REAL ESTATE DEVELOPERS AS CIRCULAR SERVICE PROVIDERS
COLOFON

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CONTENT

- Introduction
- Research problem
- Methodologies
- Case studies
- Findings
- Conclusions
- Recommendations
INTRODUCTION
TOWN HALL
BRUMMEN
Source: www.Alliander.com

ALLIANDER

DUIVEN

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CIRCL
Circular pavilion ABN AMRO
“Dit zijn op zijn best gebouwen die ontworpen zijn om uit elkaar gehaald te worden. [...] Of iemand dat daadwerkelijk gaat doen hangt af van wie het tegen die tijd is en wie daarvoor verantwoordelijk is”

Matthijs Bierman – Managing director Triodos Bank The Netherlands
(Personal communication, October 05, 2017)
PRODUCT-SERVICE-SYSTEMS

- Services are integrated with products
- Fulfil needs of customers
- Are performance-based
- Apply to different scale levels
PHILIPS

Lighting as a Service

- Performance management
- Maintenance & optimization
- Pay per use
- Financing
- Product take-back
MITSUBISHI

M-Use Elevators

- Realisation
- Performance guarantee
- Monitoring & maintenance
- Product take-back
- Finance
- Pay per Use
- Stable product / service fees

Source: www.mitsubishi-liften.nl
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(based upon Segerstedt & Olofsson, 2010; Vrijhoef & De Riddler, 2005)
A research gap exists how to successfully implement PSS business models (Reim, Parida & Örtqvist., 2015, p.62)

The exact role of the service provide remains vague (Van den Brink, 2016, p.130)

Ongoing discussion around issues concerning, responsibilities, liabilities and ownership (Kazemi, 2016; Kok, Wurpel & Ten Wolde, 2013; Van den Brink, 2016)

Market parties do not know how to cooperate with each other and find the right development processes (J. Bergman; personal communication, August 24, 2017; M. Bierman, personal communication, October 05, 2017; N. Eekhout, personal communication, September 11, 2017; M. Veerman, personal communication, July 05, 2017)

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Not the proper knowledge how to implement Product-Service-Systems

Not enough parties are available that provide Product-Service-Systems

(C. Berning, personal communication, September 20, 2017)
PROBLEM STATEMENT

Real estate developers do not know how to interact with service suppliers and customers in order to realize circular real estate development projects.

There is not enough knowledge available in science and practice about:

- The functioning of Product-Service-Systems on an operational level
- The position and the role of the service provider
How could a real estate developer interact with service suppliers and customers in order to implement Product-Service-Systems in real estate development projects?
METHODOLOGIES
METHODOLOGIES

STEP 1: CONCEPTS
- Explorative literature review
- Explorative interviews

STEP 2: THEORIES
- Literature review

STEP 3: PRACTICES
- Case studies
- In-case analyses
- Cross-case analysis

STEP 4: SYNTHESIS
- Theory building
- Expert panel

(Reim, Parida & Örtqvist, 2015)

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CASE STUDIES
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Source: OVG Real Estate
TRIODOS

- Monitoring of the technical performance
- Cleaning
- Maintenance & Repairs
- Upgrade the façade
- Product take-back
- Second-life

Source: OVG Real Estate
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Source: OVG Real Estate
BASISWEG

- Monitoring of technical performance
- Monitoring of Indoor Environmental Quality
- Maintenance & Repairs
- Product take-back
- Second-life
- Financing of energy generation assets
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Source: OVG Real Estate
THE BOUTIQUE OFFICE

- Decorated office space
- Office amenities & operation (catering, hospitality, cleaning, ICT)
- Flexible lease terms
- Flexible conditions (i.e. different packages)

Source: OVG Real Estate
SALE AND LEASE-BACK

- Splitting of ownership
- Use of superficies (opstralrechten)
- Essential vs. non-essential building components
CO-CREATION

- Risk increase for service suppliers
- Mutual dependency
- Relationship building
  - Trust
  - Common understanding
- Open & flexible contracts

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CONNECTION FOR INNOVATION

- Extended involvement
- Procurement based on outcomes
- Bottom-up commitment
- Increased performance
INTEGRATED IMPLEMENTATION

- Involve suppliers early
- Joint decision-making
- Balance between
  - Functionality
  - Architectural quality
  - Delivered services
  - ‘Circularity’

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TRANSLATING & INTEGRATING

- Technical requirements > outcomes
- Product-Service-Systems > Servitized real estate
DIRECT PARTNERSHIP

- User-centered approach
- Customers’ preferences
- Gain data from exploitation
SERVICE DELIVERY MINDSET

- Long term ‘value’ delivery
- Added value for organisation
- Competitive offer
SERVICE PACKAGES

- Blueprint for servitized buildings
- Sub-lease
  - Flexible duration
  - Flexible conditions
INTERACTION
MODEL

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CONDITIONAL LESSONS

SPECIAL PURPOSE VEHICLES
- Risks related to bankruptcy
- Balance sheet accounting
- Joint Product-Service-System delivery

ONLINE MATERIAL DATABANKS
- Guarantees for material take-back
- Uncertain material prices
- Pre-finance future expenditures

VERTICAL & HORIZONTAL INTEGRATION
- Backward vertical integration
- Integration of neighbouring activities
- Different roles for existing organizations
INTERACTION MODEL
CONCLUSION
CONCLUSION

How could a real estate developer interact with service suppliers and customers in order to implement Product-Service-Systems in real estate development projects?

- Mindset change
- Proper incentives
- Long-term service delivery
- Equal partnership
RECOMMENDATIONS

FOR PRACTICE

Service suppliers
Gain stronger position by developing and proposing PSSs themselves

Service providers
- Pilot projects
- Explore potential PSSs

Customers
Rethink added value of real estate

FUTURE RESEARCH

- Increase the validity
- Exploitation phase of servitized buildings
- Feasibility of SPVs
- Online building material passports + indicators for circularity
Literature:


Interviews:


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