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Customerships in Urban Housing Redevelopment – a Case Study on Retrofitting a Suburb

MATTI KURONEN

Aalto University School of Engineering and Architecture, Finland Currently with University of Melbourne, Victoria, Australia <u>matti.kuronen@tkk.fi</u> and <u>mkuronen@unimelb.edu.au</u>

JUKKA HEINONEN

Aalto University School of Engineering and Architecture, Finland

CHRISTOPHER HEYWOOD

University of Melbourne, Victoria, Australia

SEPPO JUNNILA

Aalto University School of Engineering and Architecture, Finland

JUKKA LUOMA-HALKOLA

Aalto University School of Engineering and Architecture, Finland

WISA MAJAMAA

ICECAPITAL Real Estate Management Ltd., Finland

Abstract

Urban development process can be considered as a system with its stakeholders falling under categories of Public, Private and People. This approach is called Public-Private-People Partnership (4P) and it has been successfully used in housing development. Between the stakeholders there are several kinds of relationships already recognised, but the field is by no means studied thoroughly.

This paper discusses "customerships", that is, customer relations from customer's viewpoint, in the field of urban housing development. The issue is approached theoretically from systems theory and from the concept of customership in context of built environment. Moreover, a case study based on key stakeholder interviews of an urban housing redevelopment process aiming to low-energy retrofitting of a suburban housing area is presented.

The paper does not delimit its view to the traditional end customer's (home buyer or owner of refurbished home) role only, but evaluates all the relationships as either existing or potential customer relationships. In the case several customerships and requirements to partnership were identified. It is concluded that customership can provide a relevant viewpoint in urban housing development and help to develop the process more viable.

Keywords

Urban housing development, Customership, Redevelopment, Low-energy retrofitting, Finland

Introduction

The period of rapid urbanisation after Second World War saw the emergence of new urban and suburban housing developments throughout Europe. In Finland this urbanisation often took the form of new multi-storey suburbs, especially in the 1960's and 1970's. Today it is a common challenge of the local and national authorities, the private sector, and the occupants to refurbish these suburbs, which have come of age in regard to their technical systems and facades.

Moreover, housing related issues bear great responsibility for current greenhouse gas emissions everywhere in developed countries (Heinonen et al, 2010; Seppälä, 2009; Atkinson et al, 2009). It is widely recognised that refurbishment opens a temporal window for low-energy retrofitting. This retrofitting can be very rewarding and cut the energy usage by half (Lahti, 2010; Shiel, 2009), so it is worth aiming at.

Urban development in this study is understood as the process of physically producing the urban environment – both property and infrastructure – as well as bringing together multiple actors from the government, business and users. It is a part of wider economic development operating according to the laws of economics. This development can vary in scale and encompass new development only, redevelopment only, or both (Rydin, 2010; Guy & Henneberry, 2002). Of these, especially redevelopment is continual process of reconfiguration of the built environment to meet society's needs (Miles et al, 2007).

The urban housing development process has several phases involving transactions of goods and services. In a value-adding sense the process from undeveloped "raw" land to homes and their adjacent environment is only a matter of (1) buying and selling land and/or building rights, (2) paying and receiving public fees, (3) buying and selling planning services, (4) buying and selling building and infrastructure components and related labour; and finally (5) buying and selling homes; all within existing legislation and other planning regimes (Miles et al, 2007; Healey et al, 1995). In these sequential phases the relationship between the customer and the provider is concentrated on the supply side and money-based transactions only. Customer relationships within real estate research has so far tended to concentrate on the service providers' viewpoint, not that of the customers'.

This sequential viewpoint does not respond to the requirements of successful urban development, which is more of a partnership (Rudlin & Falk, 2009; Ball & Maginn, 2005). Also, now the Public-Private Partnership, modelled in redevelopments for example by Glumac et al (2010), has not been applied to housing, where the existing and future inhabitants have a key role in deciding whether redevelopment is acceptable and will be viable.

Lately, a Public-Private-People Partnership (4P) approach, including the inhabitants as users, has been introduced as a proposition to the field of urban housing development and used to interpret urban development processes (Kuronen et al, 2010; Majamaa, 2008). The 4P model divides stakeholders to three parties (Public, Private and People) and examines their roles in the urban development partnerships. The differences of sequential and 4P viewpoints are illustrated in Figure 1 below.

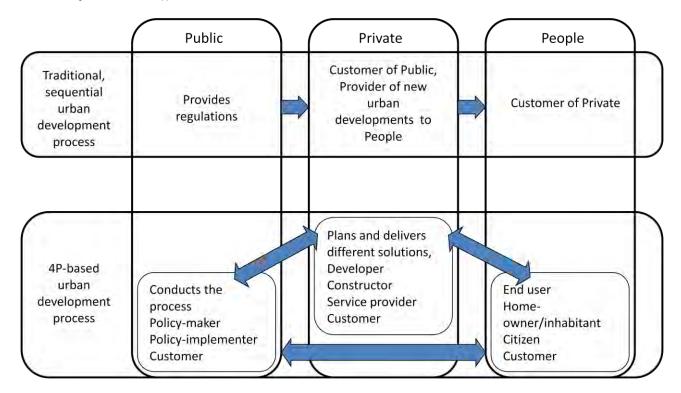


Figure 1. The differences between sequential and 4P urban development (after (Kuronen et al, 2010; Majamaa, 2008)).

The aim of this paper is to consider the bilateral relationships between parties in a 4P urban housing development using an empirical study of the real-life urban redevelopment process of Siltamäki in Helsinki, Finland and thus improve understanding of the urban housing redevelopment process. Hitherto these relationships have been considered as relationships between citizen and state, as customer relationships aiming at customer satisfaction, as stakeholder participation, as necessary interactions in sequential process, or as one partnership. None of these quite adequately describe the essence of this relationship, which is the reason a new form of relationship, "customership", is introduced in this paper, and complemented with a systems theory approach to urban development.

A proposition of this study is that partnership enhances more possibilities of adopting low-energy solutions than the sequential model in urban development because it enables more choices to be offered (Kuronen et al, 2010).

The research question this paper aims to cast some light on is:

- What kind of, existing or potential, customerships are there in an urban redevelopment process in owner-occupied housing?

The word customership in this paper means a relationship observed from the customer viewpoint between the customer (the subject of customership) and the provider (the object of

customership), in which relationship goods or services of a tangible or intangible nature are transferred based on free will of both participants¹. Customership is "the state of being a customer" as defined in Wiktionary (Wiktionary, 2009) and includes reasons to enter the relationship and expectations towards that relationship, as well as willingness to contribute to that relationship. In customership the contribution from customer is not only money or exchanging goods, but also taking one's custom, such as buying habits and consumption patterns, to somebody. Customership develops over time. It has a start and it has an end.

Customership bears some resemblance to citizenship, but the customer does not have to be a natural person, nor does the object of customership have to be a state. It makes sense to inspect the relationships in urban development from this point of view, because it is already defined above that the urban development process is a branch of economic development. So far the term has been used in studying supply chains but not in complex property processes as far as we are aware.

The structure of the study is as follows: first, the methodology selected to interpret the case accompanied by research design are presented. After that, the basic setting of the case is presented, followed by the results. Only after that are the results discussed within a theoretical background. The structure follows Miles & Huberman's (1994) suggestion that structure of a research should serve the data.

Methodology and research design

The nature of this paper is a qualitative case study. Qualitative data possesses qualities, such as local groundedness, holism, temporal extension, access to causality and an emphasis on meanings, which are of value when investigating a critical case (Yin, 2009; Flyvjberg, 2006; Miles & Huberman, 1994).

An absolute prerequisite of this kind of investigation is sound pre-understanding (Yin, 2009; Goulding, 2002; Robson, 2002). In this paper this pre-understanding has been gathered in the fields of practice and research alike. In the earlier investigation of the 4P model (Majamaa et al 2008; Majamaa 2008) the idea of customership has emerged and is now tested and investigated further. Throughout this paper sensitivity for theories potentially emerging from the data is maintained and later an external theory presented to support the findings (Dubois & Gadde, 2002). In research concerning phenomena of built environment the boundaries between phenomenon and its environment are seldom clear, so case studies are considered an effective way of gathering temporal understanding of these phenomena (Yin, 2009; Amaratunga et al, 2002; Goulding, 2002).

The research data of this paper are transcriptions of interviews of thirteen key stakeholder representatives in the Siltamäki case; four Public, seven Private and two People representatives. Considering the case, the coverage was wide enough to saturate the evidence. Altogether eleven

¹ Oxford English Dictionary defines customership as the office of the collector of customs (excise & taxes), the newest references dating back to 17th century. Therefore, we have needed to refer to Wiktionary to capture contemporary meanings of this emerging term.

interviews were conducted by a third person. Two of those were pair interviews in which the primary interviewee suggested another person of the same organisation to participate in the interview due to added information value. This was agreed by the interviewer. The interviewees were aware of the situation in Siltamäki at least to the degree presented in this study. The authors' deep familiarity with the case and the people interviewed were the reasons to use secondary data, the transcriptions of interviews, in this study to decrease researcher bias; a method supported in the grounded theory approach (Goulding, 2002; Glaser, 1978).

The interviews were conducted in April-May 2010 and transcribed by the interviewer. Later they were coded and further analysed with QSR NVivo 8.0 software. The coding aimed to find clear needs and wishes of all the parties with respect to each other and the limitations which the parties have in participating in the redevelopment process of Siltamäki. The coding included revealed needs of parties to themselves, to other parties, or just generally, and needs that parties saw other parties having (for example, what Private saw People need or wish of the redevelopment). Thus customership is not viewed as only willingness to pay for some product or service but in a wider sense.

Case Siltamäki

Siltamäki is located in the north of the City of Helsinki, 15 kilometres from the central business district. Siltamäki represents a Finnish 1970's neighbourhood fairly well. It even has planning controls to preserve the external appearance because of its value as a representative suburb of the era (Salastie, 2009). The neighbourhood of Siltamäki is about to go through major refurbishment due to end of life span of some construction components, such as facade, and heating and water systems, and is struggling to carry the costs of refurbishment. Siltamäki has been investigated under an ongoing research program "Agile renovation project" so much information about renovation prices and the like was already available. The research program explores the possibilities of combining energy-efficient refurbishment and infill development to partially finance that refurbishment. The situation in Siltamäki has also been discussed in other publications under the research program mentioned above, for example in Luoma-Halkola et al (2010) and Kuronen (*forthcoming*). This paper is also a part of the research program.

Siltamäki is an owner-occupied neighbourhood. Houses, as well as land beneath them and some excess land, are owned by housing companies that are, basically, a management system applied somewhat similar to condominiums or owners' associations and used in owner-occupied blocks and terraced houses. The home-owners are shareholders in housing companies, entitling them to control their own house or apartment and obligating them to share the costs of management (Government of Finland, 2009).

The Siltamäki area consists of seven housing companies, which encompass approximately 1,000 apartments in 44 two or three-storey apartment buildings, total net floor area being 65,500 m² (Salastie, 2009). The refurbishment costs in Siltamäki are estimated to be \in 60m. These extensive

renovations include facade and balcony renovations, plumbing repairs, and renewal of the technical systems.

The refurbishment costs the apartments are facing are approximately $\leq 900/m^2$, which are increased by seven per cent if low-energy options are chosen, while the market price of apartments is a bit above $\leq 2000/m^2$ (Lahti, 2010; Lantto & Saari, 2010). This, combined to the fact that, in the near future, only this current refurbishment phase enables low-energy retrofitting, leads to hard decisions in the housing companies, such as whether to do the utmostly necessary renovations only, whether to aim at low-energy solutions, even if they were a bit dearer than conventional solutions, or whether they should attempt the redevelopment process and see if it leads to acquiring equity that can be used to finance the renovations.

The parties in Siltamäki are:

- Public: City of Helsinki (several different departments);
- Private: developers, construction companies, financers; and
- People: owner-occupiers, housing companies, a management company owned by the housing companies.

The People consists thus not only of inhabitants but also of legal entities which the People possesses directly (housing companies) or indirectly (the management company owned by the housing companies), and which do not serve any other purpose than to possess and maintain the apartments of inhabitants.

In Finland, local authorities are responsible of zoning, approving the development plans and providing infrastructure to urban areas. In Siltamäki the City of Helsinki is the local authority.

Results

Altogether 64 different needs and wishes were coded in the transcribed interviews, together with 19 requirements. In re-coding and grouping these were organised as follows:

- primary needs each party had towards other parties (or itself), that is, customer needs towards the provider;
- secondary needs the parties placed upon others (needs that the parties saw other parties having);
- requirements to enter the partnership (redevelopment) at all; and,
- needs towards the partnership (redevelopment) if, and when, entered.

A common understanding of the interviewees was that the redevelopment process must be economically sound and well-led. A view shared by People and, interestingly, Private was that a construction company, operating in a refurbishment on a tender basis, cannot be part of the partnership but another actor, such as developer, must represent Private. To enter the partnership Private saw Public's contribution as important, whereas People saw Public guidance as a relevant thing. What was disagreed was the importance of adding value to existing apartments. Public and Private saw this as an important factor but People, the owner-occupiers, considered this to be important only to those who are about to sell their homes. People did not place any needs upon other parties, whereas they had needs placed upon them by both Public and Private.

The results of the interviews are grouped below in Table 1 and Table 2.

The parties must act according to the primary requirements, otherwise the partnership fails. Many needs are intertwined with Private actions. Private seems to be a central part of the partnership. In only one occurrence in Public interviews was the possibility considered of Public conducting the developing process itself by a separate public agency. Also, the role of People in this case, where they are also land-owners, is emphasised. It is also worth mentioning that the relationship between Public and People, interpreted as formal participation in planning in earlier 4P studies, revealed only secondary customer needs in this study.

People and Private expected Public to offer "governing services" in an effective way. People saw themselves more as inhabitants of the area than as economic actors, whereas Private clearly approached the issue from economic actor viewpoints. Public saw the urban redevelopment process as an arm to implement its policies and to deliver projects within cost frames. Some of the expectations revealed were towards the process in general.

		CUSTOMER (SUBJECT OF CUSTOMERSHIP)			
		People	Private	Public	
PROVIDER (OBJECT OF CUSTOMERSHIP)	People	No needs	- Gain more knowledge about alternatives in refurbishment and redevelopment	No needs	
	Private	 Provide more knowledge about alternatives in refurbishment and redevelopment Actor other than construction company to represent Private in partnership Execution of the refurbishment works*) 	- Actor other than construction company to represent Private in partnership	 Project-oriented, cost-effective process Flexibility to process, not Public agency's rigidness Actor other than construction company to represent Private in partnership 	
	Public	No needs	- Readiness to negotiate, especially about amendments of development fees to People	No needs	
	Needs placed on customer by others (secondary needs)	 Added value of existing apartments (by Public and Private) Fast Public decisions (by Private) Willingness to act as end customer (by Public and Private) 	No needs	- Conduct planning with policy- implementing targets (by Private)	
	Case specific needs	 New accessible apartments with lifts Better energy efficiency of existing apartments 	 Potential of new development Neighbourhood is relevant size of project 	 Implementing of policies concerning infill developments, energy efficiency and improvements to existing housing stock 	

Table 1. Primary, secondary and case specific needs revealed in the interviews.

*) Need to execute the refurbishment works did not occur in any of the interviews but it nevertheless is an existing need behind the whole process.

Table 2. Requirements to enter partnership and readiness to contribute to partnership revealed in the interviews.

	People	Private	Public
Primary requirements to enter partnership	 Nature of neighbourhood must be maintained (services, existing management company) Partnership must include Public 	- Profitability	- Public policies must be implemented via the partnership
Ready to contribute	 Value created in redevelopment can be used to low-energy refurbishment 	- External investments in the area	 Negotiations about potential amendments to implement policies

Customership and systems theory in the urban development

As the results of the interviews presented above show, the concept of customership is highly complex in the 4P framework. In theory, a customership would be something that includes several transactions between a provider and a customer creating some tangible value for the provider (Pekkanen, 2005), that can be called customer equity for the provider (Hogan et al, 2002). Now, many authors of customer relationship management emphasise the role of customer satisfaction in creating and managing customerships, for example Kärnä (2004), Maloney (2002) and Torbica & Stroh (2001). However, what is inherent in construction projects, applying also to urban development, is that the transaction between Private and People is most often a one-time occurrence at the project delivery, or the relationship is at least discontinuous (Ahola, 2006). Customer satisfaction may thus not directly create loyalty in construction business (Kärnä et al, 2004; Maloney, 2002), or lead to customerships in above mentioned sense. Taking this into account when analysing and trying to define customerships in 4P emphasises further the complexity of the situation.

In addition, the provider-customer relationship itself is complex in the 4P framework, as well as in built environment in general. A simple definition is that a customer is an actor having a direct contract relationship with the provider (Rope & Pöllänen, 1998). In the 4P this definition would leave the third party just as a stakeholder and annihilate the potential of a multilateral relationship. There might also be a long supply chain with multiple customerships according to the same definition, particularly in the Private party. However, as stated by Pekkanen (2005), satisfying the needs of the end user should be the object of all the actors of the chain, which again is outside of the simple definition of a customer.

And finally, if the primary targets of the 4P framework are sustainability related rather than profit maximisation related, confidence issues may reduce the parties' interest in committing to the partnership. Knowledge is always imperfect and differs between the parties, and thus distrust may hinder the co-operation.

If it is now assumed that the end user is seen as the customer in 4P, the constructivist approach to customerships presents a theory for successful provider-customer relationship building. In the constructivist approach the provider and the customer work in a tight cooperative process of joint construction of a project (Cova et al, 2002). This would also be the approach that enables successful 4P developments. However, the problems of distrust and discontinuous customerships closely related to it remain. Concerning these, the customer satisfaction theory states, that even with the discontinuous nature of the customership, high customer satisfaction is the key to successful long-term business (Ahola, 2006; Kärnä, 2004; Maloney, 2002). This, if seen as reputation or brand value, would diminish the problem of distrust related to discontinuous customerships.

The complex concept of customership which the evidence revealed needs a theoretical arena (Dubois & Gadde, 2002) (Eisenhardt, 1989), some scene in which its occurrence can be explained.

In the 4P model systems theory could prove to be this arena. Systems theory is, in a nutshell, a framework for gaining more understanding of behaviour of complex systems, be they natural or social (Senge, 1992), such as 4P was defined above. So-called "open systems" that are in constant interaction with their environment are more relevant to real-world studies than closed systems that seldom exist (von Bertalanffy, 1975; Faludi, 1973). A system and its environment exist in reference to each other, and the environment consists of a vast number of systems (Doak & Karadimitriou, 2007; Luhmann, 1995). In the context of urban development, a systems view of development in property has earlier been adopted by Doak and Karadimitriou (2007), Trevillion (2002), and Elliot and Trevillion (1997), although emphasising on commercial development or the property market as a system.

The boundary between a system and the environment is clear, yet subject of constant internal and external pressure (Doak & Karadimitriou, 2007). This applies to both social and natural systems (van Assche & Verschraegen, 2008; Ehrenfeld, 2007).

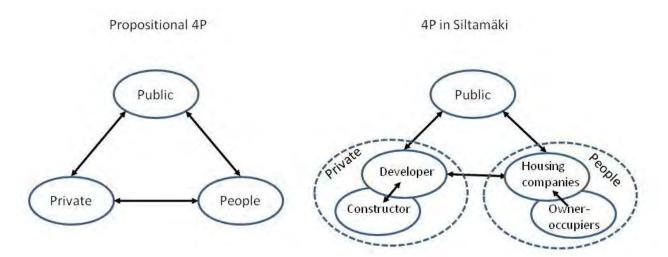
Another defining factor about any kind of social systems is their complexity, that is, the large number of variables needed to define them (Weaver, 1958). Organized complex systems, such as ecosystems, companies or cities, can be defined by their nonlinearity rather than simple input-output linearity (Wilson, 2006). In social systems the relationships between stakeholders are as important as the stakeholders themselves (Luhmann, 1995). Still, these relationships are too often left outside of inspection. In the findings and discussion section below an attempt is made to combine the system of 4P, based on deliberate co-operation (partnership) and customership.

Findings and discussion

This paper answers the research question "What kind of, existing or potential, customerships are there in an urban redevelopment process in owner-occupied housing". During this investigation the structure of the 4P in this specific redevelopment case sharpened a bit to bear more complexity within the parties. This is illustrated in Figure 2. The paper was initiated with the lefthand structure of 4P, but the interviews revealed a slightly altered structure, where Private is clearly dualistic and a developer is the actor in the redevelopment process handling all interaction with the constructor and with other parties. The constructor was seen by even constructors themselves as unable to contribute to the partnership. Also People in the case of Siltamäki had clear representatives, the housing companies.

The needs stated by Private, concerning the economics of scale when considering the whole area to be redeveloped at a time, are supported theoretically by Joutsiniemi (2010) and Webster (2003), who see a neighbourhood as the relevant level of operation because of the limited amount of actors.

Figure 2. The propositional assumption of 4P (after Kuronen et al (2010) and Majamaa (2008)), on left, and the 4P in Siltamäki revealed by this study, on right.



People act on a different kind of rationality than Private and Public (Gezelius & Refsgaard, 2007). Mutual wishes of more knowledge about possibilities of retrofitting and refurbishment in general refer to this distinction, as well as several needs that Private and Public placed upon People. It will be interesting to see later in the process if Public will act based on the needs that it placed on People and itself, or the actual revealed Peoples' needs. Tension between professional players, defined as an administrative system by Mäntysalo (2000), or institutions by Guy and Henneberry (2002), and People is characteristic to housing in the field of property research.

It cannot be claimed that the parties have revealed all their needs and requirements in the interviews, or that they all are interpreted correctly. This is a real-life condition of systems theory as well, where actors are often defined as black-boxes (Luhmann, 1995; Chadwick, 1978).

Systems' non-linearity and conceptual parties, as defined by Chadwick (1978) fit well to 4P and support non-agreement based partnership characters (Ysa, 2007; Koppenjan, 2005). Despite the potential lack of formal agreement, especially in the early phases of partnership, 4P clearly qualifies as a system. It has clear boundaries, the system alters over time and both the parties and surrounding environment create pressure on the system. Rather than linearism, complexity defines the system of urban development.

Rather than just labelling all relationships within the 4P under the concept of partnership it makes more sense to analyse these relationships a bit deeper. Customership can be used to define the relationship between all the parties, as well as inside them in the case of Private. This network of multilateral customerships also eliminates the concept of strong and weak parties as suggested by collaborative planning theory (Healey, 1998). Mostly this power is seen only as power to stop development or to make others act the way power user wants (Rydin, 2010; Mäntysalo, 2000), not as a forwarding factor in partnership based on free will. Strength in the 4P is a relational property – all the stakeholders have something the others want. In this paper customership proves to be able to explain urban development system better than just plain "relationship".

Of course, some of these customerships may never eventuate due to existing and imperfect market conditions, or other reasons. There are necessary requirements and needs and those that are just complementing the process. Customerships are not always bilateral (goods or services are traded for other goods or services, or for money) but multilateral, and this is, actually, a rather good definition of partnership between more than two partners.

In the wider social context it can well be asked if customership is a relevant form of relationship between People and Public, or just advocacy of neo-liberalism. In the urban development, a part of economic system, the relationship between People and Public must not be confused of that between citizen and state in western democracies. In the context of urban development Public is also an economic actor delivering common good and People make righteous claims on that common good (Friedmann, 1999) – that is, exhibit characteristics of customership.

This paper adds to the existing information about the Public-Private-People Partnership model and serves to deepen understanding about it in a larger body of research, as well as provides a novel way of looking at mediating relationship in a system of urban development. The results are of value to practitioners on the field in Private, the policymakers in Public, and to People involved in the refurbishment alike.

Empirically this paper is based on interviews on single case only. More investigations and replications in other cases are needed to further develop the idea. Also rival explanations can be found, for example, power relations in collaborative planning theory are not totally to be forgotten as they are relevant in urban development. In the case of Siltamäki much of the equality between the parties is based on the fact that People, the inhabitants, are also landowners. Their participation and agreement is critical if the redevelopment is to proceed and to help to finance low-energy solutions.

Conclusions

In urban owner-occupied housing redevelopment process there are several customerships and potential customerships between People, Private and Public. These customerships take many forms and are not only bilateral but also multilateral, thus knitting the net of partnership. The concept of customership provides a useful viewpoint in the urban redevelopment system and helps to make the process more viable, for it allows the observant to see stakeholders' motivation behind their economic actions. This viability can lead to more energy-efficient solutions. Not only proved the concept of customership to be a valid one, but it also revealed some of the complexity embedded in urban redevelopment. Partially this complexity is due to the established positions of the Parties compared to a new development project. To maintain its feasibility the Public-Private-People Partnership (4P) model must be able to be accommodated according to current environment such as that examined in this paper.

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References

Ahola, T. (2006). How to Deliver Value to Customers with Latent Needs in a Business-to-Business Project Delivery Context: Empirical Illustration from the Construction Industry. *Proceedings of the 22nd IMP-conference*.

Amaratunga, D.;Baldry, D.;Sarshar, M.;& Newton, R. (2002). Quantitative and qualitative research in the built environment: application of "mixed" research approach. *Work Study*, *51* (1), 17-31.

Atkinson, J. G.; Jackson, T.; & Mullings-Smith, E. (2009). Market influence on the low carbon energy refurbishment of existing multi-residential buildings. *Energy Policy*, *37* (7), 2582-2593.

Ball, M.;& Maginn, P. J. (2005). Urban Change and Conflict: Evaluating the Role of Partnerships in Urban Regeneration in the UK. *Housing Studies , 20* (1), 9-28.

Bertalanffy, L. v. (1975). General System Theory. In B. D. Ruben, & J. Y. Kim, *General Systems Theory and Human Communication* (pp. 6-20).

Chadwick, G. (1978). A Systems View of Planning (2nd ed.). Oxford: Pergamon Press.

Cova, B.; Ghauri, P.; & Salle, R. (2002). Project Marketing: Beyond Competitive Bidding. London: Wiley.

Doak, J.;& Karadimitriou, N. (2007). (Re)development, Complexity and Networks: A Framework for Research. *Urban Studies*, 44 (2), 209-229.

Dubois, A.;& Gadde, L.-E. (2002). Systematic combining: an abductive approach to case research. *Journal of Business Research*, 55, 553–560.

Ehrenfeld, J. (2007). Would industrial ecology exist without sustainability in the background? *Journal of Industrial Ecology*, *11* (1), 73–84.

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, *14* (4), 532-550.

Elliot, C.;& Trevillion, E. (1997). *A systems approach to the property market*. London: Royal Institute of Chartered Surveyors.

Faludi, A. (1973). Planning Theory. Pergamon Press: Oxford.

Flyvjberg, B. (2006). Five Misunderstandings About Case-Study Research. *Qualitative Inquiry*, 12 (2), 219-245.

Friedmann, J. (1999). The Common Good: Assessing the Performance of Cities. In J. Friedmann (Ed.), *Urban and Regional Governance in the Asia Pacific* (pp. 1-16). Vancouver, BC: The Institute of Asian Research, The University of British Columbia.

Gezelius, S. S.; & Refsgaard, K. (2007). Barriers to rational decision-making in environmental planning. *Land Use Policy*, 24 (2), 338-348.

Glaser, B. (1978). Theoretical Sensivity. Mill Valley, CA: Sociology Press.

Glumac, B.;Blokhuis, E.;Han, Q.;Smeets, J.;& Schaefer, W. (2010). Modelling actor decisions in the context of Brownfield redevelopment. *Proceedings of ERES 2010.* Milan.

Goulding, C. (2002). *Grounded Theory. A Practical Guide for Management, Business and Market Researchers.* London: Sage.

Government of Finland. (2009). Housing Companies Act 2009/1599.

Guy, S., & Henneberry, J. (2002). Approaching development. In S. Guy, & J. Henneberry (Eds.), *Development and Developers: perspectives on property* (pp. 1-18). Oxford: Blackwell Science Ltd.

Healey, P. (1998). Collaborative planning in a stakeholder society. *Town Planning Review , 69* (1), 1-21.

Healey, P.;Purdue, M.;& Ennis, F. (1995). *Negotiating development. Rationales and practice for development obligations and planning gain.* London: E & FN Spon.

Heinonen, J.; Junnila, S.; & Kuronen, M. (2010). A Life Cycle Assessment of Carbon Mitigation Possibilities in Metropolitan Areas. *Proceedings of Sustainable Building '10.* Helsinki.

Hogan, J.;Lemon, K.;& Rust, R. (2002). Customer equity management: Charting new directions for the future of marketing. *Journal of Service Research*, *5* (1), 4-12.

Joutsiniemi, A. (2010). *Becoming Metapolis - A Configurational Approach*. Tampere: Tampere University of Technology.

Kärnä, S. (2004). Analysing customer satisfaction and quality in construction - the case of public and private customers. *Nordic Journal of Surveying and Real Estate Research, Special Series*, 2, 67-80.

Kärnä, S.; Junnonen, J.; & Kankainen, J. (2004). Customer Satisfaction in Construction. *Proceedings of the 12th Annual Conference on Lean Construction*, (ss. 476-488).

Koppenjan, J. F. (2005). The Formation of Public-Private Partnerships: Lessons from Nine Transport Infrastructure Projects in The Netherlands. *Public Administration*, 83 (1), 135-157.

Kuronen, M. (forthcoming). Viable urban redevelopments - exchanging equity for energy efficiency. *Unpublished manuscript*.

Kuronen, M.; Junnila, S.; Majamaa, W.; & Niiranen, I. (2010). Public-Private-People Partnership as a way to reduce carbon dioxide emissions from residential development. *International Journal of Strategic Property Management*, 14 (3), 200-216.

Lahti, P. (2010). *Riihimäki Peltosaari – Eco-efficient renewal of a neighbourhood*. VTT Technical Research Centre of Finland.

Lantto, J.; & Saari, A. (20. April 2010). Agile renovation model project (Ketterä korjausmalli).

Luhmann, N. (1995). *Social systems*. Stanford, CA: Stanford University Press.

Luoma-Halkola, J.; Junnila, S.; Majamaa, W.; & Kuronen, M. (2010). Urban Redevelopment Concept (URC) for Existing Neighbourhoods. *Proceedings of ERES 2010*. Milano.

Majamaa, W. (2008). *The 4th P - People - in urban development based on Public-Private-People Partnership.* Espoo: TKK Structural Engineering and Building Technology Dissertations.

Majamaa, W.;Kuronen, M.;Kostiainen, J.;& Heywood, C. (2008). A consumer-oriented technique for planned residential developments. *International Journal of Housing Markets and Analysis*, *1* (3), 231-245.

Maloney, W. (2002). Construction Product/Service and Customer Satisfaction. *Journal of Construction Engineering and Management*, *128* (6), 522-529.

Mäntysalo, R. (2000). Land-use planning as inter-organisational learning. University of Oulu.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis. An Expanded Sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.

Miles, M., Berens, G., & Eppli, M. (2007). *Real Estate Development: Principles And Process* (4th ed.). Washington: Urban Land Institute.

Pekkanen, J. (2005). *Threats and Opportunities with Customer Relationships in Construction Projects. Doctoral dissertation.* Espoo: Helsinki University of Technology.

Robson, C. (2002). *Real World Research: a resource for social scientists and practitioner-researchers* (2nd ed.). Oxford: Blackwell Publishers.

Rope, T., & Pöllänen, J. (1998). *Asiakastyytyväisyysjohtaminen (Managing Customer Satisfaction)* (4th ed.). Helsinki: WSOYpro.

Rudlin, D., & Falk, N. (2009). *Sustainable Urban Neighbourhood. Building the 21st Century Home* (2nd ed.). Oxford: Architectural Press.

Rydin, Y. (2010). *Governing for Sustainable Urban Development*. London: Earthscan.

Salastie, S. (2009). Siltamäen kontaktikaupunki. Helsinki: Edita Prima Oy.

Senge, P. M. (1992). *The Fifth Discipline*. London: Century Business.

Seppälä, J. (2009). Suomen kansantalouden materiaalivirtojen ympäristövaikutusten arviointi ENVIMATmallilla. Suomen Ympäristö 20/2009.

Shiel, J. (2009). Practical greenhouse gas reduction strategies for the existing building stock. *Architectural Science Review*, *52* (4), 270-278.

Torbica, Z.; & Stroh, R. (2001). Customer Satisfaction in Home Building. *Journal of Construction Engineering and Management*, *127*(1), 82-86.

Trevillion, E. (2002). Systems theory and the commercial development process - towards an understanding of complex behaviour and change. In S. Guy, & J. Henneberry (Eds.), *Development and Developers: perspectives on property* (pp. 181-203). Oxford: Blackwell Science Ltd.

Van Assche, K.; & Verschraegen, G. (2008). The limits of planning: Niklas Luhmann's systems theory and the analysis of planning and planning ambitions. *Planning Theory*, 7 (3), 263-283.

Weaver, W. (1958). A quarter century in the natural sciences. In *Annual Report* (pp. 7-122). New York: The Rockefeller Foundation.

Webster, C. J. (2003). The Nature of the Neighbourhood. Urban Studies , 40 (13), 2591-2612.

Wiktionary. (2009, 08 29). *customership - Wiktionary*. Retrieved 09 28, 2010, from Wiktionary: http://en.wiktionary.org/wiki/customership

Wilson, A. G. (2006). Ecological and urban systems models: some explorations of similarities in the context of complexity theory. *Environment and Planning A*, 38 (4), 633-646.

Yin, R. K. (2009). *Case Study Research. Design and Methods* (4th ed.). Thousand Oaks, CA: Sage.

Ysa, T. (2007). Govenance Forms in Urban Public-Private Parterships. *International Public Management Journal*, 10 (1), 35-57.