Co-Creation in Real-Estate

a framework to steer upon value-creating firm-consumer relations in demand-driven development.

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MANAGEMENT SUMMARY

This research has been motivated by observations made for the establishment of a ‘parallel world of development’ (Robles-Duran, 2011); one which seeks to innovate under the current challenging conditions found in the Dutch real-estate market. While several market-actors are hoping to continue a supply-driven strategy, some practitioners are seemingly moving towards the transition to ‘demand-driven’ development approaches. Four main drivers have been recognized to have increased the potential for this approach in the current Dutch market:

1) *The Changes in the Market due to the Crisis*
   - From Supply to Demand Dominance
   - From New-building and Vinex Development; to Re-building and Inner-city Development

2) *A changing Consumer Profile and Way of Consumption*
   - Higher Levels of Education
   - The Influence of the Internet and social media

3) *Increased Networking in Development*
   - Increased Complexity & Dynamism
   - Paradigm Shift from Keynesianism to Neoliberalism

4) *Growing Recognition for the potential Added Value of Demand-Driven Development*
   - A broadening Value Definition
   - Growing Evidence

Given the insight in the semantic unclarity surrounding the term ‘demand-driven development’ this thesis defines the same as: ‘an approach to developing real-estate or urban areas, where both market-actors and civil actors jointly steer the process and product development through cooperation’¹. Demand-driven development thus lies between and excludes serial development and private commissioning. Following this definition demand-driven development closely relates to the definition of Prahalad and Ramaswamy (2004) for co-creation: ‘the consumer and firm are intimately involved in jointly creating value that is unique to the individual consumer and sustainable to the firm.’(Prahalad and Ramaswamy, 2004)

**Demand-Driven Development:** developing ‘with’ rather than developing ‘for’ civil-actors (the consumers of real-estate), as such it is understood as an approach to developing real-estate or urban areas, where both market-actors and civil actors jointly steer the process and product development through cooperation.

**Co-Creation:** “the consumer and firm are intimately involved in jointly creating value that is unique to the individual consumer and sustainable to the firm.”(Prahalad and Ramaswamy, 2004)

**Market-Actors:** people and organizations which deal with real estate and its industry as a market. This includes developers, investors, housing associations, architects, etc...

**Civil-Actors:** people and organizations that are consumers of the real-estate (i.e. users, owners, society)

- internal civil-actors: are or potentially will-be contractually related to the object (e.g. tenants, owner-occupiers)
- external civil-actor: are not and will not be contractually related to the object but have a substantial interest in the same (e.g. customers, locals)

¹ Government-actors are considered an important third actor in co-steering demand-driven development but are not in the focus of attention in this research.

Supply-Driven vs. Demand-Driven based on Sanyal (2005) and De Carlo (2005)
Practitioners adopting a demand-driven development approach thus face two main problems:

1) **Steering a changed form of value creation**: from firm only to firm and consumer
2) **Steering a changed relation of civil-actors and market-actors**: from transaction only to collaboration and competition

Preliminary research has however shown that there seems to be a knowledge gap in both practice and theory as to how these implications can be steered upon in the building industry under consideration of current market conditions and consumer trends. While civil-involvement is by no means new to the Netherlands, the status-quo of civil-involvement as co-creation in retail and housing development seems to be describable as one of potential rather than being a well-established reality, given the comparably few examples which have up to now been realized. A recent survey among house/apartment-searches in the Netherlands suggest that 83% of the consumers want more say in the development of their housing (DBMI and Nirov and Nieuwbouw Nederland, 2012) of which the most popular forms are not C(PO) project but mass customization, co-creation in the initiation phase and casco forms. Also a recent report by NEPROM (2011) from the Retailbijeenkomst in November 2011 emphasizes the need for much closer collaboration between retailers and developers/owners, to counteract vacancies and reduced sales volumes. On the basis of this insight this thesis set-out to answer the following research question:

**Research Question:**
What framework may assist practitioners in steering the co-creation relation of market-actors and civil-actors in demand-driven developments; and what main drivers and critical success factors can be identified for the same?

By identifying the underlying nature of this new firm-consumer relation, this thesis aimed to 1) develop a suitable steering framework for market-actors to steer upon a value generating co-creation relation with civil-actors; and to 2) identify the critical success factors and drivers for this form of demand-driven development.

**The Nature of the Firm-Consumer Relation in Demand-Driven Development**

Demand-driven development is by no means new to the Netherlands but has undergone substantial transitions of rising and falling interest, under different conditions over the past century. As such civil-involvement is not a new phenomenon; nonetheless the nature of the collaboration has evolved considerably and thus has the understanding of the same in theory (Richardson and Connelly, 2005). After WW2, the Netherlands has seen the first rise in attention to civil-involvement in the late 60’s in connection to the student revolts. At this time theorists described the relation with civil-actors as one of ‘protest’ (e.g. Stadsvernieuwing) where the slogan was ‘power to the people’. The following decades see a transition in the perception on civil-actor involvement from ‘rational-instrumentalism’ (e.g. Grotestenenbeleid) to the belief in ‘ideal consensus’ in a power-free environment (e.g. Poldermodell). The latter perceptions seem to dominate the current understanding for civil-actor involvement in practice, where both instrumental and transformative (Andersson et al., 2005) approaches can be observed. Richardson and Connelly (2005) however criticise these earlier paradigms fall short of either satisfying the interpersonal dynamics or recognizing power as an omnipresent and constructive element in collaboration. The authors thus advocate a pragmatic consensus paradigm, where civil-actor involvement has to be understood as the collaboration of different parties, interacting on the basis of ‘powers and interests’.

The latter proposed paradigm of ‘powers and interests’ seems to coincide with the understanding of the civil-actor and market-actor relation in co-creation. Prahalad and Ramaswamy (2004) describe this relation to be based on both collaboration and competition in value-creation, and thus recognize both compatibility and differences in the capacity as well as in orientation of the two actor groups. Overall civil-involvement can thus be said to have moved from ‘participation’ to ‘co-creation’.

The nature of the market-civil actor relation in demand-driven development can be understood as:
The collaboration of different parties, interacting on the basis of ‘powers and interests’
Overall literature study, as well as the insight from Richardson and Connelly (Richardson and Connelly, 2005) however suggested that there had only been very little research in demand-driven development and participatory planning which has analysed the civil-actor and market-actor relation under this paradigm. This research therefore built upon additional fields of knowledge which gave further insight in the transition to a collaboration based on ‘powers and interests’:

- **Public-Private Partnerships** – a broadly-researched collaboration of different parties interacted on the basis of ‘powers and interests’ (valuable insight on another relation in the building industry of the same paradigm)
- **Change Management** – Moving from a firm-consumer relation to a relation of co-creation is no easy transition as it requires a change of business cultures (insight on the implementation of change)
- **Co-creation in Consumer-Goods Industry** – there is growing body of knowledge form marketing and design theory on co-creation, which primarily looks at the same in regards to consumer goods (insight from a similar relation in another industry)

**THE RESEARCH METHOD**

This research focuses upon a ‘contemporary pluralistic phenomenon’ (Yin, 1994) in the building industry, for which no specific theory or model could be found in the conducted literature study. These factors combined have facilitated the choice for an inductive rather than deductive research. This research thus made use of a mixed methods approach to test potential critical success factors (CSFs) and drivers (D) and identify patterns in the researched phenomenon. These were then taken as a basis to develop a steering framework for co-creation in reflection upon the obtained insight.

Overall the research can be divided into five main research phases for which Phase-0 (preparatory literature study) provided the basis, by identifying the possible nature of the firm-consumer relation in demand-driven development. In most of the 5 phases theory and empirical research had been used simultaneously to triangulate and verify identified patterns.
Phase 1 - Identification of potential CSFs+D and preliminary framework from theory on PPP and change management

Phase 2 - Review of preceding empirical research and publications on demand-driven development and participatory planning to compare identified CSFs+D with previous findings.

Phase 3 - In-depth Case Study, testing how far the identified CSFs+D can explain the success or hinderance of a co-creation relation between the main market-actor and the key civil-actor groups in this case.

Phase 4 - Delphi Panel composed of market-actors from the analysed case and experts on demand-driven development to verify findings against practical insights incl. an iterative ranking of the CSFs+D by importance.

Phase 5 - Reflection on the obtained insights and finalization of the Steering Framework for Co-creation.

The Critical Success Factors and Drivers

Given the insight on the limited research on the market-civil actor relations in demand-driven development, research on PPP and Change management was made use of to identify potential Critical Success Factors (CSFs) and Drivers for the co-creation. Through the comparison of seven publications on public-private partnerships and the well-established work of Kotter (1996) on change management a total of 8 drivers, 8 CSFs of the relation and 12 CSFs of the process could be identified.

<table>
<thead>
<tr>
<th>Drivers</th>
<th>CSF - Relation/Actors</th>
<th>CSF - Process</th>
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</thead>
<tbody>
<tr>
<td>1. A Sense of Urgency</td>
<td>1. Actors’ Fit (culture, structure)</td>
<td>1. Early Implementation of Partnering</td>
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<tr>
<td>2. Supportive Environment</td>
<td>2. Win-Win Attitude</td>
<td>2. Proper Preparation</td>
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<tr>
<td>5. Exchange of Resources</td>
<td>5. Consciousness of Interdependencies</td>
<td>5. Team Building</td>
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<td>9. Effective Coordination / Monitoring</td>
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<td>10. Conflict Resolution Mechanism</td>
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<td>11. Expert Involvement</td>
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<td></td>
<td></td>
<td>12. Generate and Consolidate Short-Term Wins</td>
</tr>
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Identified Drivers and Critical Success Factors from PPP and Change Management theory

These identified factors were then compared, tested and verified against preceding as well as self-conducted empirical research on demand-driven development and participatory planning. The literature study has shown that the issues identified in the reviewed previous research on demand-driven development and/participatory planning match the identified factors. Publications suggest that demand-driven development and its current context can satisfy the identified drivers. Only supportive environment in regards to the bureaucracy and institutionalization of the Dutch development process has been largely regarded as an inhibiting factor. Also the relation factors and process factors are widely recognised in the reviewed literature as being critical issues in co-creation, which if absent, have resulted in problems in the market-civil actor relation. The in-depth case study showed that the factors identified from PPP and change managements were also recognized as critical issues by interviewees (market, civil and observers) in the relation between the project office and key civil-actors. In addition, the relative presence or absence of factors seems to provide a relatively good explanation for the success of, or hindrance to a co-creation relation within this case.

The applicability of the identified critical success factors and drivers seems to be supported by findings from both past empirical studies and the in-depth case study conducted within this research.

Following this insight, a Delphi panel was set up in order to: 1) extending the empirical research beyond a single case to ensure validity of results and test expertise within the case on co-creation; and 2) get insight in the relative importance practitioners give to specific factors within each category (drivers, relation, process) through an iterative ranking. The statistical analysis of the conducted rankings allowed for the following conclusions to be made in regards to the relative importance of specific factors in each category:
Delphi results suggest that there is no single most important driver but that the associated importance seems to rather depend on the profession or perspective actors adopt on co-creation. The results of the Delphi panel suggest that tendencies towards both marketing as well as a new-order perspective on co-creation can be found among the questioned market-actors. While in marketing the emphasis is placed on increasing brand-loyalty, the new-order perspective considers consumer involvement more as a redefinition of roles to democratize the development process (Sanders, 2008). The overall understanding is that despite tendencies to one or the other side, constructive involvements of civil-actors will most likely build upon both poles, as both a self-serving or activist position would tend to deny the ‘powers and interests’ of the other party an therefore inhibit constructive co-creation in the long run.

The Delphi results suggest that the relative importance given to specific drivers seems to depend on, where market-actors positions themselves between the view point of marketing and new order in regards to demand-driven development.

Statistical analysis suggests that there seems to be a higher level of expertise in regards to the ranking of the relation factors in the case-independent group of panellists compared to panellists from the case. Further analysis within the ranking of the independent expert group advocates a grouping of the factors into three categories of importance to be more representative of the Delphi results. Panellists however frequently suggested that even lower ranked items were not to be neglected but just seen as slightly less urgent than higher ranked factors. Furthermore the Delphi panel also led to the inclusion of two additional relation-factors, which had been broadly validated by panellists: open-mindedness and creativity, both factors which are concerned with the ability to innovate.

Analysis of the Delphi suggests that the individual relation factors can be best categorized into three groups of importance whereby the category of highest importance is composed of the factors: mutual trust, commitment & dedication and consciousness of interdependencies.

The ranking of the process factors showed a common tendency across the entire Delphi panel, with however a higher common level of expertise in the independent group. The comparison means and spread in the ranking has resulted in a factor grouping into four main categories. Interestingly enough this categorization has resulted in groups of factors which touch upon common issues. The high ranking of guidance illustrates the perceived necessity for the process to lead to the aspired value of co-creation. The shared vision forms the basis and justification for cooperation, while leadership provides direction for moving forward within the process. A clear organization on the other hand touches upon the need for a careful matching of civil-actors and market-actors in the right form of organization, for the specific goal of the co-creation. Transparency on the other hand is closely related to mutual trust and the management of expectations and uncertainties. The last category maintenance is composed of factors which secure a smooth interaction over the entire process.

The conducted Delphi suggests four main levels of importance in regards to steering the process of civil-actor and market-actor cooperation: guidance, organization, transparency and maintenance.
The Concluding Insight On the Firm-Consumer Relation Value Creation and In Demand-Driven Development

The Definition of the Firm-Consumer Relation in Demand Driven Development
Overall the results from this research suggests that the relation of market-actor and civil-actors in demand-driven development can be explained and steered with the same critical success factors and drivers as found in an established form of multi-actor collaboration, that is openly based on ‘powers and interests’ (i.e. public-private partnerships). Given the spectrum of possible forms of interaction this relation can best be defined as a form of cooperation, defined as the joint operation of otherwise independent parties with independent interests to achieve a common goal.

The combined insight from theory and empirical research suggests that, if to be constructive (i.e. reach the aspired value/ goals), the relation of market-actors and civil-actors in demand-driven development may best be defined as: A Civil-Private Cooperation (CPC) based on ‘powers and interests’

The Form and Creation of Value in Demand-Driven Development
In demand-driven development, value becomes an intimate part of the consumer-firm interaction rather than only being the attribute of a product or effectiveness of a process. Instead of being transacted, value is co-created by market-actors and civil-actors, thereby making the market the location of value creation (Prahalad and Ramaswamy, 2004). While in supply driven development firms will have to steer on product and process excellence the integration of civil-actors in the development process asks for third form of value to be steered upon namely experience (Prahalad and Ramaswamy, 2004). Experience is thereby understood as the value from co-creation that is “personal and unique for each individual” and generated through the interaction with firms and/or other consumers. Insight obtained within this research suggest that the adoption of demand-driven development not only results in a different form of value creation but may also cause a broadening of the definition of value. Several authors (Putman, 2010, van Joolingen et al., 2009) describe demand-driven development as a form of ‘process inversion’ due to which value is considered more holistically across different stakeholders and phases of the project lifecycle. In addition also effects on social value and location value seem to be more often taken into consideration, as market-actors increasingly recognize their intimate link with the value of the object and the firm (see Chapter 4.3.2 and 6.1.2). Traditionally location value is understood as an external factor that is made use of but not actively altered (Geltner and Miller, 2007). Preceding case-studies however suggests that civil-actor involvement in development can increase an area’s social capital and centrality, by improving the level of social cohesion, minimizing vandalism and achieving better functional trade-offs that can ultimately increase location value (Andersson et al., 2005, SEV, 2009, SEV, 2008).

Concluding, the insight obtained in this research suggests that the adoption of a demand-driven development approach results in the co-creation of value by civil-actors and market actors with: 1) a broadening of market-actors’ understanding of value over the entire building lifecycle which may more often include effects on social value and location value; and 2) the extension of the variables to steer upon value-creation, as to include experience next to process and product excellence.
THE PROPOSED STEERING FRAMEWORK FOR CO-CREATION IN REAL-ESTATE

On the basis of the definition of value-creation as well as the relation of market-actors and civil-actors in demand-driven development a framework is proposed that may be of assistance to practitioners in steering the co-creation relation with civil-actors. The here presented framework has been developed parallel to the conducted research on the basis of growing insights; and is complemented by the critical success factors and drivers which have been tested and ranked in the empirical research. As described by Bruil (2011) steering can be defined as: “the purposeful action on or in a (hard or soft) system, to meet specified objectives”. A steering framework thus aims at providing its user with an understanding for the system in which he/she acts and the objectives of steering. By integrating the steering model of De Leeuw (2000) and the decision pyramid, both established models from business administration, the system and objectives have been defined as:

- The system to be steered is composed of the context, value, actors/relation, process which shape each other simultaneously.
- There are three objectives of steering, which are directed towards answering the why?, what/who? and the how? within the system.

In the proposed steering framework the system’s elements and objectives are combined in common levels such that:
- value + context = why?
- actor/relation = who/what?
- process = how?

On each of these levels further guiding principles are provided which are specific to the market-civil actors’ relation in co-creation:

Why? here the guiding principle is the aspired value which has been define within the ‘value model of demand-driven development’ presented above.

Who/What? As the relation of market actors and civil-actors can be defined as a Civil-Private Cooperation based on ‘powers & interests’. This framework provides guidance in identifying the powers and interests of civil-actors and market-actors in reference to the work of Giddens (1984) and Scharpf (1997). Interest thereby makes up part of an actor’s orientation which is defined by his/her perception and preference (Scharpf, 1997). Important variables regarding an actor’s orientation in co-creation, are given in the CSFs - Relation. The ‘power’ of a certain actor describes the force he/she can exercise on others or a project. In reference to Giddens (1984) the following 8 powers have been identified: commitment, legitimacy, expertise, information, property, finance, instruments and time. The conducted research has shown that all of these powers can be held by both market-actors and civil-actors and that the relative balance of power will depend upon the type of actor, context, aspired value and process type.
How? On the basis of the work of Sanders (2006) on everyday-people creativity, four ways could be identified in how civil-actors can co-create with market actors in a development process. The form of co-creation applied, depends mainly on how far things are decided before/outside the co-creation relation. In regards to real-

<table>
<thead>
<tr>
<th>Level</th>
<th>Type</th>
<th>Purpose</th>
<th>Form of Co-Creation in Development</th>
<th>Examples from Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Creating</td>
<td>express my creativity'</td>
<td>e.g. developing a design with market actors 'from scratch'</td>
<td>CPO, MO</td>
</tr>
<tr>
<td>3</td>
<td>Making</td>
<td>make with my own hands'</td>
<td>e.g. developing with pre-designed parts and options</td>
<td>MO, Mass Customization</td>
</tr>
<tr>
<td>2</td>
<td>Adapting</td>
<td>make things my own'</td>
<td>e.g. completing /personalising an 'unfinished' development</td>
<td>Casco, Klusworking</td>
</tr>
<tr>
<td>1</td>
<td>Doing</td>
<td>getting something done'</td>
<td>e.g. using/testing a development</td>
<td>Proefwonen</td>
</tr>
</tbody>
</table>

For real-estate development, the possible way of co-creation will thus depend upon the point within the building life cycle, when civil-actors are involved. Research results however suggest that independent of the form or moment of co-creation, demand-driven developed seem asks for a sufficient level of engagement throughout the building life cycle as a basis to build trust and an enabling factor for possible co-creation at later phases. Engagement can be seen as the level of personal attachment or ‘mental ownership’ (van Etten, 2010) and is
thus closely related to the experience value. According to van Etten (2010) the extent of ‘mental ownership’ will depend on three aspects: 1) the relation between corporations and consumers (transparency, trust, communication), 2) the matching of the place/product to the personal identity and 3) the level of participation. Participation (i.e. co-creation) is thus only one of three ways in which engagement can be created. So even at project phases of no or limited co-creation the other two factors can be steered upon. As becomes apparent through the different potential forms of co-creation (see Error! Reference source not found.), the relation-process will not always run synchronized with the development-process. As such the interaction stands as a process within itself and can be essentially boiled down to four distinct phases:

1. **Preparation** - concerned with issues prior to the interaction (e.g. designing the interaction method)
2. **Organization** - the actual organisation of the co-creation ‘team’
3. **Operation** - regards issues such as decision-making or maintaining commitment through-out the interaction
4. **Finalization** - concerned with the extraction of value and positive conclusion/continuation of the relation

Within these four phases, the tested critical success factors provide further assistance regarding the actual steering actions which may have to be taken.

In general the framework presents the overview of the different elements of a co-creation relation in a way which clarifies the interrelation of the different levels (context, value, relation, process). In co-creation the ‘relation’ is the central element as it is the interaction which creates the co-creation. Simultaneously the same is guided by the expected value and needs to be supported by the right process that matches the actors involved, the goals and the context in which the cooperation is sought.

Overall, the proposed steering framework allows a practitioner to have an overview of the co-creation system and the central issues that he/she has to steer upon. It thus captures the complexity of steering a demand-driven development approach by emphasizing the links and core aspects, while displaying the same at a manageable level of simplicity.

### The Application of the Proposed Steering Framework

As could be observed in the case-study as well as in preceding empirical research different civil-actors will most likely interact in different intensity with market-actors. Therefore prior to making use of the steering framework it will have to be decided with which civil-actors, converse (dialogue) is actually sought and with which only an ask/tell or observation relation is looked for. The willingness to converse i.e. a two way communication is perquisite to co-creation as only this will allow exchange and thus cooperation. The following simple matrix has been proposed to provide practitioners with a basic overview of the common civil-actors with whom co-creation could potentially be sought. The matrix is based on the insight from Pluijm (2010) and depicts the civil actors in real-estate according to their level of interdependence with the market-actor, against the intensity of interaction.

When market-actors are seeking an interaction of converse with a certain civil-actor (group), the proposed steering framework may be of assistance to practitioners in both 1) deciding whether to engage into a co-creation relation and 2) to assist in steering this relation, by providing an overview of the most critical issues and their interrelations.
THE RELEVANCE OF THIS FRAMEWORK FOR THEORY AND PRACTICE

Throughout the conduct of this research contact with practitioners as well as debates on visited congresses have shown the increasing attention that seems to be paid to the topic of demand-driven development. The underlying message in these interactions had been: “we need, it but we don’t know how to implement it”. This research has resulted in the proposition of a steering framework that may aid practitioners in steering upon a value-generating firm-consumer relation in demand-driven development, by providing them with an overview of the most important elements in this cooperation. It may thus deliver useful insight to a practical problem the market is facing today.

Additionally preliminary research had shown that there also seems to be a knowledge gap in theory on developer-consumer co-creation in the real-estate industry. By iterating between different fields of knowledge from participatory planning, over public-private partnerships and co-creation in consumer industry, and providing further empirical research results, a basis of knowledge could be established which may help to fill this knowledge gap. Overall, this thesis does not have the ambition of generalizability. Considering the limited research which has up to now been done in this direction, this thesis understands itself as setting a basis, for future research to build, verify and extend upon.

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“NOT EVERYTHING THAT COUNTS CAN BE COUNTED, AND NOT EVERYTHING THAT CAN BE COUNTED COUNTS.”
CAMERON, W. B. 1963

“TELL ME AND I WILL FORGET. SHOW ME AND I MAY REMEMBER. INVOLVE ME, AND I WILL UNDERSTAND.”
CONFUCIUS, 450 B.C.

CO-CREATION IN REAL-ESTATE

A FRAMEWORK TO STEER UPON VALUE-CREATING FIRM-CONSUMER RELATIONS IN DEMAND-DRIVEN DEVELOPMENT

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