

# “A fool is a man who knows the price of everything, but the value of nothing”

- Oscar Wilde



OSCAR project  
EuPHN 17<sup>th</sup> Nov 2015  
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[www.oscarvalue.no](http://www.oscarvalue.no)

# FOCUS TODAY

- About OSCAR
- Findings up to now
- Further work in OSCAR



“Sustainable Healthcare buildings: meeting environmental and social challenges”



# OSCAR – THAT IS US!



Long term owners, user organisations, developers, technical contractors, contractors, architects, consulting engineers, research institutes, universities, FM software developer

## OBJECTIVE AND GOAL

**Strengthen competence and develop methods and tools which enables optimization of building design in a way that contributes to value creation for owner and user throughout the buildings life time.**

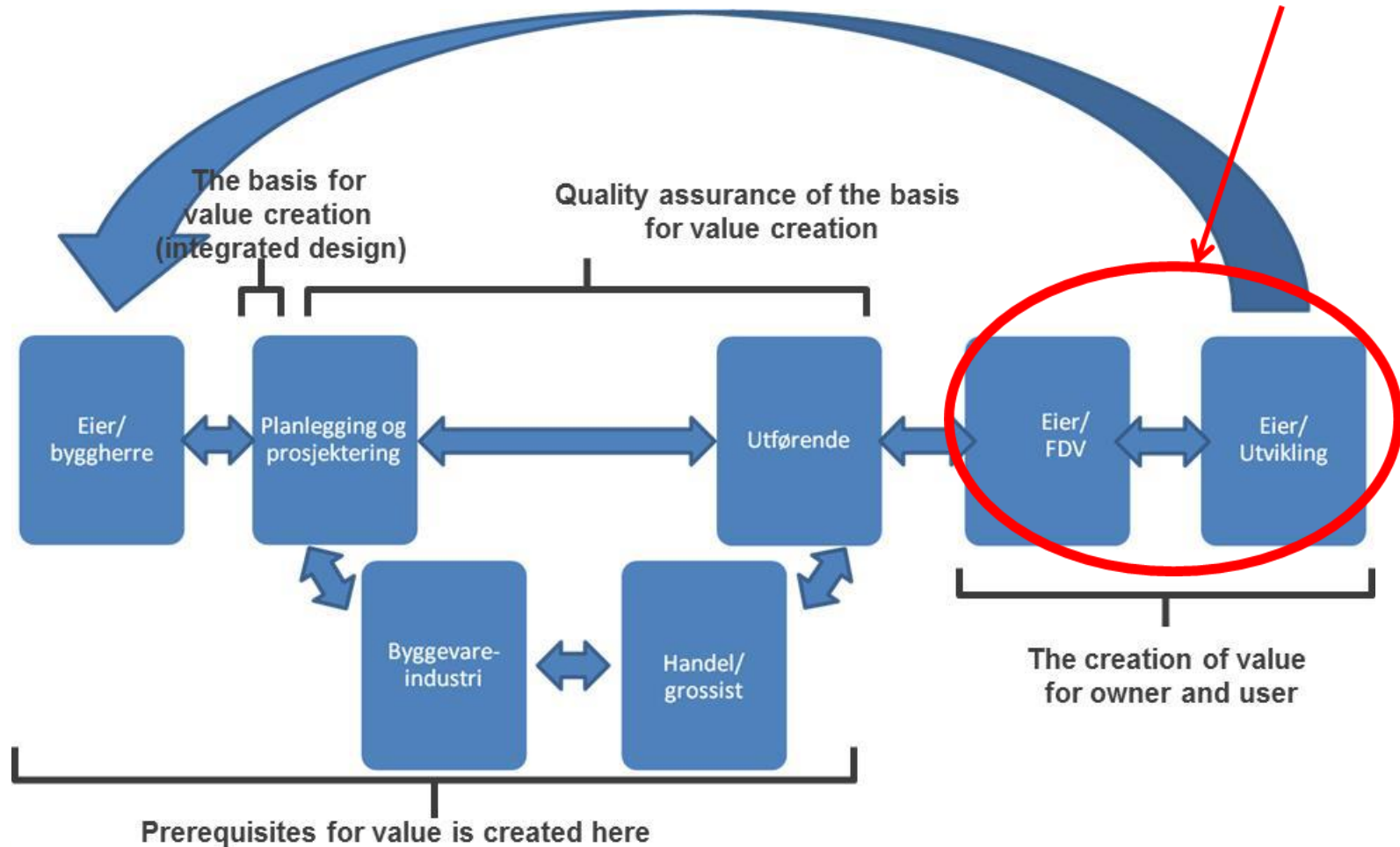
**2014-2017**



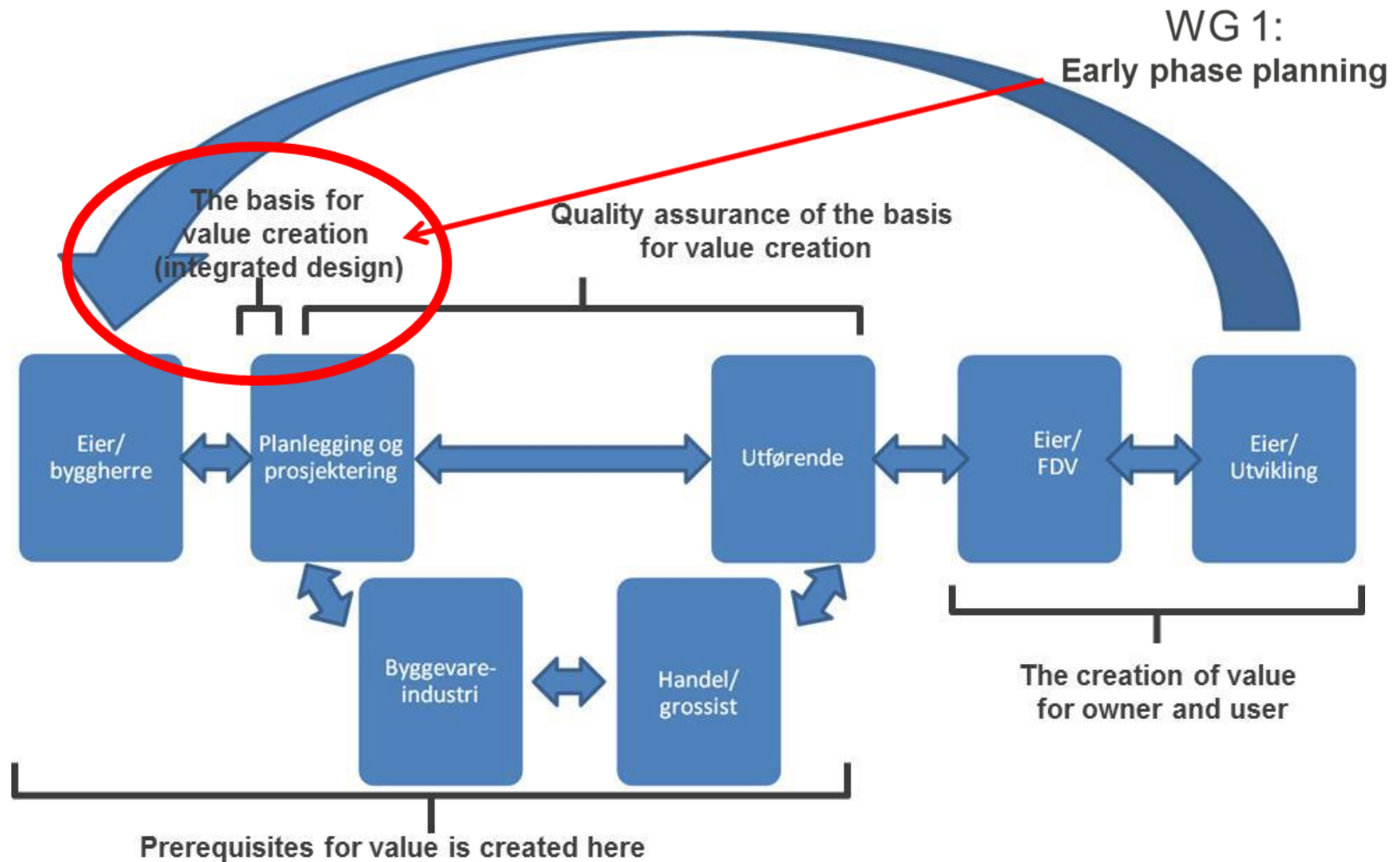
# INTERACTION IN THE VALUE CHAIN

Goal:

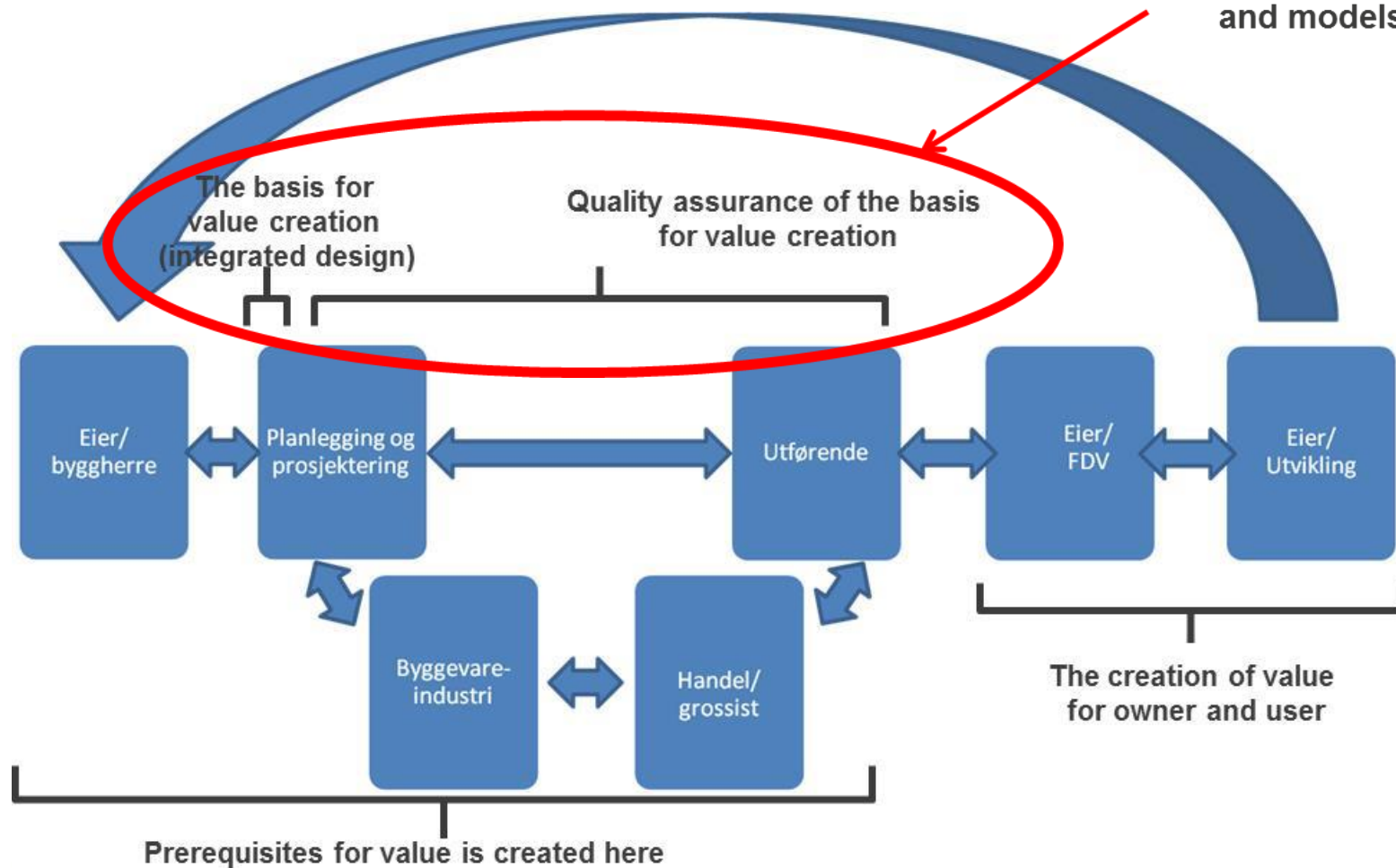
Value for owner and user



# INTERACTION IN THE VALUE CHAIN

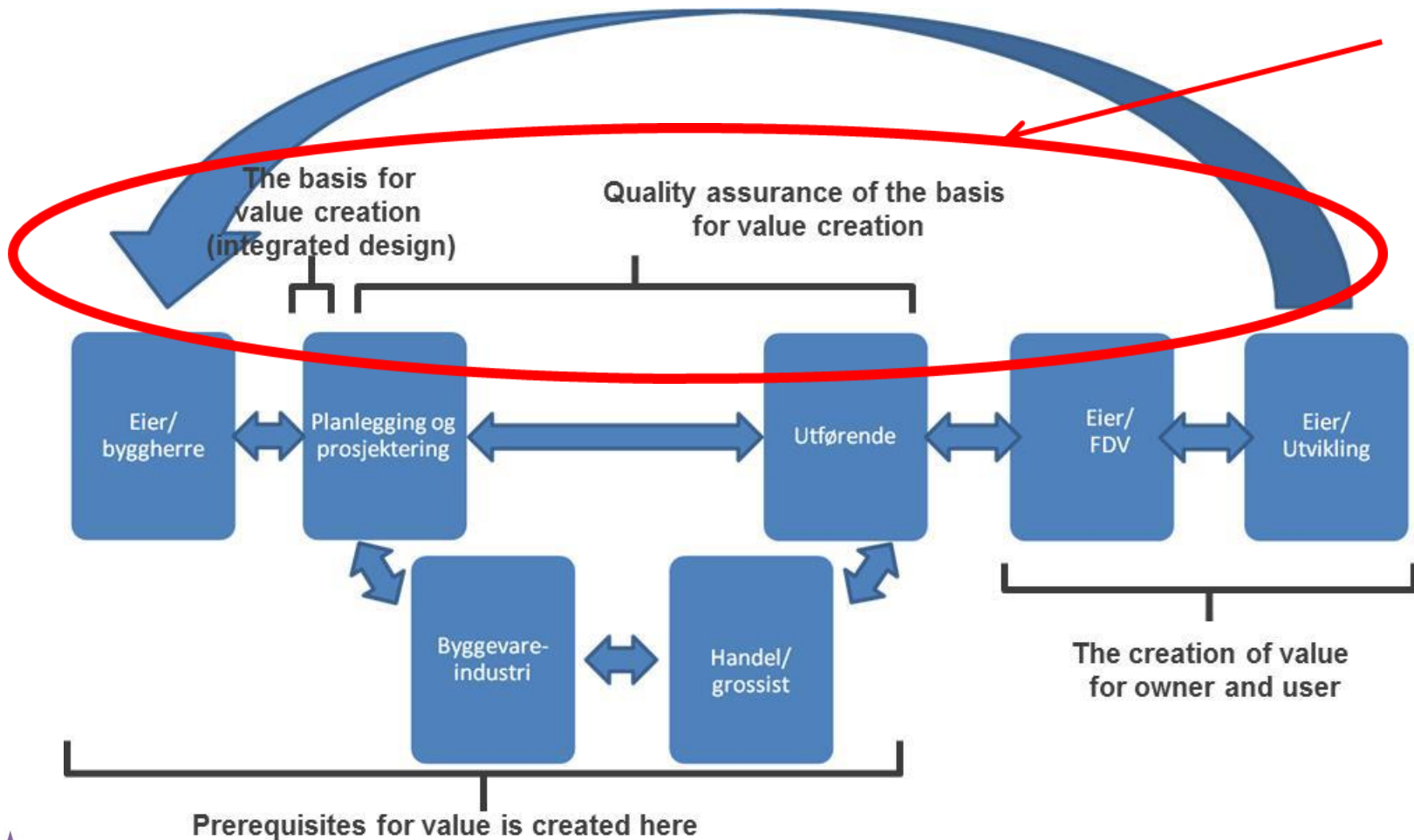


# INTERACTION IN THE VALUE CHAIN



# INTERACTION IN THE VALUE CHAIN

WG 3:  
Tools and methods





- **What do we mean with value?**
- **Value for whom?**
- **Users, owner and society**
- **Users; clients, customer and end-users**  
(ref. EN NS 15221-1)
- **End-users; patient, relatives, staff, etc.**

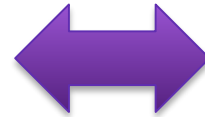


# VALUE CREATION

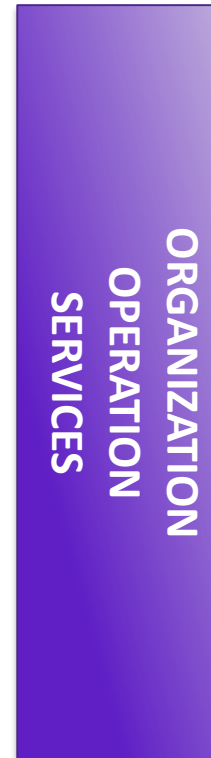
**WP1**



<b>ECONOMIC</b>
<b>SOCIAL</b> People and Organization
<b>ENVIRONMENTAL</b>
<b>PHYSICAL</b> Space and Infrastructure



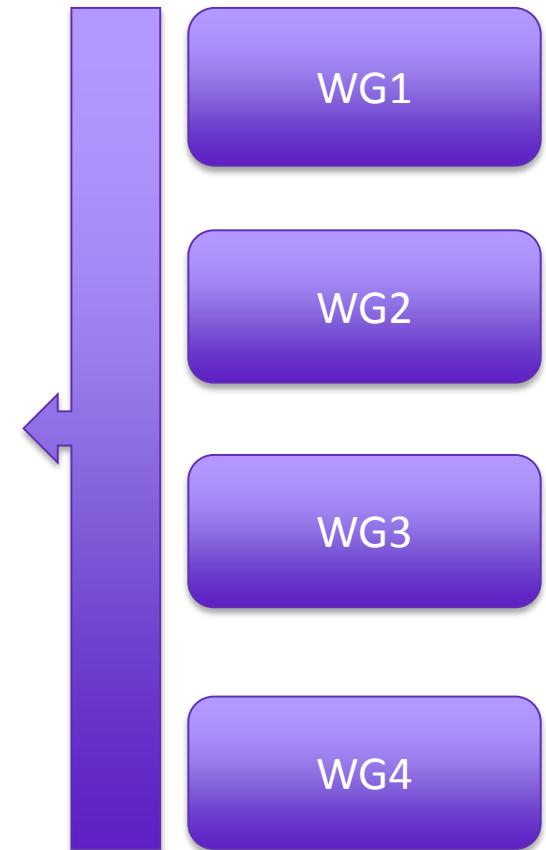
**WP2**



<b>ECONOMIC INCENTIVES</b>
<b>KNOWLEDGE</b>
<b>CONTRACT</b>
<b>PROCESSES AND ASSURANCE QUALITY</b>

## END PRODUCTS

- **«OSCAR word-book»**
- **Interactive guideline**
- **Collection of case descriptions**
- **Papers and articles**



# FINDINGS UP TO NOW...

**Surveys**

(partly based on  
literature review)

**Value for users  
and owners?**

**KPIs?**

**Obstacles?**

**Lit. review**

**Work-shops/  
interviews**

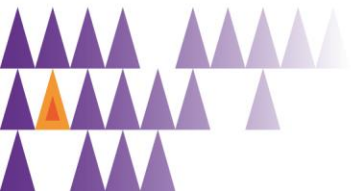




# RESULT SURVEY - GENERAL

## TARGET GROUP: PROFESSIONALS REFM

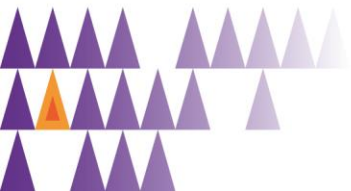
	All respondents except hospitals (N=480)	Respondents hospitals (N=90)
	Mean score, 1-4	Mean score, 1-4
<b>DO USERS AND OWNERS HAVE DIFFERENT PRIORITIES REGARDING VALUES?</b>	3,18 (to some extent-largely extent)	3,19 (to some extent-largely extent)



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# RESULT SURVEY - GENERAL

## EXPERIENCE EMPHASIS “VALUE FOR USERS AND OWNERS”

Economic Social Environmental Physical	All respondents except hospitals (N=480-540)	Respondents hospitals (N=80-90)
	Mean score, 1-4	Mean score, 1-4
Investment cost	3,39	3,40
Lifecycle cost	2,79	2,73
Energy efficiency	3,20	3,11
Indoor climate and comfort	3,17	3,00

# RESULT SURVEY - GENERAL

## EXPERIENCE WITH “ASSESSMENT AND KPI”

	All respondents except hospitals (N=480-540)	Respondents hospitals (N=80-90)
	Mean score, 1-4	Mean score, 1-4
Building condition	59%	70%
Area use	59%	57%
Energy consumption	69%	56%
Cost OMD	42%	40%
Indoor climate	52%	41%
User and/or customer satisfaction	49% 40/60	35%



den Heijer.A, De Jonge, h (2012) Linking decisions and performance: Adding value theories applied to the university campus.

- 12 ways of adding value (positive contribution to real estate goals and objectives)
  - Controlling risk, increasing real estate value, reducing the footprint, decreasing costs, increasing flexibility, increasing (user) satisfaction, supporting user activities, improving quality and place, stimulating image, supporting culture, stimulating collaboration,
- Every real estate decision should be justified by its positive effect in this effect.
  - Profitability
  - Productivity
  - Competitive advantage
  - Sustainable development
- In fact any decision that involves one of the five resources- People, capital, information, technology and real estate should be evaluated by

No	STAKEHOLDER GROUP (Specified)	Work Package 1			
		CHARACTERISTIC and SOLUTIONS OF BUILDINGS which contribute to value creation in user-phase during the Life Cycle	DEFINITION OF VALUE CREATION	EVIDENCES OF INTER-DEP of contributions or sc	
		CONTRIBUTE	DO NOT CONTRIBUTE	According to Author's Definition	POSITIVE
4	Property management role (owner), health care business (owner)	Adaptability, communication, capability and training, long term planning		Strategic FM (fulfill the four activities): Search / Translate/Process Management / Demonstrate (Howarth 2006, Kaya 2004). Search - proactive strategic role asking what to do with business direction. Translate - translate business needs and projects into workplace. Process - manages processes to provide workplace solutions. Demonstrate - results by way of satisfaction and impacts on business outcomes are demonstrated to satisfy the originating needs	
5	Client: organisation Customer: unit End user: staff, visitor	STRATEGIC - client satisfaction, culture, reliability, adaptability, cost of ownership and FM, asset value, sustainability, corporate social responsibility TACTICAL - customer satisfaction, productivity, flexibility, internal rent, project cost, energy consumption, emissions OPERATIONAL - end user satisfaction, timeliness, sociability, price of services, employment opportunities OUTCOMES OF THE CASE STUDY - cost reduction (financial), value by volume, quality and flexibility (non-financial) CO2 emission reduction, environmental portfolio, green account		Value adding management which can support FM organisations to deliver added value is focused on the effectiveness of FM and as supplementary to internal process management focusing on efficiency of FM Case study: Value added Volume - number of employees	
6	Client/owner perspective Provider perspective Stakeholders for	Value aspects in the operation phase: indoor conditions, adaptability, service life, safety, accessibility, usability, maintainability,		Value model(s) able to consider multiple aspects: economic, ecological, social and cultural. Generic (holistic) model, applicable to specific business scenarios	

# LITERATURE REVIEW

Sarasoja A.L., Aaltonen A. (2012) as a way to create added value

- Median contribution of facility activities economically is 6) of expenses, but 65% (53-82) of the environmental impact.
- Impacts after implementation of green FM
- Enhancing employee satisfaction (Average result on scale of -3 to 3 went up from 0,68 to 1,20)
- Reducing costs (Biggest cost savings were gained from electricity (-9%) and heating energy (-27%) reduction)
- Increasing employee efficiency and productivity
- Culture: promoting, marketing, sales and organisational brand (media attention to the project)
- Supporting environmental sustainability
- Increasing the value of the real estate assets

Titel	Udfordringer	Interesser	Perspektiv
Alle interessenter i projekter kræver "EVALUATION" Resultatet af denne viser interesse i renovering og forbedring af bygningen	Deltagelse fra alle interessenter i projekter og i de involverede samarbejde blandt de involverede	Hvordan kan vi løse problemer ved renoveringsprojekter?	Hvilke perspektiver har byggherre, arkitekt og renoveringsfirma?
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# LITERATURE REVIEW – SOME GENERAL FINDINGS

- Value; we all own the truth ....to a certain extent
- **Frequency of changes** increases in the core business, especially in hospitals. Is it possible to define end-product value in early phase?
- **Cross sector learning!** Oil&Gas and Telecom.
- Large responsibility for purchaser, a need to increase the competence of purchaser.
- Large potential when it comes to the use of **digital tools**. **Fail early.**
- Take a **pedagogic approach** to the methods used in the sector, to get users to contribute purposefully in the projects.
- Large potential regarding the use of time and resources in the early phase - include the perspectives of the users, by focusing on the **project effects**.

# RESULTS SURVEY - GENERAL

## EXPERIENCE “OBSTACLES FOR OBTAINING VALUE FOR USERS AND OWNER”

	All respondents hospitals (N=480-540)	Respondents hospitals (N=80-90)
	Mean score, 1-4	Mean score, 1-4
Lack of appropriate and clear commissioning of the project (mandate)	2,74	2,87
Missing multidisciplinary understanding in the project organization	2,70	2,87
<b>Missing focus on and knowledge about the operational phase</b>	<b>2,75</b>	<b>2,90</b>
The technical professions has a too dominant role in early phase project development	1,98	2,02

72% of the respondents have a degree in engineering

- The industry's own conception of the need for improvement and results of the national and international research does not match.
- Need for more knowledge:
  - What is value for clients, customers and end-users?
  - What are users experiences regarding obstacles?
  - The significance of this findings in real estate projects, especially in the early phase.
- Methods and tools the bridging the gap.



# CASES IN PROGRESS – HOSPITALS/HEALTH CARE

- Case: Oil&Gas sector versus Hospitals planning proses
- Case: Post Occupancy Evaluations method/tool.
  - Development and tests
  - Value for You or Your organization? «wanted position» and «as is»
  - «Is this reflected in early phase PM?»
  - Tool/method for coming project
- Case: Is the building used as planned?
- Case: Strategic area planning
- Case: Using BIM – gaining value

## OSCAR – THAT IS US!



Ph.d, master- and  
bachelorstudents







# Thank you for your attention!

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