development process.

This study is limited to introducing and modelling ways to include the end-users' perspective in the urban development processes. The empirical results and their practical implications are not final and complete. There is a need for future refinement of the introduced 4P-based urban development process. Also, further research is needed to find out how the end-users are considered through the urban development processes - including the decision-making processes and the tangible implementation of local economic and social infrastructure of end-users' forthcoming living environment. The other practical implication - the suggested framework of criteria for evaluation processes for the 4P-projects - needs also to be tested with practical cases in future.

1.6 Structure and main results of the Dissertation

This doctoral dissertation comprises this Summary and seven appended articles. All the papers have been prepared and scientifically reviewed to meet the requirements of the specific publications and international conferences for which they were intended. Four of the publications - papers I, II, IV and VII - have been published or accepted for publication in peer-reviewed journals and three of the publications - papers III, V and VI - have been published in reviewed international conference proceedings.

The interest and scope of the research was the inclusion of the end-users' perspective into the Public-Private-People Partnership based urban development processes, and the research question was: *How the end-users' perspective can be included in PPP-based urban development processes?* As a result of this dissertation it can be stated that the inclusion of the end-users' perspective in the PPP-based, or, more likely, in the 4P-based urban development processes is possible. The results show that it is possible to identify and categorise the end-users' perspective in a more detailed level of PPP-based urban development process - in a real estate service delivery - and transfer the knowledge to the general level of PPP-based urban development process. Also the developed 4P-based urban development process was recognised to increase the participation of the potential end-users, and created a new kind of end-user orientated knowledge for the process. As a practical result two models have been developed to add the end-users' perspective to the 4P-based urban development processes. First, through 4P-based participatory processes, involving end-users - the existing and future inhabitants of the residential development - in the urban development process. Second, by presenting a framework for purchasing process for 4P-projects that include the end-users' perspective. The specific research design, methods and main results of the dissertation are summarised below, in Table 1.

Table 1. Research design, methods and main results of the dissertation.

Papers	Research design	Methods	Results
Paper I	Pre-study of end-users participation in PPP-based urban development processes.	Multiple case study.	(1) End-users' perspective and participation of all stakeholders are recognised as a crucial point in urban development processes; (2) The existing processes does not recognise the end-users as stakeholders and crucial knowledge from the end-users' perspective is missed during the development processes; and (3) Building the 4th P into Public-Private-People Partnerships (4Ps) into the urban development processes in Finland.
Paper II	Literature review and theoretical framework development.	Theoretical concept.	A theoretical framework to understand and for examining PPPs from the end-users' perspective.
Paper III	Extension of the theoretical framework and pre-test of it.	Pre-case study.	An improved framework for examining the end-users' perspective in PPP-projects (real estate service delivery).
Paper IV	Study of the elements and categories of the end-users' perspective in PPP-based purchasing processes.	Multiple case study.	(1) Identification of the elements and categories of the end-users' perspective in PPP-projects (real estate service delivery); (2) End-users' perspective was included in the purchasing processes, but was lost at the level of making final decisions; (3) Building the 4th P into Public-Private-People Partnership (4P) projects (real estate service delivery); and (4) A framework of the stages and criteria categories for evaluation processes for the 4P-projects.
Papers V and VI	Pre-study of new 4P-based participation methods.	Action research.	Pre-understanding of transferring the elements and categories of the end-users' perspective from more detailed level to the general level of 4P-based urban development through new 4P-based participation methods.
Paper VII	Study of including the end-users' perspective in the 4P-based urban development processes.	Action research.	(1) The elements and categories of the end-users' perspective were transferable to the 4P-based urban development process; (2) The developed 4P-based participation methods were recognised to increase the participation of the potential end-users; and (3) The 4P-based urban development process created new kinds of end-user knowledge.

The dissertation begins with this, *Introduction*, outlining Public-Private-Partnerships and their usability in urban development processes to increase urban regional competitiveness. The research scope and definitions, research questions and research problem are also under discussion in this opening chapter. The research approach is characterised in the end of the *Introduction*, together with the structure of the research and the main results of this dissertation. Chapter 2, *Research design, methods and theories*, introduces the research's design and methods. Also the research theories - urban theories, communicative planning theory, theories for residential choice, and consumer theories used to build the theoretical framework for end-users' perspective are included to the Chapter 2. Chapter 3, *Case presentation*, introduces the two PPP-based urban development projects used for pre-study of considering end-users in the urban development process. Also, five existing PPP-based real estate service delivery projects and one real life urban development project, used for action research, are presented in Chapter 3. The results of the research and their interpretation, showing how the research

questions have been answered, are presented in Chapter 4. Chapter 5 discusses the research findings and their contribution to knowledge in both academic and practical terms. It examines the overall theoretical contribution to knowledge and how the theory could be implemented in practice. Also, issues of research validity will be observed. Finally, directions for future research arising from this work are outlined. Chapter 6, concludes this dissertation and highlights the research results.

2 Research design and methods

2.1 Research design

The research has a multiple case design. This approach was chosen because the research investigated an open system (Robson, 2002), and the studied phenomenon - the end-users' perspective in Public-Private Partnership (PPP) based urban development processes - is in its real life context, and the boundaries between the phenomenon and the context are not clearly evident (Yin, 2003; Varto, 1992). In this research the case study approach was selected to study a broad phenomenon which can not be separated from society. The suitability of the case study and action research methods were supported by the fact that multiple sources of data had to be used to collect the evidence needed to solve the research problem (Silverman, 2005; Yin, 2003; Varto, 1992). The case study as a research strategy was also supported by the fact that both quantitative and qualitative evidence could be used in analysing the phenomenon (Flyvbjerg, 2006; Lamnek, 2005). The research's U-shaped design is presented in Figure 3, below.

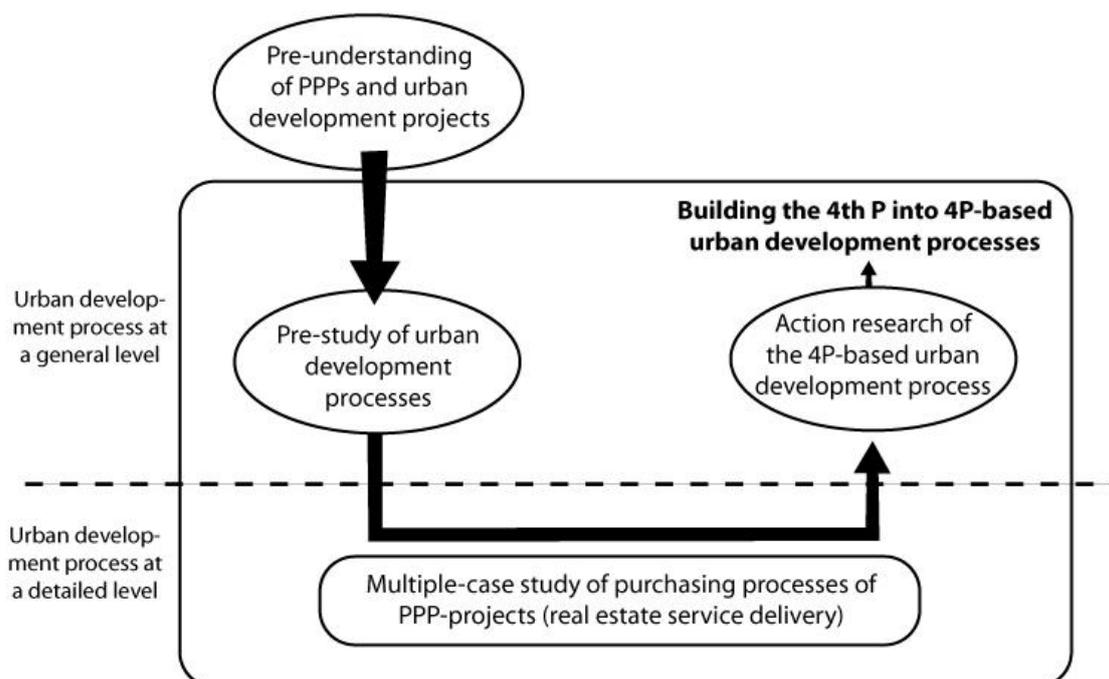


Figure 3. Research design of this dissertation.

With pre-understanding of Public-Private Partnerships (PPPs) and urban development projects the research question was first used to study how the end-users' perspective has been considered and what has been the end-users' role in the existing PPP-based urban development processes. Findings from this general level of the urban development process led to a more detailed level to identify the end-users' perspective and study how it has been managed through the urban development processes at the level of real estate

service delivery. Using the theory of rational consumers (Miljkovic, 2005; Abell, 1996) a theoretical framework for the end-users' perspective was developed. This framework was pre-studied with one existing PPP-based real estate service delivery project. After that the framework was refined and developed into an improved framework for the end-users' perspective. This improved framework was studied with a multiple case study of five existing PPP-based real estate service delivery projects. Results from this multiple case study into the detailed real estate service delivery level of urban development process encouraged continuing the study and developing an end-user orientated urban development concept and participation methods at the general level of urban development process. Action research was used to find where the results from a more detailed level were transferable to the PPP-based urban development process at a general level. Findings from this action research gave the answer to the research question (presented in Chapter 4: Results) and helped to solve the research's original practical problem (presented in Chapter 5: Discussion).

The selected research design follows abductive logic² where the approach of the research is hermeneutic and the process is iterative whereby each phase of the research provides us with knowledge and informs later stages of it (Varto, 1992; Gummesson, 1991). This kind of logic was used especially for the framework development in the multiple case study, where each project was used to build up the framework and to add more information for it to make it more sophisticated to study the end-users' perspective. This is linked to the hermeneutic spiral (Eisenhardt, 1989), where certain starting points of understanding and returns reflect on the findings and the methods after acting, useful to connect the concepts of both qualitative and inductive research approach. Instead of using grounded theory (Perry & Jensen, 2001; Sarker et al., 2001), where you start observation without previous knowledge, the researcher was able to start directly with the empirical studies with the pre-understanding - the practical knowledge - from my professional work that for several years was related to PPP-projects and urban development projects and my previous research (Majamaa, 2000) related to the topic of this study. The research design linked to the hermeneutic spiral is presented step by step in Figure 4, below.

² Abductive logic is that of, pertaining to, or proceeding by influence from observation or experience (Oxford English Dictionary 1989). For similarities in abductive logic and hermeneutic logic, see Eco (1979).

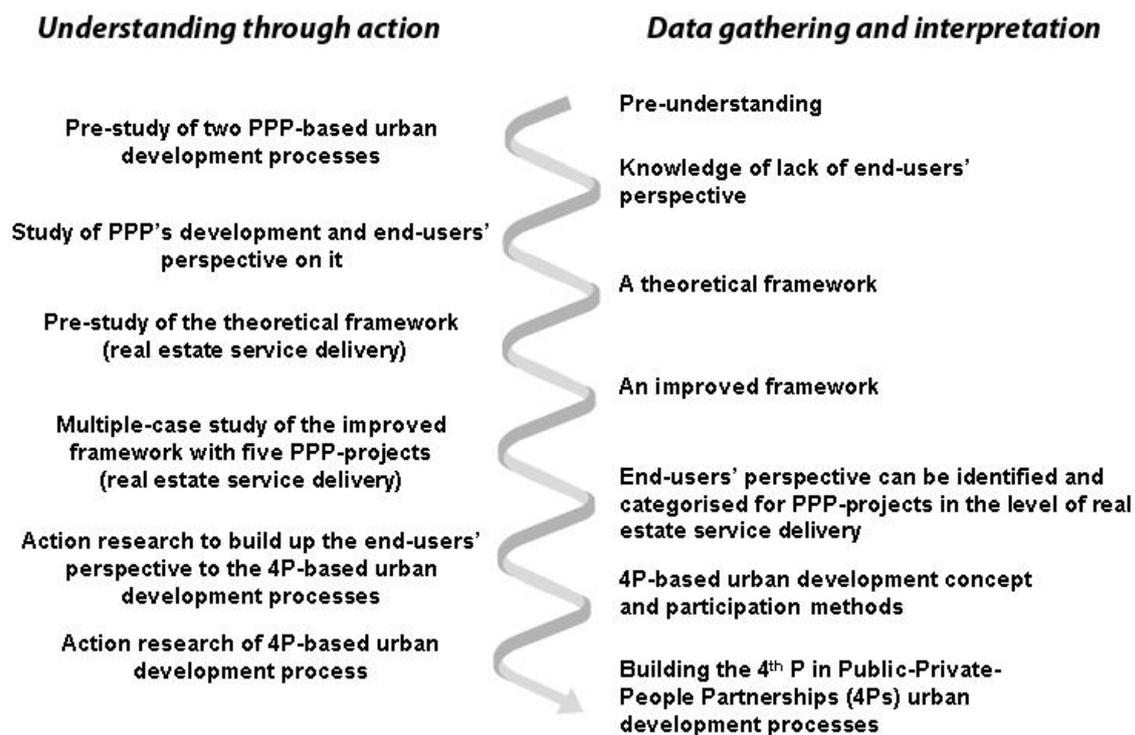


Figure 4. Research design linked to the hermeneutic spiral (applied from Gummesson, 1991).

The study of two PPP-based urban development processes is presented in Paper I. It also includes an introduction to urban development and participation processes in Finland, as well as the research context for these processes. The action research for the urban development process, where the end-users are accommodated as stakeholders in communicative planning theory and the 4th P is built into Public-Private-People Partnerships in urban development processes is also presented in Paper I. The development of the theoretical framework of end-users' perspective - the perspective of a group of rational consumers - and the outlook for the changes in public services, as well as the development of PPPs in the European Union and Finland is given in Paper II. Paper III examines the end-users' perspective in purchasing process of a PPP-based real estate service delivery project. This study was used as pre-study for the multiple case study, where the proposed framework could be re-developed in order to give a more holistic view of the dynamics of the research subject (Jensen & Rogers, 2001; Varto, 1992). Paper IV develops an improved framework and discusses the end-users' perspective in purchasing processes of five PPP-based real estate service delivery project. It also builds the 4th P into the Public-Private-People Partnerships (4Ps) in real estate service delivery context, and introduces a suggested framework for a purchasing process for 4P-projects from the perspective of end-users. The 4P-based urban development concept and participation methods from the end-users' perspective are

presented in Papers V and VI. Also, the problem of the end-users' participation in the urban development processes and the relationship between the end-users of the developed area and consumer-based residential choice and place making are presented in Papers V and VI. A study of including end-users' perspective to the PPP-based urban development process is presented in Paper VII. Practical implications for including end-users' perspective to 4P-based urban development processes are given in Papers VI and VII. This Summary links all these individual studies together and presents the inclusion of end-users' perspective into Public-Private Partnership (PPP) based urban development processes – which is of interest and the scope of this research.

2.2 Research methods

The main research methods used in this study are multiple case study and action-research. Literature reviews have also been done to understand the theories and regulations behind the practices of urban development and purchasing processes of Public-Private Partnerships (PPPs). To understand end-users' behaviour in the context of choosing a desirable living environment, the elements of residential choice and urban regional competitiveness theories were also studied. It was also necessary to understand the basic the basic axioms of rational consumers' behaviour, in order to be able to develop a framework for studying and evaluating the purchasing processes of PPP-based real estate service delivery from the perspective of end-users.

As Yin (2003) and Eisenhardt (1989) describe, a case study is a common research method in situations where the purpose is to find answers to "how" questions. In this study I had a "how" question as a research question - *How can the end-users' perspective be included in PPP-based urban development processes?* In Finland, there are not many cases for studying the PPP-based urban development process together with the end-users' role in it. I chose the case study method, because according to Yin (2003), the theory generation does not require a large number of cases. As the context of my study - urban development - is complex and a researcher cannot provide a perfect description of an area, or a final solution for a research problem, the development of theory, or a theoretical framework, and practical implications that account for much of the relevant behaviour, confirms that the case study was suitable method to use (Silverman, 2005; Varto, 1992; Glaser & Straus, 1967).

As Yin (2003) and Miles and Huberman (1994) have suggested, multiple sources of data and evidence have been used to solve the practical problem of this research. In the stages of pre-understanding of PPPs and urban development projects, and the study of urban development processes, the sources of data and evidence have related to my professional work on this field in the Helsinki metropolitan area between the years

1999-2008. The collection of data for pre-understanding has included, for example, the following methods and material related to these projects:

- Observation of developed urban projects in Finland, United Kingdom and USA;
- Participation in four urban development projects in Finland;
- Participation in three purchasing processes for PPP-based real estate service delivery;
- Participation in three research projects funded by the Tekes (the Finnish Funding Agency for Technology and Innovations) Progressive Building Process ProBuild 1997-2001 Technology Program³;
- Concept development for urban development and PPP-based services; and
- Interviews and conversations with the experts from the public and private sectors.

In the multiple case study the sources of data collection were based primarily on the publicly available tendering material. The *Finnish Public Procurement Act (1505/1992)* requires that all the material related to public purchasing and tendering processes and the decision-making on it should be publicly available. In this stage - the postscripts case study - the material included documents, presentations, protocols, study reports and minutes from following sources:

- Purchasing material provided by public bodies;
- Available tendering documents provided by bidders; and
- Evaluation and decision-making material provided by public bodies.

One source of data and evidence has also been personal participation in presentations of the tenders, and conversations related to those meetings. Also, several times I discussed the purchasing processes of the cases, during the processes and afterwards, the decisions made, and the arguments behind them with professional and political representatives of public bodies.

The same case study method could also be implemented to study Public-Private-People Partnership (4P) based residential area development in practice. However, I have chosen the action-research method because it allows one to have a more active role in the research. This reflects my role in the project, where fact-finding to the practical problem-solving in social situations with a view to improving the related quality of action would not be possible without action-research (Patton, 1990; Burns, 1998). While the theoretical background of this last part of the research was related to

³ The goal of the Progressive Building Process ProBuild Technology Programme implemented in 1997-2001 was to improve the operating culture of the building industry with regard to developing a customer-orientation and life-cycle economy contexts. The three projects participated in were: *The usability of PPP-models in Finland* 1999/02-2000/12, *Procurement processes based on life-cycle responsibility* 2001/04-2002/12 and *The developer and PPP-based models in urban development projects* 2001/01-2003/06.

communicative planning and residential choice, the development of the new urban development process was based on action-research, with my own involvement in the development of the concept and the new participation methods used in the studied residential area development. Action-research was chosen as a method also because it aims to improve practical judgment in concrete situations. Also, the validity of the 'theories' or 'concepts' it generates depends not so much on 'scientific' tests of truth, as on their usefulness in helping people to function more intelligently and skilfully (Burns, 1998). As the urban development process is a social and very complex phenomenon it has not been the aim of this research to validate its 'theories' independently and thereafter apply them to practice. During the research, practice and theory has been in discussion together and the studied urban development concept has developed continuously within the residential area development. I have developed practical implications and validated theory through practice, as this is generally done in action-research (Patton, 1990; Burns, 1998).

In this study, action-research has first been situational - diagnosing a problem in a specific context of PPP-based urban development and attempting to solve it in that context (Patton, 1990). Second, as action-research encourages (Argyris & Schon, 1989; Whyte, 1989), it has been collaborative, with a team of researchers from the *OPUS*-research⁴ project, and urban planner practitioners and political decision-makers from the *City of Espoo* as public body representatives, private sector professionals from *YIT*⁵, *Pöyry*⁶ and *Fountain Park*⁷. It has also included people, representing existing and potential future inhabitants, working together within a real life development process of one master-planned residential area in the Helsinki metropolitan area. Third, as team members have taken part directly in implementing the research findings in the ongoing urban development process, it has also been participatory (Whyte, 1984 & 1989). Finally, as findings and modifications have been continuously evaluated with the ongoing urban development process in this project to improve development practices it can also be described as a self-evaluative process (Patton, 1990). These four stages fulfil the basic characteristics given to action-research by Burns (1998).

⁴ OPUS (<http://opus.tkk.fi>) is an interdisciplinary research project at Helsinki University of Technology. OPUS acronym is based on the Finnish name of the project, translating to "urban planning and everyday life: a learning process". The OPUS-research project meets the challenges of urban planning and everyday life by pursuing the building of bridges between the planning practices, scientific knowledge and the experiential knowledge of the stakeholders. The desirable elements of the "urban planning as a learning process" concept include transparency of the process and interaction of all key actors. The results aim to benefit and satisfy the members of the Public-Private-People Partnerships involved in the processes of urban planning, design and construction.

⁵ YIT (<http://yit.fi>) is the major actor in residential housing in Finland, offering services for the property and construction sector as well as for industry. YIT's main market areas are the Nordic countries, the Baltic States and Russia.

⁶ Pöyry Environment Oy (<http://poyry.fi>) is a leading Finnish environmental and urban development company.

⁷ Fountain Park (<http://fountainpark.fi>) is the forerunner in web-aided change management and the top performer in the Finnish market in its field. It is a provider of innovative software solutions and web services that help streamline strategic management and decision making.

2.3 Research theories

2.3.1 Urban theories

Theories simply provide an abstract understanding and framework, where as for abstract understanding, they move beyond describing a single event by providing a means by which all such events can be understood (Dainton & Zelle, 2005). As for a complex phenomenon, like urban development process, it is hard to name a single dominant 'urban theory' or paradigm to cover it completely (Batty, 2008). One way to more closely approach the phenomenon of urban development theoretically is to use the substance theory related to it. The stage and form of urban development used to be related to nations but through globalisation is nowadays having the form of borderless world wide development. As an example of this kind of development and urban substance theory related to the urban development is the theory of the *World Cities* or the *Global Cities* which were introduced by Friedman and Wolf (1982) and Sassen (1991). The basic nature of these kinds of cities is that they simultaneously function as the cauldron for new forms of economy and society. Global cities are posited to act as the “command points” in the organization of the world economy, as the local cities where diverse social and cultural geographies collide and mix, and as the highly charged symbolic space associate with the making of collective subjectivities (Clark, 1996; Sassen, 1991). They can also be approached from the economical point-of-view as competition between these cities and city-regions has become a worldwide issue (Kotler & Lee, 2007; Helenius-Mäki, 2002; Kotler et al., 1999). Issues and approaches generally related to the global cities are:

- Urbanism;
- Relationships between the global cities and the nation;
- Migration and labour markets in global cities;
- The network structure of global cities;
- Telecommunications and the making of digital/global cities;
- Democracy, citizenship and global cities; and
- Governance and global cities at local, national and supra-national scales.

The latest research is also linking the development of global cities more closely to sustainability and environmental issues (Bugliarello, 2006). However, the theory of Global Cities and “urban theory” related to it is in a strong relationship with the economic issues (Smith, 2001) and development of Global Cities is based primarily on a relatively small group of mostly western cities (Sassen, 1991; Brenner, 1998), and been recently criticized for its narrow perspective in global world, for example, by Robison (2002) and Chakrabarty (2000). Robison (2002) points out that instead having imperialist and 'west' centred point-of-view, where 'third-world cities' are assessed in terms of this pre-given standard of (world) city-ness, or urban dynamism, we should

develop a more cosmopolitan account of “city-ness”. Research related to these 'ordinary cities' and cities in developing countries and third-world countries has been carried out, for example, by Amin and Graham (1997) and Gilbert (1998).

The theory of world cities or the global cities is also linked to the information society, as the cities are understood to be the relevant 'nodes' and 'hubs' in the Castells' theories of the *Informational City* (1989) and the *Network Society* (1996). The information and networked society has also been studied in the context of regional competitiveness and innovation. In his thesis - *Urban Economic Development Policy in the Network Society* - Kostianen (2002) has tied together urban regional competitiveness and learning in the network society and expand Nonaka's and Konno's (1998) "Ba"-concept to the potential "Ba" in the development network of the urban region. In recent urban development processes and terms innovation and innovativeness has been strongly related to strategic concepts like "creative cities" (Landry, 2000), or "knowledge cities" (Carrillo, 2005). Cities and urban regions can also be seen as innovative places by themselves and their inhabitants as stakeholders of the innovative development process innovators by themselves (von Hippel, 1988 & 2005; Lester & Piore, 2004) in an open and interpretative innovative process (Chesbrough, 2003).

Harcourt and Escobar (2002) have said that in the information society it is important to be able to join the knowledge building process. Urban development processes can be very complex and unpredictable but the urban planning processes inside them are normally structured and hierarchical processes. The interest in studying urban development processes is to lead to the theories behind the planning process. Knowledge building in planning theories is strongly related to communication and relationships and actions made by planning's stakeholders (Staffans, 2004). Habermas saw planning as a rational and communicative process (1970 & 1984 & 1987), where Forester (1989) introduced critical planning theory and practical communicative action. Healey's planning theory - *Collaborative Planning* (1993 & 1997) - is based on institutional approach and institutional design. Healey (1998) has also strengths in participation theory with the concept of active and party stakeholders of the planning process. As the learning is also becoming an important part of the urban planning process her theories of process knowledge and personal knowledge are also strongly related to this research's theoretical background. Staffans (2004) has raised the question of residents' participation in her thesis - *Influential Residents: Interaction and Local Knowledge Challenging Urban Planning and Design* - and she is looking for the inhabitants' perspective in urban planning. Including the inhabitants' - or end-users' - perspective to the urban development process needs more close observing for end-users' may also be consumers and decision-makers rather than being only part of the planning process as a stakeholders.

2.3.2 Communicative planning and residential choice

Urban planning and development theory and practice are poorly equipped to deal with consumerist motivations as it is dominated by issues of rationality, or democratic practice through communicative or deliberative theory and practice (Gunder, 2003; Huxley, 2000; Forester, 1998 & 1999; Innes, 1995 & 1998; Healey, 1993; Habermas, 1984 & 1987). Developers and construction management practice and theory are largely financially or productivity focused and is also ill-equipped to deal with consumerist perspectives (Godschalk, 2004); though developers are implicitly concerned with them in ensuring their developments are attractive in the market place. Traditionally they have used consumers' segmentation, and the market-based methods to understand consumer preferences (Kotler, 2003). As this study examines end-users' perspective in Public-Private Partnership (PPP) based urban development processes at the stages of planning and design, and through the participation of stakeholders in these stages, the theories related to them are relevant background to the study.

Forester's (1998 & 1999) and Healey's (1993 & 1998) communicative planning theory - either its consensus-seeking branch or management of conflicts - has been a popular research area (Peltonen, 2006; Friedmann, 2005; Staffans, 2004; Gunder, 2003; Huxley, 2000; Innes, 1995 & 1998; and many others). Although the theory of communicative planning, an action-centred view of the democratic planning system (Habermas, 1984 & 1987), aims to increase citizens' activity and to involve all the stakeholders in the urban development process (Forester, 1998 & 1999; Taylor, 1998; Healey, 1993 & 1998), it is questionable whether this kind of democratic point of view actually does cover all the stakeholders, and whether avoiding conflicts and democratic decision-making is enough to create desirable neighbourhoods - a quality living environment with all its elements?

Public participation and communicative planning theory is subject to the effects of power (Hillier 2002; Flyvbjerg 1998) and does not recognize or have difficulties in identifying end-users - especially future inhabitants - as stakeholders (Staffans, 2004; Mäntysalo, 2002; Huxley, 2000). Urban development theory considers an economically rational action in terms of segmentation (Kotler, 2003).

However, neither planning theory nor development theory considers urban development processes - the physical environment - from a consumerist perspective in a post-modern, globally networked society where housing is also used for identity construction (Hernesniemi, 2006; Bauman, 2001 & 2002; Hall, 2002). Consuming is also a way to transmit your commitments to other people and get the valuation from the other members of a chosen community (Hämäläinen, 2006). With a membership of a community people try to collect social, cultural and social capital (Hernesniemi, 2006). The Italian philosopher Lazzarato (2007) gives consuming even more metaphysical

meaning, by stating that consuming is not only simply buying products or services, but first of all is a means of belonging to the world and connecting to the universe. One significant way to “join the universe” is by using residential choice. An everyday solution for living becomes one way of consuming and an individual’s identity-making process, in sociological meaning - lifestyle making. Research on consuming, residential choice and consumers' lifestyle has recently been carried out from various perspectives and locations. These include:

- Consuming as a way to belonging to the world and connecting to the universe (Lazzarato, 2007; Lewis, 2001);
- Residential choice related in identity construction, where consuming is a way to transmit your commitments to other people and get validation from the other members of a chosen community (Hernesniemi, 2006; Hämäläinen, 2006; Bauman, 2001 & 2002);
- The impact on residential choice from household's lifecycle and changes to family size in Denmark (Ærø, 2006);
- Lifestyles, daily mobility and choice of housing location in Germany (Scheiner & Kasper, 2003);
- Gentrification related location, economic and lifestyle factors in Norway (Hjorthol & Bjørnskau, 2005);
- Differences in appraisal between suburban and exurban residents in Sonoma County, California (Crump, 2003); and
- Lifestyles and location choices in the Ile-de-France Region, France (Brun & Fagnani, 1994).

2.3.3 End-users as rational consumers

In addition to development of desirable living environments in the today's global world and in the networked society, the post-modern world also brings a new heterogeneous perspective to consuming and identity making (Castells, 1997; Trentmann, 1997). People's role as citizens and consumers at the same time has been related to the liberalism and historically discussed through the theories of it, for example: *Classical Liberalism, Revisionist Liberalism and Neo-Liberalism* (Bonanno, 2000). Where neo-liberalist Friedman (1980 & 1982) believes consumers have the freedom to choose to be the future of capitalism, others, like Beck (1992) and Beck, Giddens and Lash (1994) have introduced the *Reflexive Modernization* and are placing the future as based more on new risks in a global society. However, in today’s space of flows there are more independent players involved with diverging needs - the consumers of the neighbourhood and its public and private services. As Sanne (2002) stated, the focus on the consumer also fails to pay attention to how service producers and business construct the field of consumption to satisfy end-users' interest. It has neglected the role of the

public sector as a primary provider and how private business tends to co-operate with, or pressure the public sector to create conditions conducive for increasing consumption and free choice in public services. In Scandinavia, public service provision in the past has been closely connected to decommodification; in other words, equal service provision for all members of the community (Esping-Andersen, 1990). When the focus of PPPs has been only at the interface of public and private, the benefits of a customer orientation have been partly wasted. Thus, it may be acceptable that consumers are making a deliberate choice rather than being passive homogenic recipients following the dictates of private or public producer's marketing efforts, but we must still acknowledge that private and public service producers must make intentional use of all the factors end-user do consider in their choice (Sanne, 2002).

The perspective of the end-users, used in this study, is based on examining Public-Private Partnerships (PPPs) from the perspective of a group of rational consumers with individual needs. In the literature, the theory and behaviour of rational consumers is not unambiguous, and has been examined from various scientific perspectives (Miljkovic, 2005; Abell, 1996). In the discipline of economics, consumption is an individual choice among different ways of acting to optimize one's benefits, and it offers a distinct way to explaining how this choice is made. While other disciplines have objected and suggested other, or complementary, explanations, the group of three theories can be named to be - *utilitarian*, *differentialist* and *culturalist* (Sanne, 2002):

- The *utilitarian* approach is the economic explanation, and is also tied to the psychology of Jeremy Bentham. The process of choice is assumed to be atomistic, performed independently by each consumer (Sanne, 2002; Bentham, 1996);
- In the *differentialist* approach social relations are the key issues and consumption is regarded as a system of signs, which creates meaning in terms of order (Simmel, 1978); and
- The *culturalist* approach relates an individual to their own self-understanding and consumption is not a signal to the world but to the individual's own mind (Campbell, 1987).

In this study, the rational consumers were understood via the very basic prerequisites of rational consumers' behaviour which can be established from all these three group of theories. The three common axioms of consumers' behaviour in the economic theories of rational consumers used in this study are:

1. Individuals are capable at making decisions based on their own preferences, for example, individuals understand the value/quality and Value-for-Money (VFM) aspects;
2. There are multiple options to act (there is choice) and the results are related to the choices made; and
3. Individuals are willing to make free choices from multiple options (Zafirovski, 1999; Varian, 1996; Rohlf, 1996; Heap et al., 1992).

Establishing what rational consumers prefer as individuals, or as a group of individuals, is very difficult in the case of large topics, like public services. The post-modern view is also rather to rationalize consumption habits. Cross (2000) states, the academic critique of consumerist conformity has turned into a celebration of choice, identity in and through goods. In this study, instead of naming detailed preferences, I have laid the foundation for framework to study end-users' perspective to ensure that the basic axioms of consumers' behaviour as rational consumers can be fulfilled.

3 Case presentation

3.1 Case selection for the pre-study of the urban development processes

Two Public-Private Partnership (PPP) based urban development residential projects from the Helsinki metropolitan area - *Aurinkolahti* and *Kartanonkoski* - were selected to pre-study the role of end-users' position and status as stakeholders in existing PPP-based urban development processes in Finland. The basis for choosing these two PPP-based greenfield areas was based on the following criteria:

- The future population of the case areas are significant to the metropolitan area;
- Mainly developed or under development under the new *Land Use and Construction Act* (MRL, 1999/132);
- The land ownership includes both private and public land; and
- The urban development is done in partnership with the real estate industry.

Table 2 contains the basic data for each project used for pre-study of urban development processes.

Table 2. Basic information for the pre-study's urban development projects.

	Aurinkolahti -project	Kartanonkoski -project
<i>Landowner at starting phase</i>	Municipality and Private	Private
<i>Municipality</i>	The City of Helsinki	The City of Vantaa
<i>Area</i>	App. 105 hectares	App. 68 hectares
<i>Population when finished</i>	App. 7000	App. 6000
<i>Readiness at September 2007</i>	Area almost fully constructed	Area fully constructed

3.2 Case selection for multiple case study of purchasing processes of PPP-projects

Case selection for purchasing processes of urban development process at a more detailed level - real estate service delivery - contained five Finnish Public-Private Partnership (PPP) projects from years 1999-2006. It should be noted that all the suitable Finnish PPP-projects, with public service production that were available were included in this study. In order to devise the improved framework and to test its appropriateness the selected five PPP-projects included:

- A real estate investment;
- A private body responsible for Design and Build and technical-maintenance; and
- Private financing and/or ownership of the property.

The selected five PPP-projects were: *Kaivomestari*, *Pyynikki*, *Dynamicum*, *Frami* and *Vantaa Point*. The primary nature of all the selected projects was Build-Own-Operate (BOO), where the private sector is responsible for planning and design of the real estate, owns it, and operates it at least in the level on technical-maintenance during the concession period. For some projects, like *Kaivomestari* and *Dynamicum*, the public sector had an option to purchase the real estate asset from the private investor at reversion points during the service contract, or at the end of the first service period. The research in all these projects of purchasing processes relies primarily on the material and information publicly available from the selected projects. The *Kaivomestari* and *Pyynikki* projects also contain other background purchasing material, as the author has personally been involved in the tendering processes of these projects. Table 3 shows the basic information of these selected PPP-based urban development projects.

Table 3. Basic information of the selected five PPP-based real estate service delivery projects.

Project	Purchaser	Function	Service provision
Kaivomestari [K] in the City of Espoo.	The City of Espoo.	High School, swimming and sport centre.	Design & Build; Technical-maintenance; Financing and ownership; and Operating (all services excluding teaching).
Pyynikki [P] in the City of Tampere.	The City of Tampere.	Swimming and city spa centre with possibility to develop private business related to the services (hotel, shops, exercise studios and so on).	Design & Build; Technical-maintenance; Financing and ownership; and Operating (Swimming centre and city spa).
Dynamicum [D] in the City of Helsinki.	Senate Properties (owned by Finnish Government).	Office building for Government's units.	Design & Build; Technical-maintenance (partial); and Financing and ownership.
Frami [F] in the City of Seinäjoki.	Seinäjoen Teknologikeskus Oy (owned by the City of Seinäjoki and other local public bodies).	Centre of innovations and technology: office space and learning units for the local university.	Design & Build; Technical-maintenance; and Financing and ownership.
Vantaan Point [VP] in the City of Vantaa.	Vantaan teollisuuskiinteistöt Oy (owned by the City of Vantaa).	Local learning and information centre: library, international school and kindergarten.	Design & Build; Technical-maintenance; Financing and/or ownership; and Option to create leisure services.

The *Kaivomestari* project in the City of Espoo was used first for pre-study to develop the improved framework of end-users' perspective. *Kaivomestari* was chosen for the pre-study because it has been used as an example of best practice for PPPs in Finland, and during its purchasing and development processes it has been also the subject of several research projects and research programs, for example, its purchasing process was partly developed by *ProBuild Technology Program* 1997-2001. The *Kaivomestari* project was also used for the pre-study because I had a lot of detailed information and background knowledge about it, as I had participated in its tendering process during 2001-2002.

3.3 Case selection for the action research of the 4P-based urban development process

For the action-research, one greenfield residential area was chosen - *Hista* - in which the new Public-Private-People Partnership (4P) based urban development process has been actively developed and tested. In the stage of action research - *Nupuri* - the first part of the *Hista* area was used to study the everyday work of one neighbourhood development, and to more closely analyse a new 4P-based participation method - a two-phase internet questionnaire. While the *Hista* master-planned area, generally, is at the General Development phase, in its first area to be under construction - *Nupuri* - the Detailed Plan draft has done during the action research period and is expected to be accepted by the Espoo City Council and be legal in Spring 2008. *Hista's* total population is estimated to be 17,500 and in *Nupuri* 500. With *Hista* and *Nupuri* likely to be similar to the corresponding residential areas in the City of Espoo, the average household size would be 2.28 (Munter, 2005), which means there would be approximately 220 households in *Nupuri* and 6,250 in *Hista*. Choosing *Hista*, and its first part under development *Nupuri*, also means that there is one greenfield PPP-based urban development process to study from each of the Helsinki metropolitan areas main cities: Helsinki, Espoo and Vantaa. Table 4 contains the basic data for *Hista* and its first part *Nupuri* used for the action research of urban development processes.

Table 4. Basic information for the action research's urban development projects.

	Hista -project	Nupuri -project
<i>Landowner at starting phase</i>	Municipality, two master private and hundreds of smaller landowners	Private
<i>Municipality</i>	The City of Espoo	The City of Espoo
<i>Area</i>	App. 1400 hectares	54 hectares
<i>Population when finished</i>	App. 17500	App. 500
<i>Readiness at September 2007</i>	General plan proposal ready	Detailed plan draft ready

4 Results

4.1 Pre-study of the PPP-based urban development processes

Two Public-Private Partnership (PPP) based residential case areas - *Aurinkolahti* and *Kartanonkoski* - were used for a pre-understanding of end-users' roles in practical urban development processes in the Helsinki metropolitan area. Figure 5, below, presents the end-users' - existing and future inhabitants - position and status as stakeholders in the studied processes.

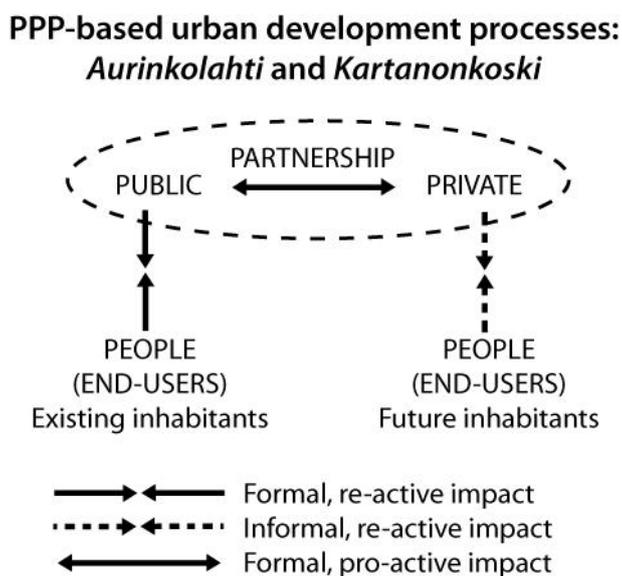


Figure 5. The end-users' position and status as stakeholders in the pre-studied PPP-based urban development processes.

In the urban development processes done via the PPP, as in *Aurinkolahti* and *Kartanonkoski*, the existing inhabitants were re-actively part of the planning's formal participation process. The private sector had a proactive and positive impact in the process, as the public and private bodies were in partnership, making the development together. In *Aurinkolahti*, the Urban Planning Department of the City of Helsinki did the planning stage more independently by itself and the private sector or end-users did not therefore have a strong role in it. In *Aurinkolahti*, the level of co-operation between public and private sectors during the development period was related mostly to the place-making issues, such as creating the image for the new area and coordinating the marketing processes. The land was owned by the municipality, and land sale process was done by public auction as has been done in recent years in the City of Helsinki. In *Kartanonkoski*, the development was done by a group of consultants selected through a competition organized by the public and private bodies together. In these urban development processes the private body was a developer who, outside of the formal

development process, had considered potential end-users - future inhabitants - informally as their potential customers. This consideration indirectly influenced the planning details and residential choices and the housing units offered to the market by the developers. In *Kartanonkoski*, land-use contracts were used to finance the economic infrastructure, and PPP-based real estate service development was introduced, to solve the problem of getting the required social services 'Just-in-Time' (Alfasi & Portugali, 2004).

This pre-study indicates that one of the main objectives of the revised *Finnish Land Use and Construction Act* - to strengthen the role of public participation (Peltonen et al., 2006; Kurunmäki, 2005) - has not been fulfilled as only the existing inhabitants have formally and directly been included in the urban development processes. The pre-study indicates that the used processes, where only the existing inhabitants have been included formally and directly in the urban development processes, fulfilled the revised Finnish Land Use and Construction Act. However, as one of the main objectives of the revised Act was to strengthen, increase and expand the role of public participation (Peltonen et al., 2006; Kurunmäki, 2005), in these pre-studied processes the future inhabitants remain outside of the urban development processes. In order to involve the fourth P - People - into the Public-Private Partnership (PPP) based urban development processes by increasing the citizens' activity and involving the end-users' perspective in more customer-oriented urban development processes, we need also involve the potential future inhabitants - end-users - as stakeholders of new areas. This requires identification of future inhabitants and their perspective in the early stages of the development, which has been so far difficult (Mäntysalo, 2002; Huxley, 2000). This is also important because after development and construction delivery, they will use the developed area and its public and private services. In urban development processes, they will be the primary end-users of the area and its economic and social infrastructure, and their opinions and attitudes are vital for the area to function as a residential location and community as a quality living environment with all its elements. Including all end-users as stakeholders in the development process allows also a number of important real-life questions to be answered that are of concern to these future residents, such as: 'Where is the nearest school, or kindergarten?' and 'How bad are the traffic jams?' or, indirectly, 'How much does my housing cost?' and 'Do we need to have two cars?' Answers to questions such as these are crucial to the success of the end-user orientated urban development. This makes including the end-users' perspective in the urban development processes vital.

The pre-study of the PPP-based urban development process showed that the general level of urban development processes was too complex for detailed study of the end-users' perspective. The pre-study indicated that the existing urban development

processes did not include all the potential inhabitants as the stakeholders. As the main aim of this research was the inclusion of the end user's perspective into PPP processes, the lack of knowledge of the end-users' perspective in PPP-based development processes, in general, led to the study continuing at a more detailed level of the urban development processes - purchasing processes of PPP-based real estate service delivery. At that level the aim was to develop a framework for the end-users' perspective and to study how the end-users and their perspective has been considered and managed in these PPP-based purchasing processes to find the ways of including the potential end-users perspective in the PPP-based urban development processes.

4.2 Multiple case study of purchasing processes for PPP-projects

4.2.1 A theoretical framework

The assessment of PPP-service provision, and a framework to study PPP-based urban development processes, and the purchasing process used for PPP-based real estate service delivery projects from the perspective of rational consumers with individual needs was founded on three categories: *Life Cycle approach*, *Diversity*, and *Customer Selection*. These categories followed the three presumptions which fulfilled the aforementioned axioms through which rational consumers maximize their benefits, are presented in Table 5, below.

Table 5. The theoretical framework to study urban development process from the end-users' perspective.

Criteria category	Axioms, through which rational consumers maximizes their benefits
<i>Life Cycle approach</i>	The Value-for-Money (VFM) principle operates, both in an individual's personal decisions and behaviour as a part of the community, as well as an expectation that the representative leadership of the community also adheres to the principle.
<i>Diversity</i>	An appreciation of diversity in selection and the resultant ability to make choices between different alternatives.
<i>Customer Selection</i>	There are independent choices and an expectation of having the possibility to make free choices based on personal preferences.

The theoretical framework's usability in the purchasing process was pre-studied in one PPP-based real estate service delivery project - *Kaivomestari*. The aim was to examine the usability of the framework and future development of it for the multiple case study. The requirements and desirable characters from the pre-qualification material and from the tendering and decision-making material given by the public purchaser were divided into the theoretical framework's three criteria categories. The results of the categorisation process are presented below, in Table 6.

Table 6. The criteria categories and stages of purchasing processes for the pre-study - Kaivomestari.

Criteria category	Stages of purchasing processes		
	Pre-qualification	Tendering	Decision-making (weighting in selection)
<i>Life Cycle approach</i>			
Economic factors and risk management and risk sharing.	Economic requirements for tenders.	The "Value-for-Money" principle and risk sharing mechanism from public purchaser's perspective.	30%
Quality and technical factors related to design and construction.	Technical requirements for tender.	Functionality, architecture, technical usability, materials, et cetera, from the public purchaser's perspective.	40%
Quality of required services.	Organizational requirements for tenders.	Detailed services for the school and sport authorities from the public purchaser's perspective.	10%
Project control and certainty of service performance.	Organizational requirements for tenders.	Detailed services during construction phase and during service delivery time from the public purchaser's perspective.	10%
Risk sharing and economic points in concession agreement.	–	Legal factors in approved concession agreement from the public purchaser's perspective.	10%
<i>Diversity</i>	–	Extra services identified and included in the "Value-for-Money" principle. Economic view from the public purchaser's perspective.	–
<i>Customer Selection</i>	–	Private cash flow from extra services included in the "Value-for-Money" principle. Economic view from the public purchaser's perspective.	–

In the pre-qualification process, the public purchaser, the City of Espoo, stipulated the technical and economic requirements for the tenders. At that time, the main interest was to estimate the potentiality of interested tenders on the basis of technical, economic and organizational factors. Only technical and economic requirements and characters were made public and no evaluation criteria were given. The purpose of the pre-qualification phase was more to short-list at least three, and no more than four, candidates for the ordinary tendering process.

The tendering documents included the economic and technical factors related to the *Life Cycle approach*, but also factors related to extra services and private cash flow from them. These important factors, related to *Diversity* and *Customer Selection* categories, were considered from the public purchaser's perspective, not from the end-users' perspective. The weighting of the evaluation criteria for decision-making indicated that the focus was on technical and economic factors of *Life Cycle approach* category. The City of Espoo, as purchaser, tried to secure the service on behalf of its educational and sports authorities. The call for bids did not preclude innovative solutions and the end-

users' perspective, which would include extra services and private - third party - cash flow. However, the main interest for decision-making was in public services and the evaluation criteria were set up on this basis. The breakdown of the required services was specified in great detail in the tendering documents, and the weighting in selection did not encourage tenders to include innovative development of extra services, or to extend the service supply to other end-users. Evaluation was made from the public purchaser's perspective and there were no factors at all which necessitated a direct link between the private service provider and the end-user. All the criteria were founded on managing the interface between the public purchaser and the private provider. The end-users of the public services, for example, students and other users of the leisure centre were considered as a homogenous group of consumers. The innovative services and diversity of the project were evaluated only on the basis of the *Life Cycle approach* and with the Value-for-Money (VFM) principle.

The findings from the pre-study indicated that there were some indications of looking after the *Diversity* and *Customer Selection* as there were features related to these categories at the stage of tendering. According to the findings it can be stated that even if these categories existed from the perspective of the public purchaser in the tendering stage they were lost in the final stage of evaluation as these two categories were not weighted at all in the final decision-making stage. As the basic structure of three criteria categories - *Life Cycle approach*, *Diversity* and *Customer Selection* turned out to be useable to study PPP-based real estate service delivery projects this structure needed to be subsequently developed to answer better the end-users' perspective. In the pre-study, there were desirable characters, for example: added value in core public services related to VFM principle and therefore automatically sorted under the *Life Cycle approach*, even if they also included features related to the other categories - *Diversity* and *Customer Selection*. Also, with difficulties in sorting some characters only to one category, the refined improved framework should be more precise by its sub-categories.

4.2.2 An improved framework

The criteria categories - developed in the pre-study to involve the end-users' perspective to the PPP-projects - were re-developed by using more precise classification in sub-categories. The base structure of previous three categories of the theoretical framework was also used for an improved framework. The first, *Life Cycle approach* category, is the most common one in the field of property development and service production, where benefits of PPPs have been traditionally measured by using Value-for-Money (VFM) as a key object (EIC, 2003; HM Treasury, 2003 & 2004; European Commission, 2003b; TTF, 2000). In this suggested framework it included the following sub-categories:

- Economic features related to VFM;
- Legal features related to the concession agreement;
- The quality and technical features related to the design and the building;
- The quality of the required core public services;
- Project management and certainty of service performance; and
- Risk sharing and risk management.

As the discussion of PPPs' benefits has recently moved from VFM and cost-effectiveness to more innovative development of public service structure in partnerships with the private sector (Yliherva, 2006; Demirag et. al., 2004; Brunila et al., 2003; CIC, 2000), the next two criteria categories: *Diversity* and *Customer Selection* were developed to better fulfil these kinds of expectations. Under the second category criteria - *Diversity* - were the following requirements:

- Desirable characteristics and evaluation criteria which embodied value added to core public services;
- Added value from networked service production of core public services;
- Diversity of core public services and service development; and
- Service and production innovations in core public services.

The third, *Customer selection* criteria requirements include desirable characteristics and evaluation criteria which embodied end-users' potential to make free choices and criteria related to services provided to third parties, outside or in addition to core public services:

- Innovations in third-party services;
- Extra cash flow from third-party services;
- Increases in utilization rate; and
- Increased potential for people to make free choices related to public and private services.

The stages of the purchasing process were divided to four instead of three as in the previous theoretical framework. The first stage, pre-qualification requirements and evaluation criteria for selecting tenders was kept as they were. To be more precise with the characters at the tendering stage, it was divided to two separate stages - requirements and desirable characteristics given in tendering material, and itemised evaluation criteria given in tendering material. The last stage, evaluation criteria used for decision-making was also kept as it was in the theoretical framework.

4.2.3 Multiple case study

In the multiple case study, the purchasing processes of five Finnish PPP-projects - *Kaivomestari*, *Pyynikki*, *Frami*, *Dynamicum*, and *Vantaan Point* - were studied using the improved framework. The aim of the multiple case study was to examine whether the end-users' perspective had been noticed, and how it was managed through the purchasing processes. This was done by analysing whether the given requirements, desirable characteristics and evaluation criteria - given in the purchasing material by the public purchaser - were used systematically throughout the purchasing processes, and how these three categories were recognised in evaluation stages and evaluation criteria used for decision-making. This tested the improved framework's usability in studying PPP-projects from the end-users' perspective. The results of the multiple case study are represented in complete form in Appendix 1, and in more compact form below, in Table 7. For brevity, the cases are denoted as follows:

- K=*Kaivomestari*;
- P=*Pyynikki*;
- F=*Frami*;
- D=*Dynamicum*; and
- VP=*Vantaan Point*.

These letters refer to the single features used in the original bids.

Table 7. The results of the multiple case study.

Criteria categories	Stages of purchasing process			
	1. Pre-qualification requirements	2. Requirements and desirable characteristics	3. Itemised evaluation criteria	4. Evaluation criteria used for decision-making
Life Cycle approach features				
Economic features	K	K P F V P D	K P F V P D	K V P D
Legal features	K P	K D	K P	K
Quality and technical features related to the design and building:	P	K P F V P D	K P F V P D	K V P F D
Quality of required core public services	K P	K P F D	K P F	K F
Project management	K P	K P F V P D	K P F	K F
Risk allocation and management:	K P	K F	K F	K
Diversity features				
Added value in core public services	K	K		
Added value from networked services production of core public services	P	K P D	F	
Diversity of core public services and service development	P	K P	P F	
Service and product innovations in core public services	K	K		
Customer Selection features				
Innovations in third party services	K P	K		
Extra cash flow from third party services	K	K		
Rise of utilization rate		K		
Rise of possibility to make free choices in public and private services		K		

In the first stage of purchasing processes, pre-qualification, the aim was to choose the best companies for the tendering process. Pre-qualification was only used in the *Kaivomestari* and *Pyynikki* projects. In the other cases, the processes went directly to the tendering stage. In the second stage - requirements and desirable characteristics - all the projects had features related to *Life Cycle approach* category. For the category of *Diversity* there were features evident from *Kaivomestari*, *Pyynikki* and *Dynamicum*. In this stage, the *Kaivomestari* project also had features related to *Customer Selection*. In the third stage, itemised evaluation criteria, again all the projects have features related to the *Life Cycle approach* category. For the category of *Diversity*, there were features evident only from the *Pyynikki* and *Frami* projects. In this stage, there were no features related to the third category *Customer Selection* at all. For the final, fourth stage of the purchase processes, evaluation criteria used for decision making the only features evident were from the *Life Cycle approach* category. Through all the projects had some features related to this first category, none of them had features related to the other categories *Diversity* and *Customer Selection*.

The findings point to how the end-users' perspective has been considered in purchasing processes for PPP-projects related to real estate service delivery projects in Finland. The

first finding from the multiple case study was that the improved framework, its three categories and four stages, was usable to study and was capable of identifying the end-users' perspective for PPP-projects. The other essential finding from the study was that the end-users' perspective was poorly managed throughout the purchasing processes. The criteria used for decision-making considered only a small number of features given in purchasing processes. All the requirements and desirable characteristics, related to *Diversity* and *Customer Selection*, given in the pre-qualification stage and in two tendering stages were not applied in the decision-making stage. This established that the projects had requirements, desirable characteristics and criteria considering the end-users' perspective, but these were not used to evaluate the proposals. The multiple case study confirms a fundamental lack of end-users' perspectives in the evaluation processes, especially in the evaluation criteria used for decision-making. According to the findings, it can be stated that the end-users' perspective was important to the projects, however the evaluation processes and criteria used for these projects were mainly based on *Life Cycle approach* criteria, not on the *Diversity* or *Customer Selection* criteria. They were not based on end-users' perspective and would not be advisable from the end-users' point-of-view.

Findings from the multiple case study at the real estate service delivery level also point out that end-user orientated service provision should be considered in the early stages of project development. Then, the perspective of the end-users could entirely be incorporated into the purchasing process. The project development stage is crucial because the main decisions related to investment and service provision occur during this stage, and over the concession period changes are extremely limited (Dixon & Pottinger, 2006; Kaya, 2004). The property, which is usually the most expensive single element in the contract, gives physical limits to the service production to be conducted in it (Nisar, 2007). During the concession time, major changes are normally unacceptable because the investors like to secure a steady cash flow based on a tight contract (Dixon & Pottinger, 2006).

Findings from the more detailed real estate service delivery level, encouraged action research at the general level of PPP-based urban development processes in its early stages of urban development - urban planning and design. In this level of the urban development process, the knowledge was transferred to the Public-Private-People Partnership (4P) based participation and development processes, where end-users are involved in the process. These, end-users' perspective based processes, were studied and developed by action research in one residential greenfield 4P-based urban development process in the Helsinki metropolitan area.

4.3 Action research for 4P-based urban development process

4.3.1 4P-based participation process

The third of the selected urban development projects - *Hista* - was used for action research for the new 4P-based urban development process and end-users participation on it. What makes *Hista* and its first part under construction - *Nupuri* - especially interesting, compared to the other PPP-based urban development processes studied earlier in this research - *Aurinkolahti* and *Kartanonkoski* - was the organization and processes used for urban development in its early stages. Whereas mostly General and Detailed Plans are drawn by municipalities' planners, dynamic action planning, as defined by Friedmann (2005), was adopted in *Hista* and *Nupuri*. All the stakeholders and their participation relations in the 4P-based urban development processes for *Hista* and *Nupuri* are shown below, in Figure 6.

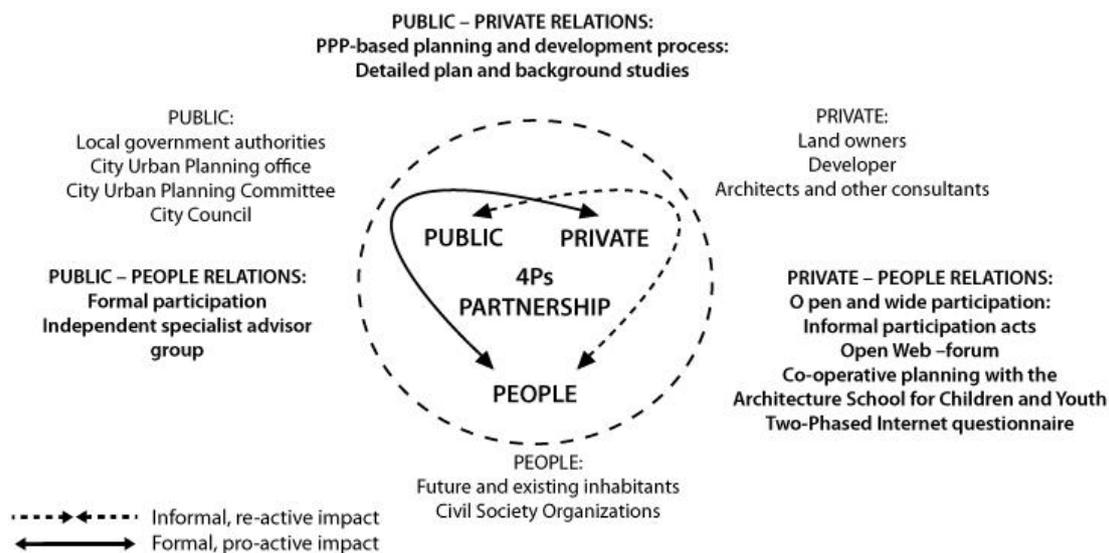


Figure 6. Stakeholders and participation relations in the 4P-based urban development processes for *Hista* and *Nupuri*.

In the beginning of the development process the municipality, the developer and the landowners outsourced the actual plan-making to consultants. This can be characterized as Public - Private relations (see Figure 6). In this process we could make the relationship between the City of Espoo and private land owners and developer authentically co-operative. As part of the *Public - Private relations* in the PPP-based urban development process, public authorities worked together with the developer who also supplied private resources to the local government and shared the expenses of planning. The private sector was responsible for the actual planning material and background studies related in it. The selected PPP-based co-operation in planning had, for example, already sped up the project's timetable by several years, and shifted the

burden of planning costs from public sector and taxpayers to the private sector - developer and the landowners. These findings are closely related to the first category of the improved framework studying for the end-users' perspective - *Life Cycle approach*.

As the main objectives of the new *Finnish Land Use and Construction Act* were to strengthen the role of public participation and local decision-making, in this new situation, the public body of the process - the City of Espoo - was able to concentrate on its authoritative role in conducting the process and overseeing and conducting the formal participation. This can be characterized as the *Public - People relations* (see Figure 6). In the *Hista* and *Nupuri* areas this democratic aim of communicative development has been traditionally done by the municipality, which has also been officially responsible for the urban planning process. With formal participation, the City of Espoo had also established an independent specialist advisor group to work with and discuss the planning principles with the city's urban planners, the developer, the land owners and the local government's political decision-makers from the city's Planning Committee.

A most interesting part of the process was the interface between the private sector and the people - the potential end-users of the neighbourhood. This can be characterized as *Private - People relations* (see Figure 6). During the development process, the private sector had arranged several different ways for existing and future inhabitants to participate informally and respond in the process. As the idea of the 4Ps urban development process also includes the end-users' perspective it gives end-users different ways to participate in open and fluid participation process at all stages of the project life cycle. This is relevant to avoid the risk of creating a formal group of "end-users" at the early stages and lose touch with the real needs of potential end-users - the customers of public and private sectors (Mäntysalo, 2002).

The interface between Private and People (Private - People relations) was something quite new in urban development in Finland, and deserves closer analysis. There were several informal participation acts with local inhabitants, heritage authorities, environmental groups, and other Civil Society Organizations, to establish the social and cultural background for the areas, and to create suitable themes and lifestyle-based development. Also, in these participation meetings, the local services, and local public and private infrastructure - including public transport, childcare and schools - had a crucial role. As involving the end-users - existing and future inhabitants - in the process and finding out their desired lifestyle has been a crucial part of the development of *Hista* and *Nupuri*, the one participation method used in *Nupuri* was an Open Web-forum. It was used to introduce the plans, and to collect feedback for the city's urban planners and developer's private architects and consultants. A further useful way of

getting fresh and new ideas for the urban development process was a co-operative planning workshop with the Architecture School for Children and Youth (ARKKI), where the students first explored the site (*Nupuri*) with their teachers and then made written proposals, drawings and models for the area. This kind of new "children's" perspective produced several useful ideas for further development of the area and its housing. One of the participation methods used for Private - People relations - an open, unstructured, two-phase internet questionnaire - was a participation method completely new in urban development processes in Finland.

4.3.2 The two-phase internet questionnaire - a new participation method for urban development

As has previously been noted the identifying of the end-users' perspective and their needs has been a problem, and the exchange of knowledge and the development of ideas through communication has become vital. To identify the end-users' perspective and conciliate the exchange of information with them in *Nupuri* - a two-phase internet questionnaire - designed and organized by Fountain Park, was used in the beginning of the detail planning phase. In January 2006, *Nupuri's* developer and the City of Espoo worked together with the OPUS-research project, to test this new way of potential end-users participation via the internet. Links to the questionnaire were in the City of Espoo's and the developer's main web-pages, and on the web-page of the OPUS-research project. Using its customer records, developer also sent more than 3000 e-mails concerning the questionnaire to its customers.

The two-phase internet questionnaire, Fountain Park's 'Signals-method', was a web-tool that used an unstructured questionnaire where participants were encouraged to circumvent the filters which normally restrict their thinking and observation. It was a method to collect qualitative knowledge from large group of participants in a few weeks, and the main task was to get weak signals and knowledge, which is not produced by other methods (Ilmola & Kotsalo-Mustonen, 2003a & 2003b). The weak signal could be described as a factor for change, hardly perceptible at present, but which will constitute a strong trend in the future, or as a sign which is slight in present dimensions but huge in terms of its virtual consequences (Uskali, 2005). Ansoff, who invented the concept and theory of weak signals in the mid-1970s, refers to the level of information as having two extreme stages: strong signals and weak signals. Strong signals are "sufficiently visible" and "concrete" and weak signals are "imprecise early indications about impending impactful events" (Ansoff & McDonnell, 1990). The design and structure of Signals-method, is presented below, in Figure 7.

Signal collection and evaluation process

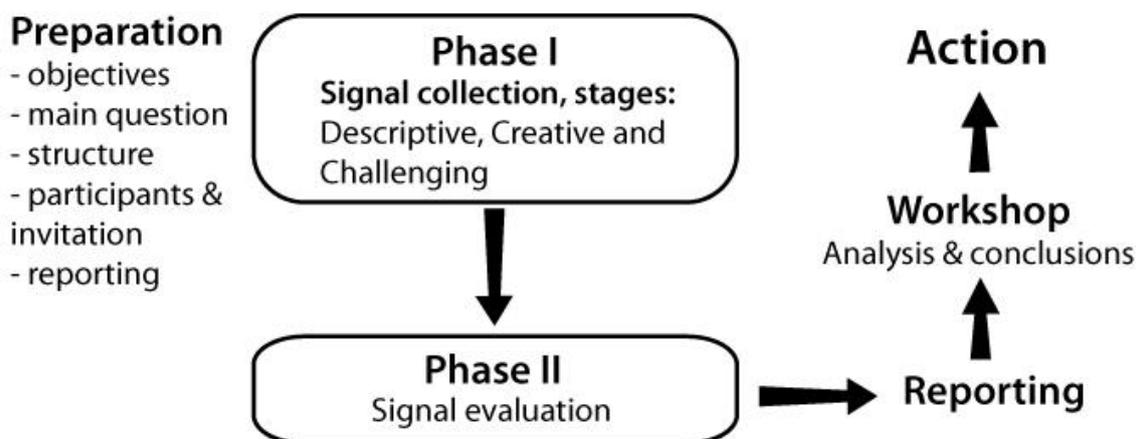


Figure 7. Indicative format of interfaces of the three signal collecting stages, the evaluation, phase and the quadrants result table of the questionnaire as for an example of the process.

The questionnaire had two main phases - 'signal collection' and 'signal evaluation'. The signal collection phase worked with three different stages of filters of strategic imagination: *Descriptive*, *Creative* and *Challenging*. In the first signal collection phase, 208 people made proposals, in three stages, to the same single question "What could make Nupuri a desirable neighbourhood?" In the first stage, the background picture was neutral and 244 mainly descriptive signals were collected from participants. For the second stage, the background picture was more creative and five different beginnings of sentences, such as: "Together with neighbours I could..." or "On weekends..." were randomly given stimulants for more imaginative thinking to help to create 340 new, more creative, signals. In the third stage, the background picture was fantasy, like with a hippo and a kite, and again five more challenging beginnings of sentences - like: "Think about circus!" or "The land was uninhabited and empty" - were given as stimulants to help collect 267 new, challenging, signals. It was notable that participants were able to create more signals in the last, *Challenging*, stage than in the first, *Descriptive*, stage.

At the end of first phase, participants were invited to participate in the forthcoming second phase. E-mails were not used in this phase, and the second phase webpage was made available two weeks after the end of Phase I. In this second phase, 155 participants were given 30 randomly selected signals from the first phase to evaluate. In this evaluating phase the participants were asked to evaluate the importance of each of the signals and graphically locate them relative to an important centre. The evaluated signals were then analysed using a special quadrants matrix to find out the strong and weak signals (Ilmola & Kotsalo-Mustonen, 2003a & 2003b). In the quadrants matrix, the quadrant with high relevance and low deviation gives you the important, strong

signals, which explicate the current perception. For development, this means "ideas and needs" which the majority of the respondents - potential end-users - find relevant for their residential choice. In the other upper quadrant are signals which have high relevance and also high deviation. These could see as the diverging characters in residential choice such as preferred density and level of community interaction. In the lower quadrants the relevance is low and the deviation also varies from low to high. With low relevance and low deviation you more likely have the characters which majority of potential end-users sees as unimportant for their residential choice. The most interesting quadrant was the weak signals, with low relevance but high deviation, which gives you the discontinuities in the urban development and business environment (Qihong & Konstantinos, 2006; Smeds, 2001). As Coffman (1997) states in his signal theory, here you are able to find out some of the characters with highest opportunity and greatest risks related to end-users' expectations for their residential choice.

Statistically, the results of the questionnaire were not meaningful, because there were 851 signals to be evaluated and only 155 participants that did it. With each participant evaluating 30 signals, each of the selected signals was evaluated only 5 times on average. However, the trend of collected and evaluated signals was clear. The common desired character in every quadrant was flexibility and the possibility to make variations at both neighbourhood and house-design levels. Besides that, as a strong signal, people clearly wanted close relation to nature and certain privacies. The weak signals were more related to tolerance, demographic diversity and community activities, such as getting together for community singing, or for a barbeque party. These common findings, especially potential end-users desire for flexibility and the possibility to make variations seem to be in the line with the last two categories of the improved framework to study for end-users' perspective - *Diversity* and *Customer Selection*.

As the study was not statistically meaningful some important findings could be made from the background variables about the participant's characteristics which were asked in the beginning of Phase I of the two-phase internet questionnaire. Among them were the usual age and gender, but also family situation and preferences concerning living environment were asked. Half (50%) the responses came from females between 30 to 55 years and 24 per cent from males aged between 30 to 55 years. The other demographic groups were females under 30 (11%), females over 55 (5%), males under 30 (7%) and males over 55 (4%). As 51 per cent of the responses had children living with them and 33 per cent were families with two adults without children, the responses represent the picture of the average suburban neighbourhood which the city and the developer are expecting *Nupuri* to be in future. The responses most preferred assessments of their living environment were:

- Nature (8.8%);
- Low density and "greenness" (8.6%);
- Everyday life with family (7.3%);
- Good relations with neighbors (7.3%);
- Spacious houses (7.3%); and
- The possibility to take part in the urban development (7%).

One of the variables was the knowledge of the *Nupuri*. 60 per cent of the participants did not know beforehand where *Nupuri* is located, or knew where it is but did not know area features. 29 per cent of the participants said they would be interested in living in *Nupuri* and only 10 per cent said they would like to have *Nupuri* as it is now, without the proposed development, and 1 per cent was not interested in the area at all. However, they have been interested enough in the questionnaire to complete it. As the area is a 'so-called' undeveloped, greenfield area with only a few surrounding inhabitants, the fact that the majority (60%) of the participants did not know the area beforehand, and that almost one third (29%) of the participants already interested to move in *Nupuri* demonstrates an important finding that the very large number of signals were from potential end-users - future inhabitants of the area.

4.4 Interpretation of the results

The interest and scope of the research was the inclusion of the end-users' perspective into Public-Private Partnership (PPP) based urban development processes. According to the study's findings, I can state that the inclusion of people in the PPP-based, or more likely in the 4P-based urban development processes is possible. The research gave the answers to the research question: "*How can the end-users' perspective be included to the PPP-based urban development process?*" Results of the study show that is possible to add the end-users' perspective in the PPP-based urban development processes through involving the end-users - existing and future inhabitants of the developed residential area - in the 4P-based urban development process and via building up the purchasing process of PPP-projects from the end-users' perspective. The results show that the developed improved framework was usable to study and are capable of identifying and categorising the end-users' perspective at a more detailed level of 4P-based urban development processes - in a real estate service delivery - and transfer the knowledge to the general level of 4P-based urban development processes. I can also state that the developed 4P-based urban development process was recognised as increasing the participation of the potential end-users, and created a new kind of end-user orientated knowledge for the process.

Findings to the research's first sub-question - *How has the end-users' perspective been considered and what has been the end-users' role in the existing PPP-based urban*

development processes? - were visible. Even if the problematic participation and knowledge transfer between the public and private developers and potential end-users of the area was seen as important (Van Herzle, 2004; Mäntysalo 2002 & 2005; Huxley, 2000; Rubistein-Montano, 2000), according to the results end-users' participation in the pre-studied PPP-based urban development processes did not include the potential future inhabitants - the vital group of end-users. The existing inhabitants were taking part formally and re-actively. Potential future inhabitants were only having an informal and re-active role through the developers' marketing premises.

The research's second sub-question - *How has the end-users' perspective been managed through the purchasing processes in the existing PPP-based urban development processes?* - was studied via the purchasing processes for PPP-projects. According to the results the goal-directed end-users' perspective did not go through the purchasing processes. The multiple case study of five Finnish PPP-projects confirmed a fundamental lack of end-users' perspectives in the evaluation processes, especially in the evaluation criteria used for decision-making. It can be stated that the end-users' perspective was important to the projects, however the evaluation processes and criteria used for these studied PPP-projects were mainly based on *Life Cycle approach* criteria, not on the *Diversity* or *Customer Selection* criteria. They were not based on the end-users' perspective and would not be advisable from the point of public services' end-users.

The research's third, and last, sub-question - *How can the elements of the end-users' perspective be identified and categorised in PPP-based urban development processes?* - led to the development of a framework to study and understand the end-users' perspective. An improved framework with three categories - *Life Cycle approach*, *Diversity* and *Customer Selection* - was developed and first used to study PPP-projects at the level of real estate service delivery. According to the findings, the improved framework and its three categories were usable and capable to identify the end-users' perspective for PPP-projects. As the developed 4P-based urban development process, used in action research, was based on these three categories, the first category of the end-users' perspective - *Life Cycle approach* - was included in the process by introducing the PPPs as a way to establish local economic and social infrastructure. Also, the partnership-based urban development process can be seen as having a *Life Cycle approach* character. The 4P-based urban development process done by PPP was the core public service. The process included all the purchasing processes of the PPP-projects as the more detailed processes. Economic and legal features were related to the cost and the legitimacy of the process. Quality and technical features were related to design, to the building, and to the quality of required public services, for example, to the planning and implementation stages of the urban development process. Moreover, the

risk allocation and project and risk management were natural parts of the urban development process. The categories of *Diversity* and *Customer Selection*, and the related end-users' perspective were included in the process by establishing wide and open exchange of knowledge and the development of ideas through communication during the urban development process. This has been seen as vital in urban development theories based on communicative planning (Rantanen, 2007; Van Herzele, 2004; Khakee et al., 2000; Rubinstein-Montano, 2000). As the common finding from the two-phase internet questionnaire was the end-users desire for flexibility and the possibility of making variations in their living environment, the improved framework seem to be usable also at the more general level of urban development.

The action research of 4P-based urban development processes provided one relevant approach to the defined research problem - *How to develop a 4P-based urban development process which includes the end-users' perspective*. As a research answer, findings from the action research established that involving potential end-users in the urban development process seems to be possible. The new participation method used was able to find and involve the potential and active future end-users in the urban development process. The tested new Signals approach was also able to bring new information into the development process. According to the findings from the study it can be said that by expanding the urban development process to include more open participation of all stakeholders and taking care of the end-users' perspective in all stages of purchasing process of real estate service delivery we have the precondition to the involvement of the 4th P - the People. This research answer has helped to solve the original practical problem of the research - *The end-users' perspective should be included in the PPP-based urban development processes for more desirable living environments* - and to develop practical implications for this kind of 4Ps-based urban development process. The practical implications are given in the next chapter, Chapter 5, Discussion.

5 Discussion

5.1 Contribution of the research

Previous research does not give an unambiguous answer about the residential choices and different lifestyles that groups, peoples, or tribes like to choose, and what are the most important factors in their choice. According to the literature, the question of residential choice is not related only to the socio-economic issues, but also to the social structures and economic positions that affect individuals' lifestyles. It can be demonstrated that lifestyle is a relevant part of residential choice, but the selection is complex and a result of many variables. In today's post-modern, globally-networked society, choice of neighbourhood is about belonging to a group, an expression of individuality, and relates to the choice of house type and the interior of the residence. One method that creates desirable living environments and neighbourhoods to match end-users' lifestyles is by involving them in the urban development process, using new participation methods as a bridge between residential choice and communicative planning. This not only finds out what end-users desire as consumers, but brings them into an innovative process of creating residential products - the choice being their own.

The research's main theoretical contributions are:

- The end-users - or consumers according to rational consumer theory or citizens according to communicative planning theory - can be added to the communicative planning theory and its participation planning processes by utilising the three basic categories (axioms) of consumer theory:
 1. *Life Cycle approach* as individuals are capable at making decisions based on their own preferences, for example, individuals understand the value/quality and Value-for-Money (VFM) aspects;
 2. *Diversity* as there are multiple options to act (there is choice) and the results are related to the choices made; and
 3. *Customer Selection* as individuals are willing to make free choices from multiple options.
- The possibility that 'People' can be integrated into Public-Private Partnerships (PPPs) through a framework for doing that both at the general urban development level and the more detailed PPP-based real estate service delivery level. The more detailed level can itself be seen as an offspring of the urban development 'family';
- The widely used communicative planning and rational consumer theory in a networked society are not mutually exclusive and can be integrated via Public-Private-People Partnership (4P) based participation processes at both the urban development and real estate service delivery project levels; and

- The established framework for an end-users' perspective based on the basic axioms of consumer theory seems to be capable of studying PPP-projects at both the urban development and real estate service delivery project levels, and to be interpretative for PPP-projects from the end-users' perspective.

The research also contributes the following findings:

- As the theory of residential choice alone does not give an unambiguous answer to create desirable living environments and neighbourhoods to match end-users' lifestyles, the developed 4P-based urban development process involves them in an innovative process of creating residential products - the choice being their own;
- The 4P-based urban development process can be innovative and end-user oriented in the sense of openness, customer-centred, and interpretative by its nature, as the development processes according to theories of innovativeness generally should be; and
- The urban developers, both public and private ones, benefited from the early inclusion of people in PPP-based urban development processes and PPP-projects at the real estate level;

In the next two paragraphs the practical contribution combined with theories is discussed at a more detail level with 4P-based urban development process and the suggested framework for Public-Private-People Partnership (4P) projects as practical implications of the research.

5.2 Building the 4th P into Public-Private-People Partnership (4P) based urban development process

The new 4P-based urban development concept - partly examined from its Planning stage and developed during this study - has been Community Creation Concept (3Cs). It was introduced and first used in the Helsinki metropolitan area in the City of Espoo for the *Espoonkartano* master-planned residential area in 2003. It was next used for the *Hista* master-planned area in 2004, and now widely used in company's master-planned residential area developments in Finland. It has four stages: *Theming*, *Planning*, *Service Development* and *Implementation & Maintenance*. Theming involves creating the local identity, or refining the soul, of the area. The identity is both contextual and architectural, and the architecture should express it. Theming is the first stage of including the future and existing inhabitants' participation in the urban development process for a new area. For the urban Planning stage, the 3Cs concept gives various formal and informal possibilities to the existing local residents and the future inhabitants – the customers of local government and developer- to take part to the development process. Wide and open participation, and participants acting as product

developers, are vital elements of the Planning stage. The Service Development stage includes the development of local services by Public-Private-People Partnership (4P), which also includes the customers' viewpoints. Here, the main task is to get the public and private services 'Just-in-Time' in the developing area and provide a diverse local service base by creating the service range together with existing and future inhabitants. Implementation & Maintenance is the final stage using life-cycle responsibility in design and building and funding of investments via Public-Private Partnerships (PPPs) and Public-Private-People Partnerships (4Ps). Efficiency in implementation and respect for environment were also considered to be the main targets in the 3Cs concept. This study focused on the Planning stage and especially new 4P-based participation methods used in it.

This research into theoretical and practical solutions for urban development tested two propositions identifying and engaging end-users in the 4P-based urban development process. The way to achieve this kind of participation was through a two-phase internet questionnaire, as a form of communicative planning that was tested in *Nupuri*. By involving future inhabitants, participation changes from a process characterized by passive and adversarial objects to an active and positive process where the needs of end-users are accounted for. People are thus able to influence their own future lifestyle and housing which, in new greenfield residential areas, would then be constructed and delivered by private developers. End-users, through Public-Private-People Partnerships (4Ps) can have a stronger influence on their living environment than they would have had if they were considered only as potential customers of the developers. In this process both the public and the private sector can integrate participation with place-making and learn earlier what it is that their customers - the fourth "P" - really desire.

While traditional Public-Private Partnerships (PPPs) managed financial and construction risk for public authorities the one thing they were not well equipped to deal with was political risk, which cannot be contracted to the private sector. Often PPPs have been the focus of adverse media attention and debate which can impact on a government's political standing. This adverse attention may arise when one stakeholder in the process makes a loss or carries too much risk (Raisbeck & Doloi, 2007). The 4P-based urban development process, through its open participatory planning and development methods, can also reduce the risk in political decision-making, as all the stakeholders are more committed to the results. As exemplified in *Hista*, and affirmed in *Nupuri*, this cannot be done without an authentic mapping of *all* stakeholders. Moreover, both the strong stakeholders and, so called, weaker stakeholders must be considered as this is very important in any theory of communicative planning.

In PPP-based urban development the focus has been on partnership between the strong stakeholders - the Public and the Private. For weaker stakeholders - People - participation has been re-active in a formal way with existing inhabitants and informally with potential future ones. As *Nupuri* demonstrated, one new 4P-participation method - the Signal method - pro-actively produced 851 mainly positive proposals, before the detail planning had even been done. This kind of participation method was also able to find the end-user of the new greenfield residential area, as one urban city planner said; "By having the vast majority (89%) of participants not being existing residents, this was the first time that we got some non-aligned expectations from the potential end-users, and by a way we would never be able to do by ourselves". In 4P-based urban development the focus is on the interface with end-users - People. Public and private bodies also have pro-active, formal and informal connections through the development process. Building the 4th P into 4P-based urban development process is presented below, in Figure 8.

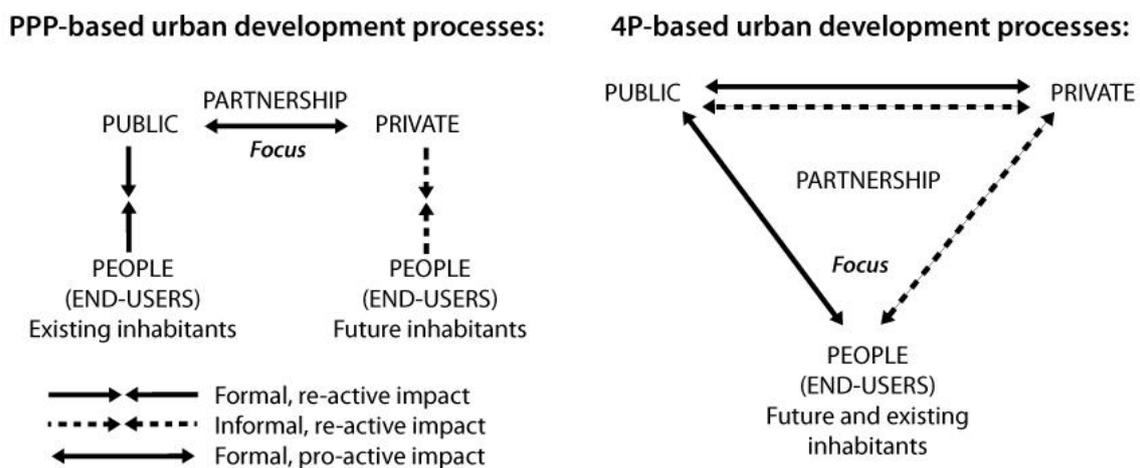


Figure 8. Building the 4th P into Public-Private-People Partnership (4P) based urban development processes.

The benefits of the new 4P-based development process and its new 4P-participation methods were clearly noticed in *Nupuri* by the public authorities and their decision-makers, and by the private developer. The new 4P-participation method has added the notion that the aims of communicative planning and its democratic point of view, and residential choice with end-users' lifestyle-based aims are not in conflict and can, in fact, support one another. In the early stages of the urban development process - planning and design - the developer's private resources has facilitated and accelerated these integrated communication processes. The new 4P-participation methods expedited the urban development process by several years, and both eased formal and informal decision-making by giving more information and supporting it. Without the 4P-based urban development process, the detailed planning of *Nupuri* would have been done after

the large *Hista* General Plan. The city's and developer's benefits from the 4P-based urban development process also come from the expedited and evolutionary open-ended interpretive innovation process with a lot of useful end-user oriented information. As Van Herzele (2004) stated, and the statistics of the City of Espoo amplifies, normal participation processes produces mainly negative *future defining* information, while the information from this process, with more than 800 signals, was mainly *future seeking*. Compared to normal participation, and the usually used, structured questionnaires, the use of unstructured Signals-method engendered new, valuable knowledge, not only for the development process for *Nupuri* but also for other similar areas in the Helsinki metropolitan area. With 155 participants also evaluating the signals themselves, the Signals-method was also a new and innovative process to analyze the data and identify the weak and the strong signals of end-users' needs in the very early stages of the development process. This differs from the consumers' segmentation, and the market-based methods traditionally used in cities and companies' development policy. From the end-users' point-of-view the new participation method has been a vital step in allowing them to actively take part in the urban development process and create the signs and desirable characters for their forthcoming neighbourhood. The process allows local government, and the developer, to see end-users as future inhabitants with 29 per cent of 208 participants, making up 27 per cent of the area's 220 planned households already interested in moving to the *Nupuri*. This brought them in as customers and innovators by themselves into an open and interpretative innovative process of residential product development more pervasively than traditionally. In the evaluated 4P-based urban development process the identification of single end-user is not relevant. More relevant is to see end-users more widely as a primary stakeholders and innovators themselves in the open innovation processes of urban development. That is why the action research part of this study was used to include the end users' perspective in the innovative urban development process - where the end-product is a desirable neighbourhood - through a participation process. From a neighbourhood level, this kind of participation has also affected the developer's house and interior design, and increased their implementation of variations for customers, which is normally only done later by the developer's designers.

These findings and practical implementations have helped answer the research's practical problem. The inclusion of the 4th 'P' into Public-Private-People Partnership (4P) based urban development process, and the development of the 4P-based urban development process as a practical and useful application for urban development have fulfilled the aim of this research. Inclusion of the end-users' perspective in the Public-Private Partnership (PPP) based urban development process amplify collaborative and participatory development, as multiple stakeholders and partnerships enable a holistic view to be used in this new kind of Public-Private-People Partnership (4P) based urban

development. The Public sector, the Private sector and the People each bring new knowledge to the creation of liveable residential areas and regions - desirable living environments. By considering the future and existing inhabitants, the fourth P, as a significant and strategic stakeholder in the urban development process, and by using the 4P-based urban development process as a foundation for an active method of development, participation can be turned from merely opposing all changes into creating new possibilities, making it closer to collaborative place-making benefiting all stakeholders. Public-Private-People Partnerships (4Ps) are also a way that the urban development process can be innovative and end-user oriented in the sense of openness, customer centred and interpretative by its nature as the development processes generally should be. However, there are some practical limitations as the existing urban development processes are based on public sectors monopoly and political approval of city plans. The stakeholders are not equivalent in power and the nature of end-user's perspective varies from public sectors administrative and political to private sectors commercial point of view. The duration of urban development processes is also a major factor to make distance between end-user's and the process. By the nature of end-users, the existing inhabitants are more interested of the changes in their neighbourhoods and have therefore readiness to time-consuming processes. The potential future inhabitants are more likely on searching desirable living environments from a number of options and are therefore not so keen for long processes. In practical life, urban development processes - at least in Finland - can take several years and include many gaps and non-active periods when end-users are not involved to the processes. Also, the nature of political decisions making can not guarantee that the innovative solutions and customer orientated elements will be considered as the vital part of the main document of urban development process - city plan - or the local economic and social infrastructure. One key aspect of future discussion and development of the urban development processes should be the form and duration of the processes. One solution could be the equal process where all the stakeholders can be represented and which duration can be known beforehand.

5.3 Suggested framework for Public-Private-People Partnership (4P) projects

The other practical implication of this study - the framework of stages, and criteria for evaluation processes of 4P-projects from the end-users' perspective - is based on the findings from the multiple case study. The findings show that end-user orientated service provision should also be considered in the early stages of project development. Then, the perspective of the end-user could entirely be incorporated into the purchasing process. The project development stage is crucial because the main decisions related to investment and service provisions occur during this stage, and over the concession period changes are difficult. The property, which is usually the most expensive single

element in the contract, gives physical limits to the service production that can be conducted in it. During the concession time, major changes are normally unacceptable because the investors like to secure steady cash flow, based on a tight contract. The lack of application of the end-users based evaluation criteria, and the missed potential of service development from the end-users' perspective, particularly in the decision-making stage, raised a need to develop an end-user orientated framework for evaluation processes for 4P-projects. This suggested framework clearly identify end-users' needs and perspective both at the start of the project and throughout the concession period as those needs may change.

The new evaluation framework of Public-Private-People Partnership (4P) projects in Finland includes all the three preferred evaluation categories - *Life Cycle approach*, *Diversity*, and *Customer Selection* - as evaluation stages and the framework has been developed for pre-qualification and evaluation of proposals stages in the purchasing process. In pre-qualification, the features should be related to the company's capability, and in the tendering stage, to the service outcome of proposals. If the purchasing process itself has more than one round, the features can be more open in early stages to get innovative solutions, and tighten up during the decision-making stage. The new suggested framework can also be used to compare the Public Sector Comparator (PSC) and 4P-concepts. Traditionally, the PSC has only been used on the best Public-Private Partnerships (PPPs) alternative (Treasury Taskforce 1997a & 1997b), and only with Value-for-Money (VFM) criteria. From the end-users' point-of-view, it is fundamental that the PSC is considered with 4P-concepts in the evaluation process. This new framework makes it possible to compare all the elements, not only the VFM features. The new end-user oriented framework for evaluation in purchasing process of 4P-projects includes three criteria categories as stages in the evaluation process:

- Life Cycle approach;
- Diversity; and
- Customer Selection.

By evaluating all the proposals through the three evaluation stages, the end-users' point of view is assured. The end-user orientated criteria have been divided into four categories based on the findings from the multiple case analysis of this study:

- Economic features;
- Quality and technical features related to property;
- Public and private service features; and
- Risk sharing and risk management features.

The new suggested framework is presented below, in Table 8.

Table 8. New suggested framework for end-user orientated stages and criteria for evaluation in the purchasing processes of 4P-projects.

Criteria categories	Evaluation stages		
	<i>Life cycle approach</i>	<i>Diversity</i>	<i>Customer selection</i>
Economic features	VFM in public core services and in property investment	Added value in core public services	Added value in third-party services and extra cash flow
Quality and technical features related to property	Design & Build and maintenance of property investment	Flexibility and usability of spaces for diversity of core public services	Flexibility and usability of spaces for diverse third-party services
Public and private service features	Quality of required core services	Service diversion and innovative development	Possibility for free choice in core public services and innovative development of third-party services
Risk sharing and risk management features	Risk sharing and risk management of property investment and for core services	Risks from networked service production	Risks from third-party services

The category of *Economic features* is based to the VFM criteria. In its first stage, the *Life Cycle approach*, VFM is related to core public services and property investment. In the next stages, *Diversity* and *Customer Selection*, the key issue is 'added value' for both core public services and private third-party services. The measurement can be done, for example, by calculating the savings from effective and innovative private service production in core services and extra cash flow from third-party services. In the studied cases, *Quality and technical features of property investment* were related closely to the *Life Cycle approach*. In the end-user orientated evaluation process more weight is given to the flexibility and usability of the spaces, which is essential to service development and innovations in core public services and in third-party services. The third category, *Public and private service features* is also related to the design and maintenance of property. A very important feature in this category is the innovative capacity to develop both public and private services during the concession period. If the private body does not have an opportunity, and if the public body does not insist on the development in services, the conditions for innovative development of services do not exist. In these cases, like in all the studied case projects of this study, the concession period can be stable, but does not encourage any progressive development in services. The public sector concentrates on getting core public services, as stated in the PPP-contract, and the private sector is only looking for ways to provide required services with minimum cost. From the end-users' point of view, the optimal situation would be when the private sector is developing third-party services actively and public core services are getting also the benefits from this kind of development. In end-user oriented evaluation processes, the last category in the suggested framework, *Risk sharing and management features*, needs also to be considered traditionally from the investment and core service production perspective. Networked service production and third-party services do add

risk and should therefore be considered separately in *Diversity* and *Customer Selection* stages.

In the end-user orientated evaluation process, features are linked to each other and all of these corroborate the main principles of PPPs and 4Ps to increase the public services' diversity and quality, and at the same time use the taxpayer's money more effectively. The *Diversity* and *Customer Selection* features have a positive impact on several essential elements of evaluation and decision-making, like: *utilization rate*; *cash flow*; *residual value*; *quality of service*; *innovativeness*; and *risk management*. Third-party services, based on *Customer Selection*, have a positive impact on the utilization rate and the cash flow. When the operator is using the same facilities to direct services to third-parties, in an open market situation, the updating processes of facilities and service development related to it, is not only motivated from the contract term to avoid sanctions, but also becomes crucial for the operator to be able to tempt third-party customers. This kind of development needs innovation and can be seen as a guarantee for quality services and improvements in core public services during the concession period. Diverse service provision needs flexible and maintained property and therefore increases the residual value of the property. All these features affect the risk sharing and risk management elements of the project. Dynamic and positive relationships between the public and private sector, working together to deliver good quality core services and creating new service provisions to the only real customers - end-users - is the optimal solution to avoid risks and get benefits from the Public-Private-People Partnerships (4Ps).

5.4 Evaluation of the research

The first step in evaluating the quality of research is to consider the quality of the research approach. While this has been discussed at length in Chapter 3 it can be stated that the qualitative nature and multiple case design was suitable, because this research investigated an open system (Robson, 2002). The end-users' perspective in the Public-Private Partnership (PPP) based urban development process was studied in its real life context, where the boundaries between the studied phenomenon and the context were not clearly evident. The research approach included several phases where an abductive logic and a hermeneutic methodology considered knowledge from observations and experience in each phase to inform later phases. This built the understanding through the research.

The writing and understanding process progressed step-by-step by reviewing literature, collecting and studying empirical data, and writing scientific papers. The final phase, writing this dissertation summary, connects all the prior work into an entity and gives an overview of the whole research process. Hence, the evaluation of the dissertation

consists of reviewing the contribution of the individual four papers evaluated and accepted for publication in peer-reviewed journals and the three papers evaluated and accepted for international academic conferences. The individual papers have been reshaped during their publication processes through the valuable feedback from the articles' referees.

Although the research aimed at completeness, there are some limitations that might affect the validity and reliability of the results. The validity issues are discussed here under three sub-groups according to Kidder and Judd (1986):

- Construct validity;
- Internal validity; and
- External validity.

To meet the *construct validity*, triangulation was used to ensure general reliability and validity of research design and improve the accuracy of results. Multiple-triangulation was possible, as this study consisted two levels of, or angles to, the urban development process - general and detailed - and the research used two methods - multiple case study in the more detailed level and action research at the general level of urban development. This kind of multiple strategy approach means that the same phenomenon - end-users' perspective and its three categories: *Life Cycle approach*, *Diversity*, and *Customer Selection* in the PPP-based urban development process and PPP-based projects - was approached and found from different angles simultaneously. Multiple approaches - multiple case study with PPP-projects and action research with new participation methods - were also used in demonstrating that a specific result - inclusion of end-users' perspective in PPPs - was not merely random as the science here was produced by using different approaches. This dissertation's qualitative nature and hermeneutic approach used four types of triangulation (Tellis, 1997; Stake, 1995; Feagin et al., 1991; Denzin, 1984):

1. Data source triangulation, when researcher expects the data to remain the same in different contexts. Data about the end-users' perspective in Public-Private Partnership (PPP) based urban development processes was collected in two contexts - generally with the Signal-method used for participation processes in the level of urban development processes, and at a more detail level through analysing the purchasing processes of PPP-based real estate service delivery projects.
2. Investigator triangulation, when several investigators examine the same phenomenon. As the action research is a collaborative method by its nature, this part of the research did include several investigators from public, private and academic bodies to examine the phenomenon of including the end-users in the PPP-based urban development processes. Also, while some of the writing of the

individual papers has been done collaboratively, and included several international researchers, author's contribution for these papers is clear. Author has been always leading the process and initiating the idea and was ultimately responsible for writing the papers.

3. Theory triangulation, when the investigator from different theoretical points-of-view interprets the same results. The framework developed for this research to study end-users' perspective was based on the theory of rational consumers. An improved framework was later used to study end-users' participation through communicative planning and residential choices at the more general level of urban development. In this level the developed 4P-based urban development process also has characters related to open innovation theory. A good example of the results of theoretical triangulation in the study was that the two of the three main categories of end-users perspective, *Diversity* and *Customer Selection*, were first found by analytical theory creation based on rational consumer theories. And later, the same categories came up with participation based on communicative planning theory and the questionnaire based on signals methods used in Nupuri case study.
4. Methodological triangulation, when one approach is utilised after the other in order to increase confidence in the interpretation. The pre-study phase, with several interviews and discussions with stakeholders, gave an understanding of the end-users' role in today's PPP-based urban development projects. Then, with the multiple case study, the end-users' perspective was identified and categorised with theoretical and improved frameworks. The last phase, action research, was able to establish the principles of the improved framework in the urban development process. The research has used different methods, one after another, to conclude that the end-users' perspective can be incorporated in the urban development process, and to establish the 4th P in Public-Private-People Partnerships.

Internal validity, in this research, has been related to the quality of the cases and material for the multiple case study and action research. The case selection to study the Public-Private Partnership (PPP) based purchasing processes in real estate service delivery included all the suitable cases to that time (year 2006) from Finland. There have also been some other cases in Finland labelled as PPP-projects, but these cases did not reach the selection criteria of this study. Most of the other cases were based on ownership of the asset (plot), not an open purchasing process. Rather, the "PPP-label" has been used more to get public acceptance of a direct deal between a public body and a private contractor. For the multiple case study, the sources of data collection were based primarily on the tendering material publicly available but did not include all the material provided in these processes. It was very difficult to get all the material on the

cases in the study, because some of it included competition related material belonging to private companies. Because the *Finnish Public Procurement Act* (1505/1992) states that all the material related to the purchasing and tendering process and the decision-making on it should be publicly available, it can be assumed that all the principal material related to the context of this study has been available and used. Also, the multiple case study included documents, presentations, protocols, study reports, and minutes of meetings from multiple sources. One source of evidence and data was the researcher's personal participation and discussions with the professional and political representatives of public bodies. Overall, it can be stated that the material collection has been comprehensive and trustworthy.

Internal validity of the action research was limited by case selection and material of one residential case area - *Hista* - and *Nupuri* its first part under construction. As the research was located in the context of Public-Private Partnership (PPP) based urban development processes in Finland, the two examples were the only suitable areas where this kind of action research was possible in Finland. The new Public-Private-People Partnership (4P) based urban development concept was also offered for use for the City of Tampere and Lempäälä Municipality in their development process for the Vuores area. But, in Vuores, the public bodies chose to use the more traditional Public-Private Partnership (PPP) concept (Nykänen et al., 2007). However, the development process that was a practical implementation of this research - 3C-concept - has included and exploited pre-understanding, material and knowledge from areas other than *Hista* and *Nupuri* that were using this concept at the same time. These have been compared during the development to the alternative ways of PPP-based urban developments in Finland and internationally. This practical reality has strengthened the results of this study. It is also notable that the same open and wide participation methods used in *Hista* have recently been adapted not only for PPP-based, but also for more traditionally public-led processes of urban development (Salmela, 2007).

External validity, the domain to which a study's findings can be generalized, rests on analytical generalization and replication logic in this kind of multiple case study (Yin, 2003). The findings of the research can be analytically generalized to Public-Private-People Partnership (4P) urban development processes and involvement of the 4th P - People - in these processes, because the studies from both general and detailed level of the process were found to produce similar results. As action research is always a unique process and especially when the studied phenomenon is complex, like the urban development process, there are limitations for the replication. However, there are not any certain issues in the studied process or the methods used which would not be replicated with some other development projects. As studied cases with different features stated, the multiple case study can be replicated and analysis of the public

tendering material of the PPP-projects, using the same frameworks, should lead to the same findings. However, the findings are only to be generalized to a certain extent as the study was carried out in one country. Thus, the results are specifically related to the urban development process, and the purchasing process of PPPs in Finland. As the purchasing process in PPPs and legislation related to it would be similar in all EU countries, some parts of the results, like the suggested framework and purchasing stages of it, should be directly adaptable to other EU countries. The urban development processes are more individual even in EU countries. However, as the main purpose of this research has been to interpret the context of end-users' role in PPP-projects and to develop a general framework to understand the complex phenomenon of PPP-based urban development from the end-users' perspective, the results can be generalized in some level in any kind of PPP or 4P processes, or country.

The action research and the study of the new participation method - Signals-method - produced statistical data, but due the small group of 155 participants to evaluate 851 signals, the results were not statistically meaningful and do not allow statistical generalization. Because the results of the evaluation phase were not statistically meaningful, some members of the *OPUS* research team have also been critical of the Signal-method's usability in urban development. However, the character of the signals and preferred assessments at a background level were consistent with the results from other similar areas in the City of Espoo or in the Helsinki metropolitan area, and as the trend of collected and evaluated signals was clear, the results have not been underestimated in a practical context by the city, or the developer.

Finally, there is a question of my own role as an observer and participant actor. As I regarded the role of researcher as an outside observer of phenomena and also a participant actor, I needed to move between these different interpretative frameworks and make use of resources contained in both perspectives (Buttimer, 1974). At the same time, I had to be able to assume responsibility and to commit personally to the information I had produced and the social questions I have promoted or opposed with the help of that information. While doing this study, I worked with real life PPP-projects and urban development processes, and I have been able to apply the research information to development of 3C-concept and to commit it that way. On the other hand, the combining of research and practical work has also made it possible to introduce new real life questions into this research.

5.5 Future Research

Despite the findings from this research that the inclusion of the end-users' perspective in Public-Private Partnerships (PPPs) is possible, further research is necessary to find out whether the good results thus far from implementing the Public-Private-People

Partnership (4P) processes, such as 3C-concept, can be adopted for use at the city or the regional level. While the study described only Finnish cases and the results of it can be generalized only in this context, there have been several national and international senior researchers, who have participated and provided comments on both the contents and the text of individual papers included to this summary. However, it would be interesting to compare the results of this study to international experiences from the Public-Private Partnership (PPP) based urban development, and purchasing processes of PPP-based real estate service delivery projects and the inclusion of the 4th P into this project form.

The purchasing processes examined in this study were based on the *Finnish Public Procurement Act* (1505/1992). During the research, the legislation changed and a new *Finnish Public Procurement Act* (348/2007) was probated in June 2007. Future research is necessary to find out how the findings of this study could be applicable to the new Act's purchasing process. Also, future research should be done with purchasing processes based to the suggested framework of this study to understand the influence of the end-users' perspective in 4P-based real estate service delivery.

Also, more detailed research that compares the participation methods in this research to other participation methods is required. As this research approached the issue more from the qualitative research tradition, a fruitful environment for further studies would be the new trend of combining quantitative and qualitative methods.

As the concept “people” here still includes various roles in urban development based on Public-Private-People Partnership. Further studies could gain new insight in the phenomenon by analysing the roles separately and from different angels.

Future research could be done to study the economic, social, and ecological outcomes of the 4P-concept. This relates to the extent to which the 4P-concept can be used to drive innovative practices and develop more desirable neighbourhoods in today's networked society. One last interesting area of future research would be to study how effectively cities and regions are using the PPPs and the 4Ps to increase the desirability of their residential neighbourhoods in terms of sustainability. This research could focus on how a more active use of open and wider participation methods would incorporate future inhabitants in urban development processes. These are ways in which urban research policy, both in Finland and elsewhere, could be shaped in the future.

6 Conclusions

The inclusion of the end-users' perspective in Public-Private Partnership (PPP) based urban development processes makes PPPs more relevant to today's global world where urban regions, cities, companies, developers and real estate industry compete for inhabitants, experts and customers - end-users of the living environment. In this research I have studied the possibility of expanding the urban development process so it could include the end-users, the future inhabitants of the forthcoming neighbourhood. With a new 4P-participation method, such as described in this study, and the 4P-based urban development process, the widely used theory of communicative action in planning and its aim to increase citizen's activity in urban development processes can be developed to the stage where it pro-actively and positively involves the future end-users.

As there has been a noticeable lack of the crucial end-users' perspective in the urban development process generally, it was the aim of this research to include the end-users' perspective in the PPP-based urban development processes for more desirable living environments. The problem of how to include the end-users' perspective in PPP-based urban development processes was studied with the help of multiple case study and action research methods. How the end-users' perspective has been considered and what has been the end-users' role in the existing PPP-based urban development processes was studied with the pre-study of two PPP-based urban development projects. Moreover, it has been clarified with a multiple case study at a more detail level of the urban development process - the real estate service delivery level - how the elements of the end-users' perspective can be identified and categorised, and also how has the end-users' perspective been managed through the purchasing processes. And finally, the research problem of this study was solved, with action research of a particular residential Public-Private-People Partnership (4P) based development project, by developing the 4P-based urban development process which includes the end-users' perspective.

All the findings from the study indicate that the inclusion of the end-users' perspective in Public-Private-People Partnership (4P) based urban development process gives flexibility and benefits to all stakeholders and could be a method to create desirable living environments and neighbourhoods. Engaging the end-users in development processes opens previously unseen potential for including consumerist possibilities for cities and developers. Public-Private-People Partnerships (4Ps) makes participatory development possible, and gives an opportunity to take consumers opinions and needs into an alternative to traditional communicative planning processes.

The examined and developed 4P-based urban development process is by its nature a strategic Public-Private-People Partnership (4P) of local government and public land owners (Public), developers and private land owners (Private), and end-users (People) for good living environment and separate customer relationships. People's participation and involvement in urban planning and development should understand as an act of democracy, and a relevant part of local governance. The partnership between public sector and private developers and land owners is primarily based for business relations, where responsibility and transparency should be the key elements of successful operations.

The most important interface in 4P-based urban development process lies in the relations and partnership between people and private. From a consumerist point of view this interface offers new kinds of actions based for innovativeness, customer satisfaction and shared information, elements which can also seen important and primary targets in developing public services and PPP-based service structure. The market drivers of traditional PPP-based services are not necessarily looking for new and innovative ways to produce public services. One of the main problems is that public sector sees PPP only as easy and cost effective way to deliver the same services as it previously used to produce by it self. On the other hand the private sector is only looking for ways to fulfil the minimum terms of the contract as the most inexpensive way as possible. These drivers are not the best ones to create Value for Money (VFM) to the taxpayers or better public and private services to the consumers. In this context, the 4P-based urban development process has created possibilities for engaging new pro-active and positive participation methods and solutions, not only for the early stages of urban development process (planning and design), but also for construction, operation and management of local economic and social infrastructure. These solutions are not the final and complete, but can be used to establish better risk allocation between political, administrative, developers, and end-users, and to create innovative and cost-beneficial ways to produce economic and social local services.

REFERENCES

- Abell, P. 1996, 'Sociological theory and rational choice theory', in Turner, Bryan (ed.) *The Blackwell Companion to Social Theory*, Blackwell, Oxford.
- Adams, C.D. 1994, *Urban Planning and the Development Process*, UCL Press, London.
- Ahmed, S. & Ali, S. 2006, 'People as partners: Facilitating people's participation in public-private partnerships for solid waste management, *Habitat International*, Vol. 30, No. 4, pp. 781-796.
- Alfasi, N. & Portugali, J. 2004, 'Planning Just-in-Time versus planning Just-in-Case', *Cities*, Vol. 21, No. 1, pp. 29-39.
- Allen T. 1997. 'Public services, competition and privatization - visions at the turn of the Millenium' (In Finnish: Julkiset palvelut, kilpailu ja yksityistäminen – visioita vuosituhannen vaihtuessa), *Talous & yhteiskunta*, Vol. 4, pp. 14-33.
- Akintoye, A., Hardcastle, C., Beck, M., Chinyio, E & Asenova, D. 2003, 'Achieving best value in private finance initiative procurement', *Construction Management Economies*, Vol 21. No. 5, pp. 461-470.
- Amin, A. & Graham, S. 1997, 'The Ordinary City', *Transactions of the Institute of British Geographers*, Vol. 22, pp. 411-429.
- Andersen, K., Hansen, H.K., Isaksen, A. & Raunio, M. 2006, *The Geography of Technology, Talent and Tolerance: Nordic cases. Book of abstracts*, American Association of Geographers-annual conference 9th of March.2006, Chicago.
- Ansoff, I. H. & McDonnell, E. 1990, *Implementing Strategic Management*, Prentice/Hall, New York.
- Argyris, C. & Schon, D. 1989, 'Participatory Action Research and Action Science', *American Behavioral Scientists*, Vol. 32, No.5, pp, 612-623.
- Ærø, Th. 2006, 'Residential Choice from a Lifestyle Perspective', *Housing, Theory and Society*, Vol. 23 No. 2, pp. 109-130.
- Barney, J.B. & Hesterley, W. 1996, 'Organizational Economics: Understanding the Relationship between Organizations and Economic Analysis, in Clegg, S.R., Hardy, C. & Nord, W.R. (Ed.) *Handbook of Organization Studies*, Sage.
- Batty, M. 2008, 'The Size, Scale, and Shape of Cities', *Science*, Vol. 319, pp. 769-771.
- Bauman, Z. 2001, 'Consuming Life', *Journal of Consumer Culture*, Vol. 1, No. 1, pp. 9-29.

- Bauman, Z. 2002, *Liquid modernity*, Polity Press, Cambridge, England.
- Beck, U. 1992, *Risk Society: Towards a New Modernity*, Sage, London.
- Beck, U., Giddens, A & Lash, S. 1994, *Reflexive Modernization: Politics, Tradition and aesthetics in the Modern Social Order*, Polity Press, Cambridge, England.
- Bentham, J. 1996 [1789], *An Introduction to the Principles of Morals and Legislation*, Clarendon Press, Oxford.
- Bode, I. 2006, 'Disorganized welfare mixes: voluntary agencies and new governance regimes in Western Europe', *Journal of European Social Policy*, Vol. 16, No. 4, pp. 346-359.
- Bonanno, A. 2000, 'The crisis of representation: the limits of liberal democracy in the global era', *Journal of Rural Studies*, Vol. 16, No. 3, pp. 305-323.
- Booth, W.C., Colomb, G.G. & Williams, J. M. 1995, *The Craft of Research*, The University of Chicago Press, Chicago & London.
- Breheny, M. (Ed.) 1999, 'The People: Where will they work?' *Report of TCPA Research into the Changing geography of Employment*, TCPA, London.
- Brun, J. & Fagnani, J. 1994, 'Lifestyles and Locational Choices - Trade-offs and Compromise: A Case-study of Middle-class Couples Living in the Ile-de-France Region', *Urban Studies*, Vol. 31 No. 6, pp. 921-934.
- Brenner, N. 1998, 'Global cities, glocal states: global city formation and state territorial restructuring in contemporary Europe', *Review of International Political Economy*, Vol. 5, pp. 1-37.
- Brunila, A. & Jokinen, H. & Kerola, H. & Mäkitalo, R. & Putkonen, C. 2003, 'Saving the Welfare Services' (In Finnish: Hyvinvointipalvelujen turvaaminen), *Valtiovarainministeriön julkaisuja*, Vol. 4, Edita Prima, Helsinki.
- Bugliarello, G. 2006, 'Urban sustainability: Dilemmas, challenges and paradigms', *Technology in Society*, Vol. 28, No. 1-2, pp. 19-26.
- Burns, R. 1997, *Introduction to Research Methods*, Longman, 3rd edit, Melbourne, Australia.
- Buttimer, A. 1974, 'Values in geography', Commission on College Geography Resource Paper no. 24, Assocn. Amer. Geogrs., Washington, D.C.
- Campbell, C. 1987, *The Romantic Ethic and the Spirit of Modern Consumerism*, New York.

- Castells, M. 1989, *The Informational City*, Blackwell, Oxford.
- Castells, M. 1996, *The Rise of the Network Society - The Information Age: Economy, Society and Culture*, Blackwell, Oxford.
- Castells, M. 1997, *The Power of Identity*, Blackwell, Oxford.
- Carillo, F.J. (ed.), 2006, *Knowledge Cities*, Elsevier Inc., USA.
- Chakrabarty, D. 2000, *Provincialising Europe*, Routledge, London.
- Chesbrough, H. 2003, *Open innovation. The Imperative for Creating and Profiting from Technology*, Harvard Business School Press, Boston.
- CIC, 2000, *The Role of cost savings and innovations in PFI*, Tomas Telford, London.
- Clark, D. 1996. *Urban World/Global City*, Routledge, London.
- Cleaver, F. 2001, 'Institutions, Agency and the Limitations of Participatory Approaches to Development', in Cooke, B. & Kothari, U. *Participation: The New Tyranny?*, Zed Books, London and New York.
- Coffman, B. S. 1997, 'Weak Signal® Research', *MG Taylor Corporation*, available at <http://www.mgtaylor.com/mgtaylor/jotm/winter97/wsrintro.htm>. (Cited 14.9.2007).
- Cross, G. 2000, *An All-Consuming Century: Why Commercialism Won in Modern America*, Columbia University Press, Cambridge, New York.
- Crump, J. 2003, 'Finding a Place in the Country: Exurban and Suburban Development in Sonoma County, California', *Environment and Behaviour*, Vol. 35, No. 2, pp. 187-202.
- Dainton, M. & Zelle, E. D. 2005, *Applying Communication Theory for Professional Life: A Practical Introduction*, Sage, California.
- Demirag, I. & Dubnick, M. & Khadaroo, M. 2004, 'A Framework for Examining Accountability and Value for Money in the UK's Private Finance initiative', *The Journal of Corporate Citizenship*, 22-Sep-04.
- Denzin, N. 1984, *The research act*, Engelwood Cliffs, Prentice Hall, New Jersey.
- Dixon, T. & Pottinger, G. 2006, 'Lessons from real estate partnerships in the UK: Drivers, barriers and critical success factors', *Property Management*, Vol. 24, No. 5, pp. 479-496.
- Earl, G. & Regan, M. 2003, *From the three P's to the three W's, Public Private Partnerships and Beyond*, Press Conference, Brisbane.

- Eco, U. 1979, *The role of the reader - Explorations in the semiotics of text*, Indiana University Press, Bloomington.
- Edwards, P. & Shaoul, J. 2003, 'Partnerships: for better, for worse?', *Accounting, Auditing & Accountability Journal*, Vol. 16, No. 3, pp. 379-421.
- EIC, 2003, *EIC White Book on BOT/PPP*, European International Contractors, Berlin.
- Eisenhardt, K. M. 1989, 'Building Theories from Case Study Research', *Academy of Management Review*, Vol. 14, No. 4, pp. 532-550.
- El-Gohary, Nora M., Osman, H. & El-Diraby, T.E. 2006, Stakeholder management for public private partnerships, *International Journal of Project Management*, Vol. 24, pp. 595–604.
- Esping-Andersen, G. 1990, *The Three Worlds of Welfare Capitalism*, Polity Press, Cambridge, England.
- European Commission, 2003a, *Internal market Strategy, Priorities 2003-2006*, Brussels, 7.5.2003 COM (2003) 238 final. http://eur-lex.europa.eu/LexUriServ/site/en/com/2003/com2003_0238en01.doc. (Cited 17.4.2007).
- European Commission, 2003b, *Guideline for successful public-private-partnerships (March 2003)*. http://europa.eu.int/comm/regional_policy/sources/docgener/guides/ppp_en.pdf. (Cited 24.1.2006).
- European Commission, 2004a, *Green Paper - On Public-Private-Partnerships and Community Law on Public Contracts and Concessions*, Brussels, 30.4.2004 COM (2004) 327 final. http://eur-lex.europa.eu/LexUriServ/site/en/com/2004/com2004_0327en01.pdf. (Cited 17.4.2007).
- European Commission, 2004b, *A report on the functioning of public procurement markets in the EU: benefits from the application of EU directives and challenges for the future 03/02/2004*. http://ec.europa.eu/internal_market/publicprocurement/docs/public-proc-market-final-report_en.pdf. (Cited 17.4.2007).
- Feagin, J., Orum, A. & Sjoberg, G. (Eds) 1991, *A case for case study*, Chapel Hill, University of North Carolina Press, North Carolina, USA.

Finnish Land Use and Construction Act (MRL, 1999/132), available at <http://www.finlex.fi>

Finnish Public Procurement Act (1505/1992: amendments up to 1530/2001 included), available at <http://www.finlex.fi>

Finnish Public Procurement Act (348/2007), available at <http://www.finlex.fi>

Florida, R. 2002, *The Rise of the Creative Class*, Basic Books, New York.

Florida, R. 2005, *The Flight of the Creative Class*, Basic Books, New York.

Flyvbjerg, B. 1998, *Rationality and Power*, University of Chicago Press, Chicago.

Flyvbjerg, B. 2006, 'Five Misunderstandings About Case-Study Research', *Quantitative Inquiry*, Vol. 12, No. 2, pp. 219-245.

Forester, J. 1998, *Planning in the Face of Power*, University of California Press, Berkeley, California.

Forester, J. 1999, *The deliberative practitioner: encouraging participatory planning process*, MIT Press, Cambridge, Mass., USA.

Friedman, J. & Wolff, G. 1982, 'World city formation: an agenda for research and action', *International Journal of Urban and Regional Research*, Vol. 3, pp. 309-344.

Friedmann, J. 2005, 'Globalization and the emerging culture of planning', *Progress in Planning*, Vol. 64, pp. 183–234.

Friedman, M. 1980, *Free to Choose*, Harcourt Brace Jovanovich, New York.

Friedman, M. 1982, *Capitalism and Freedom*, University of Chicago Press, Chicago.

Gaffney, D. & Pollock, A.M. 1999, 'Pump priming the PFI: why are privately financed hospital schemes being subsidized?', *Public Money Manage*, Vol. 17, No. 3, pp. 11-6.

Gilbert, A. 1998, 'World cities and the urban future: the view from Latin America', in Lo, F. & Gugler, J. (Eds.), *Globalisation and the world of large cities*, UN University Press, Tokyo.

Glaser, B. G. & Straus, A. 1967, *The discovery of grounded theory: Strategies for qualitative research*, Aldine Publishing Company, New York.

Godschalk, D.R. 2004, 'Land Use Planning Challenges. Coping with Conflicts in Visions of Sustainable Development and Liveable Communities', *Journal of the American Planning Association*, Vol. 70, No. 1, pp. 5-12.

- Gore, T. & Nicholson, D. 1991, 'Models of the land development process: a critical review', *Environment and Planning A*, Vol. 23, pp. 705-730.
- Greater Helsinki Vision 2050 – International Ideas Competition.
<http://www.greaterhelsinkivision.fi/>. (Cited 23.3.2007).
- Grimsey, D. & Lewis, M. 2002, 'Evaluating the risks of public private partnerships for infrastructure projects', *International Journal of Project Management*, Vol. 20, No. 2, pp. 107-118.
- Gummesson, E. 1991, *Qualitative Methods in Management Research*, Sage, Newbury Park, CA.
- Gunder, M. 2003, 'Passionate planning for the others' desire: an agonistic response to the dark side of planning', *Progress in Planning*, Vol. 60, No. 3, pp.235-319.
- Gunder, M. & Mouat, C. 2002, 'Symbolic violence and victimization in planning process: a reconnoiter of New Zealand resource management act', *Planning Theory*, Vol.1, No. 2, pp. 125-146.
- Habermas, J. 1970, *Towards a rational society*, Beacon Press, Boston.
- Habermas, J. 1984, *The Theory of Communicative Action, vol. 1*, Beacon Press, Boston.
- Habermas, J. 1987, *The Theory of Communicative Action, vol. 2*, Polity Press, Cambridge.
- Hall, P. 2002, *Identity (In Finnish: Identiteetti)*, Vastapaino, Tampere.
- Harcourt, W. & Escobar, A. 2002, 'Women and the Politics of Place', *Journal of the Society for International Development (SID)*, Vol. 45, pp. 7-13.
- Healey, P. 1991, 'Models of the development process: a review', *Journal of Property Research*, Vol. 8, pp. 210-238.
- Healey, P. 1993. 'Planning Through Debate: The Communicative Turn in Planning Theory', in Fisher, F. & Forester, F. (eds.): *The Argumentative Turn in Policy Analysis and Planning*, Duke University Press, London.
- Healey, P. 1997, *Collaborative Planning: Shaping Places in Fragmented Societies*, MacMillan Press, Hampshire and London.
- Healey, P. 1998, 'Collaborative Planning in a Stakeholder Society', *Town Planning Review*, Vol. 69, No. 1, pp. 1-21.
- Heap, S., Hollins, M., Lyons, B., Sugden, R. & Weale, A. 1992, *The theory of choice. A critical guide*, Blackwell, Cambridge.

- Helenius-Mäki, L.2002, 'Theme City or Gated Community - Images of Future Cities', in *European Regional Science Association Congress August 22nd - 31st 2002*, Available at www.ersa.org.
- Helsinki Region Portal, 2007. <http://www.helsinkiregion.fi>. (Cited 3.5.2007).
- Hernesniemi, J. 2006, 'Consuming' (In Finnish: Kulutus), in Jakonen, M., Peltokoski, J. & Virtanen, A. (Ed.), *Uuden työn sanakirja*, Tutkijaliitto, Helsinki, pp. 130-145.
- Van Herzele, A. 2004, 'Local Knowledge in Action. Valuing Nonprofessional Reasoning in the Planning Process', *Journal of Planning Education and Research*, Vol. 24, pp. 197-212.
- Von Hippel, E. 1988, *The Sources of Innovation*, Oxford University Press, New York.
- Von Hippel, E. 2005, *Democratizing Innovation*, available at <http://web.mit.edu/evhippel/www/books.htm>. (Cited 1.9.2007).
- Hillier, J. 2002, *Shadows of power*, Routledge, London.
- Hjorthol, R. & Bjørnskau, T. 2005, 'Gentrification in Norway, Capital, Culture or Convenience?', *European Urban and Regional Studies*, Vol. 12, No. 4, pp. 353-371.
- HM Treasury, 2003, *PFI: meeting the investment challenge. July 2003*. http://www.hm-treasury.gov.uk/media//648B2/PFI_604.pdf. (Cited 24.1.2007).
- HM Treasury, 2004, *Standardization of PFI Contracts (SoPC). Version 3, April 2004*. http://www.hm-treasury.gov.uk/media/B42/D9/pfi_sopc_ver3_complete_apr04.pdf. (Cited, 24.1.2007).
- Huxley, M. 2000, 'The limits to communicative planning', *Journal of Planning Education and Research*, Vol. 19, No.4, pp. 369-378.
- Hämäläinen, T. 2006, 'Towards to healthy and competitive society' (In Finnish: Kohti hyvinvoivaa ja kilpailukykyistä yhteiskuntaa), *Kansallisen ennakointiverkoston näkemyksiä Suomen tulevaisuudesta*, SITRA, Helsinki.
- Ilmola, L. & Kotsalo-Mustonen, A. 2003a, 'Unearthing Signals from Unknown Business Territory with a Signal Collection Tool', *Strategic Management Society June 2003*, University of Connecticut, USA
- Ilmola, L. & Kotsalo-Mustonen, A. 2003b, 'Filters in the Strategy Formulation Process', *J.UCS*, Vol. 9, No. 6, pp. 481-490.

- Innes, J.E. 1995, 'Planning theory's emerging paradigm: communicative action and interactive practice', *Journal of Planning Education and Research*, Vol.14, No. 3, pp. 183-190.
- Innes, J.E. 1998, 'Evaluating Consensus Building', in Susskind, L. & McKearnon, S. & Carpenter, S. (Ed.), *Consensus Building Handbook*, Sage.
- IPPR, 2001, *Building Better Partnerships*, Institute of Public Policy Research, London.
- Jensen, J.L. & Rodgers, R. 2001, 'Cumulating the intellectual goal of case study research', *Public Administration Review*, Vol. 61, No. 2, pp. 236-246.
- Kanniainen V. & Määttä K. (ed.) 2001, *Competition justice from the perspective of economics (In Finnish: Taloustieteellinen näkökulma kilpailuoikeuteen)*, Lakimiesliiton kustannus, Helsinki.
- Kaya, S. 2004, 'Relating building attributes to end user's needs: "the owners-designers-end users" equation', *Facilities*, Vol. 22, No. 9/10, pp. 247-252.
- Kernaghn, K. 1993, 'Partnership and public administration: conceptual and practical considerations', *Canadian Public Administration*, Vol. 36, No. 2, pp.57-76.
- Khakee, A. & Barbanente, A & Borri, D. 2000, 'Expert and experiential knowledge in planning', *Journal of the Operational Research Society*, Vol. 51, pp. 776-788.
- Kiander J. 2001, *Learning from the depression. The cause and consequence of the crises of 1990's in Finland (In Finnish: Laman opetukset. Suomen 1990-luvun kriisin syyt ja seuraukset)*, VATT-julkaisu 24:5, Helsinki
- Kidder, L. & Judd, C.M. 1986, 'Research methods in social relations', In Yin, R.K. 2003, *Case study research, Designs and method*, Applied social science method series, Vol. 5, Sage, 3rd edit, London
- Kostiainen, J. 2002, *Urban Economic Development Policy in the Network Society*, Tekniikan akateemisten liitto, Tampere.
- Kothari, U. 2001, 'Power, Knowledge and Social Control in Participatory Development', in *Cooke, B. & Kothari, U. Participation: The New Tyranny?*, Zed Books, London & New York.
- Kotler, P., Asplund, C., Rein, I. & Haider, D. 1999, *Marketing Places Europe, Attracting Investments, Industries, Residents and Visitors to European Cities, Communities, Regions and Nations*, Pearson Education Ltd, London.

- Kotler, P. 2003, *A framework for marketing management*, Prentice Hall, 2nd edit, Upper Saddle River, NJ.
- Kotler P. & Lee N. 2007, 'Marketing in the public sector: the final frontier', *The Public manager*, Vol. 36, No. 1, pp. 12-18.
- Kouwenhoven, V. 1993, 'The rise of the public private partnership: a model of the management of public-private cooperation', in *Modern governance: new Government-Society Interactions*, Kooiman, J. (Ed.), Sage, London.
- Kuntaliitto, 2003, *Best service - Report of alternatives in Municipality services (In Finnish: Parasta palvelua – selvitys kuntapalveluiden järjestämisen vaihtoehtoista)*, ed. Lundström, Suomen Kuntaliitto, Helsinki.
- Kuronen, M. 2005, *Cradle to Cradle in Ecologically Sustainable Community Construction (In Finnish: Kehdosta kehtoon ekologisesti kestävässä yhdyskuntarakentamisessa)*, Helsinki University of Technology, Helsinki.
- Kurunmäki, K. 2005, *Partnerships in urban planning. "Development area" in National and Local Contexts in Finland, Germany and Britain*, Tampere University of Technology, Tampere.
- Lamnek, M. 2005, *Qualitative Sozialforschung*, Weinheim, Beltz.
- Landry, C. 2000, *The Creative City: A Toolkit for Urban Innovators*, Earthscan, London.
- Lazzarato, M. 2007, 'Strategies of the Political Entrepreneur', *SubStance*, Vol. 36, No. 1, pp. 87-97.
- Lester, R. & Piore, M. 2004, *Innovation: The Missing Dimension*, Harvard University Press, Boston.
- Lewis, D. 2001, *Soul of the New Consumer*, Nicholas Brealey Publishing, London.
- Linnanmaa, R. 1999, 'The Structural and Dynamic Elements of Competitiveness of Urban Region' (In Finnish: Kaupunkiseudun kilpailukyvyyn rakenteelliset ja dynaamiset elementit), in Sotarauta, M. (ed.) *Kaupunkiseutujen kilpailukyky ja johtaminen tietoyhteiskunnassa, Acta 106*, Suomen Kuntaliitto, Helsinki.
- Majamaa, W. 2000, *Privately financed regional building (In Finnish: Yksityisrahoitteinen aluerakentaminen)*, Lappeenranta University of Technology, Lappeenranta.

- Martinus, P. A. & Stephen O. & Ogunlana, I. 2006, 'Good project governance for proper risk allocation in public-private partnerships in Indonesia', *International Journal of Project Management*, Vol. 24, pp.623-634.
- Mattar, M. H. & Cheah, C.Y.J. 2006, 'Valuing large engineering projects under uncertainty: private risk effects and real options', *Construction Management and Economics*, Vol. 24, pp. 847-860.
- McQuaid, R.W. 2000, 'The Theory of Partnership: Why have Partnerships?', in *Public Private Partnerships: Theory and Practice in International Perspective*, Routledge, London.
- Miles, R. E. & Huberman, A. M. 1994, *Qualitative Data Analysis*, Sage, Thousand Oaks, California.
- Miljkovic, D. 2005, 'Rational choice and irrational individuals or simply an irrational theory: A critical review of the hypothesis of perfect rationality', *Journal of Socio-Economics*, Vol. 34, No. 5, pp. 621-634.
- Munter, A. 2005, 'Population and Families 2004/2005' (In Finnish: Väestö ja perheet 2004/2005), *Statistics from Espoo 1/2005*, City of Espoo Research and Development, Espoo.
- Mäenpää, P. & Aniluoto, A. & Manninen, R. & Villanen, S. 2000, *Words turns into city* (In Finnish: *Sanat kivettyvät kaupungiksi. Tutkimus Helsingin kaupunkisuunnittelun prosesseista ja ihanteista*), Helsinki University of Technology, Helsinki.
- Mäntysalo, R. 2002, 'Dilemmas in Critical Planning Theory', *Town Planning Review*, Vol. 73 No. 4, pp. 417-435.
- Mäntysalo, R. 2005, 'Approaches to Participation in Urban Planning Theories', in Iacopo, Z. and Brand, S. (eds.), *Rehabilitation of Suburban Areas - Brozzi and Le Piagge Neighborhoods, Diploma Workshop in Florence 2004/05*, Department of Technology of Architecture and Design "P.L. Spadolini", University of Florence.
- Nisar, T. 2007, 'Risk Management in Public-Private Partnership Contracts', *Public Organization Review*, Vol. 7, No. 1, pp. 1-19.
- Nonaka, I. & Konno, N. 1998, 'The Concept of "Ba": Building a Foundation for Knowledge Creation', *California Management Review*, Vol. 40, No. 3, pp. 40-54.

- Nykänen V., Huovila, P., Lahdenperä, P., Lahti, P., Riihimäki, M. & Karlund, J. 2007, *Collaborative urban planning - Beyond Vuores -research (In Finnish: Kumppanuus aluerakentamisessa)*, VTT Tiedotteita 2293, Espoo.
- Oxford English Dictionary*, 1989, *Volume 1 A-Bazouki*, Prepared by Simpson, J.A. & Weiner, E.S.C. Clarendon Press, Oxford.
- Patton, M. 1990, *Qualitative Evaluation and Research Methods*, Sage, London.
- Peltonen, L., Hirvonen, J., Manninen, R., Liljama, H. & Savikko, R. 2006, 'Land Use Conflicts and their Resolution in Planning: Mapping the Situation in Finland' (In Finnish: Maankaytön konfliktit ja niiden ratkaisumahdollisuudet), in *Finnish environment series*, No. 12, Finnish Ministry of Environment, Helsinki.
- Perry, C. & Jensen, O. 2001, 'Approaches to combining induction and deduction in one research study', *ANZMAC 2001*, Auckland, New Zealand.
- Piekkola, L. 2003, 'From public production to world of alternativis' (In Finnish: Omasta palvelutuotannosta vaihtoehtojen maailmaan), in Lundström, I. (ed.), *Parasta palvelua – selvitys kuntapalveluiden järjestämisen vaihtoehtoista*, Suomen Kuntaliitto, Helsinki.
- Pryke, M. 1995, 'Urbanising Capitals: Towards and Integration of Time, Space and Economic Calculation', in Corbridge, S., Thrift, N. & Martin, R. (Eds), *Money, Space and Power*, pp. 218-251, Blackwell, Oxford.
- Qihong, L. & Konstantinos, S. 2006, 'Customer information sharing among rival firms', *European Economic Review*, Vol. 50, No. 6, pp. 1571-1600.
- Raisbeck, P. & Doloi, H. 2007, 'Quantification and modeling of retained risk in Public-Private Partnership (PPP) projects', *4th International Structural Engineering and Construction Conference to be held from 26th – 28th September 2007*, Grand Hyatt Melbourne, Australia.
- Rantanen, H. 2007, 'From knowledge gathering to knowledge management', *Local Authority Planning in Change: Beyond Dichotomies, Nordic Planning Research Symposium, August 16-18, 2007*, Oulu.
- Rinkinen, K. 2007, *You can influence to Detailed-plan process* (In Finnish: Asemakaavoituksen keston voi vaikuttaa), Suomen kuntaliitto, Helsinki.
- Robinson, J. 2002, 'Global and World Cities: A view from off the Map', *International Journal of Urban and Regional Research*, Vol. 26, No. 3, pp. 531-554.

- Robson, C. 2002, *Real World Research: resource for social scientists and practitioner-researchers*, Blackwell, 2 edit, Malden, MA.
- Rohlf, W. 1996, *Introduction to Economic Reasoning*, Addison-Wesley Publishing Company, 3rd edit, USA.
- Rogerson, J.R. 1999, 'Quality of Life and City Competitiveness', *Urban Studies*, Vol. 36, No. 5-6, pp. 969-985.
- Rubinstein-Montano, B. 2000, 'A survey of knowledge-based information systems for urban planning: moving towards knowledge management', *Computers, Environment and Urban systems*, Vol.24, No. 3, pp. 155-172.
- Salmela, M. 2007, 'People can now create ideas for Hernesaari' (In Finnish: Kansa saa nyt ideoida Helsingin Hernesaarta), *Helsingin Sanomat*, 19.9.2007.
- Sanne, C. 2002, 'Willing consumers - or locked-in? Policies for a sustainable consumption', *Ecological Economics*, Vol. 42, No. 1-2, pp. 273-287.
- Sarker, S., Lau, F. & Shay, S. 2001, 'Using An Adaptive Grounded Theory Approach for Indicative Theory Building About Virtual Team Development', *The Database for Advances in Information Systems*, Vol.32, No. 1, pp.38-56.
- Sassen, S. 1991, *The Global City: New, York, London, Tokyo*, Princeton University press, Princeton.
- Schneider, J & Kasper, B. 2003, *Lifestyles, choices of housing location and daily mobility: the lifestyle approach in the context of spatial mobility and planning*, UNESCO.
- Shaoul, J. 2005, 'A critical financial analysis of the Private Finance Initiative: selecting a financing method or allocating economic wealth?', *Critical Perspectives on Accounting*, Vol. 16, No. 4, p. 441-471.
- Silverman, D. 2005, *Doing Qualitative Research*, Sage, 2nd edit, Thousand Oaks, CA
- Simmel, G. 1978, *The Philosophy of Money*, Routledge & Kegan Paul, Boston.
- Smeds, R. 2001, 'Implementation of Business Process Innovations: An Agenda for Research and Action', *International Journal of Technology Management*, Vol. 22, Nos.1/2/3, pp.1-12.
- Smith, D. 2001, *Transnational urbanism*, Blackwell, Oxford.

- Sotarauta, M. (ed.) 1999, *Competitiveness of Urban Regions and Management in Networked Society (In Finnish: Kaupunkiseutujen kilpailukyky ja johtaminen verkostoyhteiskunnassa, Acta 106)*, Suomen Kuntaliitto, Helsinki.
- Sotarauta, M. 2001, 'Development Games and the Eight Element of Urban Region Competitiveness' (In Finnish: Kehittämispelit ja kaupunkiseudun kilpailukyvyyn kahdeksas elementti), in Sotarauta, M. & Mustikkamäki, N. (Eds) *Alueiden kilpailukyvyyn kahdeksan elementtiä, Acta 137*, Suomen Kuntaliitto, Helsinki.
- Staffans, A. 2004. *Influential Residents. Interaction and Local Knowledge Challenging Urban Planning and Design (In Finnish: Vaikuttavat asukkaat. Vuorovaikutus ja paikallinen tieto kaupunkisuunnittelun haasteina)*, Helsinki University of Technology, Helsinki.
- Stake, R. 1995, *The art of case research*, Sage, Thousand Oaks, CA.
- Taylor, N. 1998, *Urban Planning Theory since 1945*, Sage, London.
- Tellis, W, 1997, 'Application of a Case Study Methodology', *The Qualitative Report*, Vol. 3, No. 3. On-line series, available at <http://www.nova.edu/ssw/QR/QR3-3/tellis2.html>
- Thobani, M.1998, 'Private infrastructure, public risk', *Finance and Development*, Vol. 36, No.1, pp. 50-3.
- Tiong & Alum, 1997, 'Evaluation of proposals for BOT projects', *International Journal of Project Management* , Vo. 15, No. 2, pp. 67-72.
- Treasury Taskforce, 1997a, *Partnerships for prosperity: The Private Finance Initiative*, HM Treasury, London.
- Treasury Taskforce, 1997b, *Public sector Comparators and value for money, draft policy statement*, HM Treasury, London.
- Trentmann, F. 2007, 'Citizenship and consumption', *Journal of Consumer Culture*, July 1, Vol. 7, No. 2, pp. 147-158.
- TTF, 2000, *Value for Money Drivers in the Private Finance Initiative*, Arthur Andersen and Enterprise LSE & HM Treasury, London.
- UNESCO, 1999, 'World demographic trends', *Report of the Secretary-General 1999*.
- Uskali, T. 2005, 'Paying Attention to Weak Signals - The Key Concept for Innovation Journalism', *Innovation Journalism*, Vol. 2, No. 4, pp. 33-51.

- Varian, H. 1996, *Intermediate Microeconomics - A Modern Approach*, W.W. Norton & Company, Inc, 4th edit, New York.
- Varto, J. 1992, *Methodology of Qualitative Research* (In Finnish: *Laadullisen tutkimuksen metodologia*), Kirjayhtymä, Helsinki.
- Whyte, W. 1984, *Learning from the Field: A Guide from Experience*, Sage, Beverly Hills, CA.
- Whyte, W. 1989 (Ed.), 'Action Research for Twenty-First Century: Participation, Reflection, and Practice', *American Behavioral Scientists*, Vol. 32, No.5.
- Willoughby, K. 1995, 'The local milieux of knowledge-based industries: What can we learn from a regional analysis of commercial biotechnology', in Brotchie, J. & Batty, M. & Blakely, E. & Hall, P. & Newton, P (Ed.), *Cities in competition. Productive and sustainable cities for the 21st century*, Longman, Melbourne, Australia.
- Wong, M. 2006, *Satisfying all Stakeholders in Evaluating the Feasibility of Public-Private Partnership Projects: A Structural Equation Model Approach*, University of Hong Kong, Hong Kong.
- World Bank, 2007, *Expected benefits from PPP*.
http://rru.worldbank.org/Documents/Toolkits/Highways/1_OVERDIAG/11/112.htm.
(Cited 17.4.2007)
- Yin, R. K. 2003, *Case Study Research - Design and Methods*, Sage, 3rd edit, London.
- Yliherva, J. 2006, *Productivity, Innovations and innovativeness in purchasing process* (In Finnish: *Tuottavuus, innovaatiokyky ja innovatiiviset hankinnat*), Sitran raportteja, No. 64, Sitra, Helsinki.
- Zafirovski, M. 1999, 'What is really rational Choice? Beyond the utilitarian concept of rationality', *Current Sociology*, Vol. 47, No. 1, pp. 47-113.
- Zhang, X. 2005, 'Concessionaire's Financial Capability in Developing Build-Operate-Transfer Type Infrastructure Projects', *Journal of Construction Engineering and Management*, (October 2005), pp. 1054-1064.
- Zhang, X. 2006, 'Factor Analysis of Public Clients' Best-Value Objective in Public-Privately Partnered Infrastructure Projects', *Journal of Construction Engineering and Management*, Vol. 132, No. 9, pp. 956-965.

The 4th P - People - in urban development based on Public-Private-People Partnership

APPENDIX 1

Table of requirements, desirable characters and evaluation criteria used in the analysed PPP-projects. For brevity, the projects are denoted as follows: K=Kaivomestari; P=Pyynikki; F=Frami; D=Dynamicum and VP=Vantaan Point. These letters refer to the single features used in the original bids.

Criteria categories	Stages of purchasing process			
	Pre-qualification requirements	Requirements and desirable characteristics given in tendering material	Itemised evaluation criteria given in tendering material	Evaluation criteria used for decision making
Life Cycle approach features				
Economic features:				
Overall costs and Net Present Value		K P F V P D	K P F V P D	K V P D
Financial costs and security of finance	K	P D	K P F	K
Pricing mechanism	K	K V P D	K F D	K D
Residential value of assets	K	K	K F	K V P D
Juridical features:				
Requirements of Public Procurements Act	K P			
Juridical competence of tender	K	K		
Commitment to the proposed contract	P	K D	K P	K
The legal structure of the company and it's shareholders	K P			
Quality and technical features related to the design and building:				
Features related to architectural and aesthetic values	P	P	K P F V P D	K V P F D
Usability and divisibility of space		K P F V P D	K V P F D	K V P F D
Internal environmental quality	P	K P D	K V P F D	K V P F D
Mechanical and Electrical installations			K V P F D	K F D
Sustainability and materials used		K P V P D	K V P F D	K F D
Quality of required core public services:				
Quality assurances	K	K D	K	K F
Continuance of the services and competitive advantage to other service providers	P	P		
Quality of the services			K	K
Service organisation and it's experience	K P	K P F D	K P F	F
Options to research and development of the used PPP model	K			
Project management:				
Implementation organisation and it's experience	K P	K P F V P D	K P F	K
Timetable of implementation	P	K P V P D	K P F	K F
Security features for work safety and environmental safety		VP	F	
Risk allocation and management:				
Risk allocation and risk management	K P	K F	K F	K
Understanding of the nature of risks related to project		K		
Minimising the risks for public sector and for end-users	P	K		K
Diversity features				
Added value in core public services	K	K		
Added value from networked services production of core public services	P	K P D	F	
Diversity of core public services and service development	P	K P	P F	
Service and product innovations in core public services	K	K		
Customer selection features				
Innovations in third party services	K P	K		
Extra cash flow from third party services	K	K		
Rise of utilization rate		K		
Rise of possibility to make free choices in public and private services		K		

The 4th P - People - in urban development based on Public-Private-People Partnership

**APPENDED PAPERS I - VII
AND THE ENGLISH TRANSLATION OF THE PAPER II**