

AUSTRALIAN CONSTRUCTION INDUSTRY CONFERENCE, SYDNEY SUMMER OF 2005



Denmark – 5 years of experience in optimising the value added through Lean design processes.

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PRODUCTIVITY – THE GOAL OF LEAN



$$P_{\text{roductivity (P)}} = \frac{V_{\text{alue (V)}}^{\text{max}}}{R_{\text{esources (R)}}^{\text{min}}}$$

An essential question:

How do we get maximum Value out of our resource investment?

SIMPLE QUESTIONS – COMPLEX ANSWERS



- What is Value?
- Value to whom?
- How do we find it?
- How do we deliver it?

WHAT IS VALUE?



- Value in the Product and value in the Process
- The perception of Value is individual.
- Value changes over time.
- Value at a strategical Cultural/Political level and at an operational project level.

VALUE TO WHOM?



- Society?
- Owner?
- User?
- All of them?
- A lot of Stakeholders a lot of interests –
and can they agree on common values?



HOW DO WE FIND IT?

We need a methodology that deals with client/customer complexity and the "nature" of value

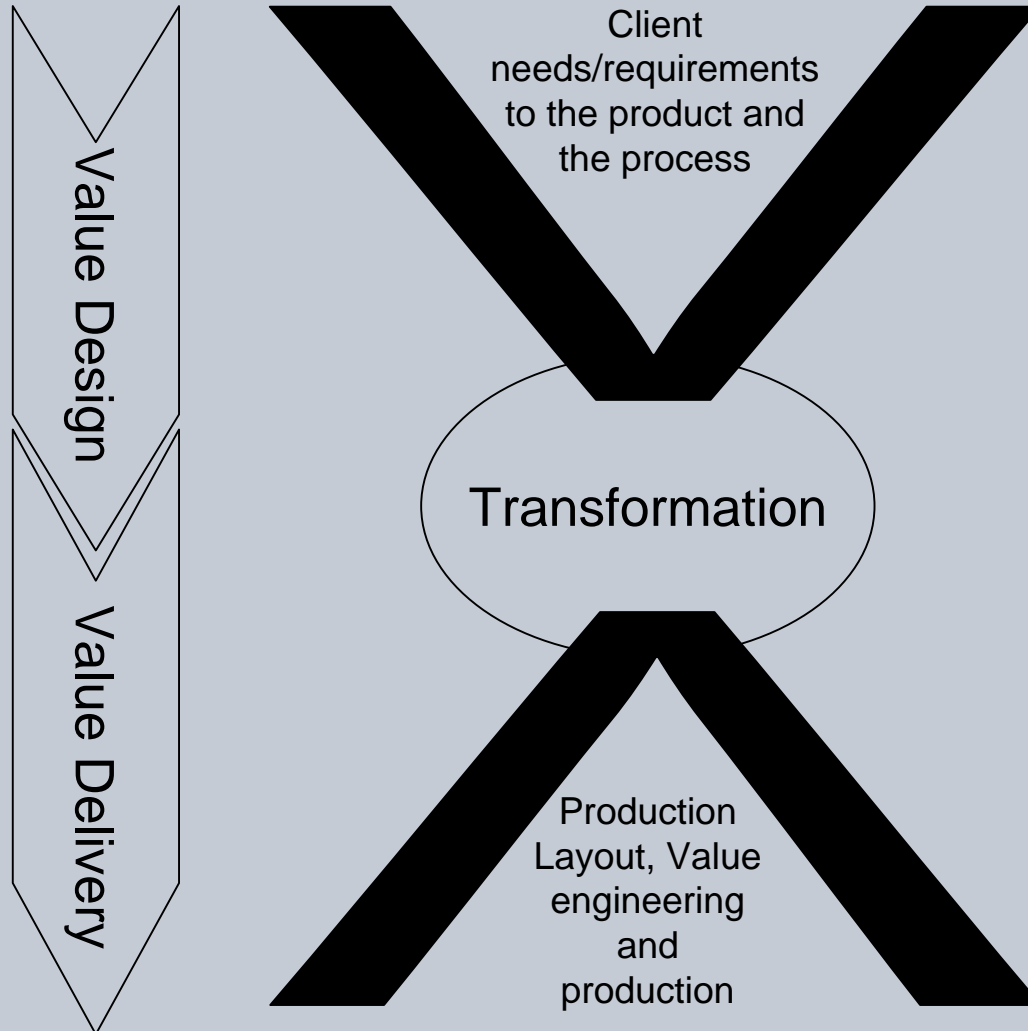
Client			
Value	Society	Owner	User
When we build			
When we use			
For the aftertime			

HOW DO WE DELIVER IT?



- We must define it before we can deliver it.
- This means that we have a phase of creating/designing value.
- And when we are “certain” that we have the best value within a given framework,
- We go into “production” focusing on the effective delivery of the value – another phase, another thinking but still focused on value!
- Two “Mental” phases: Value Design and Value Delivery.

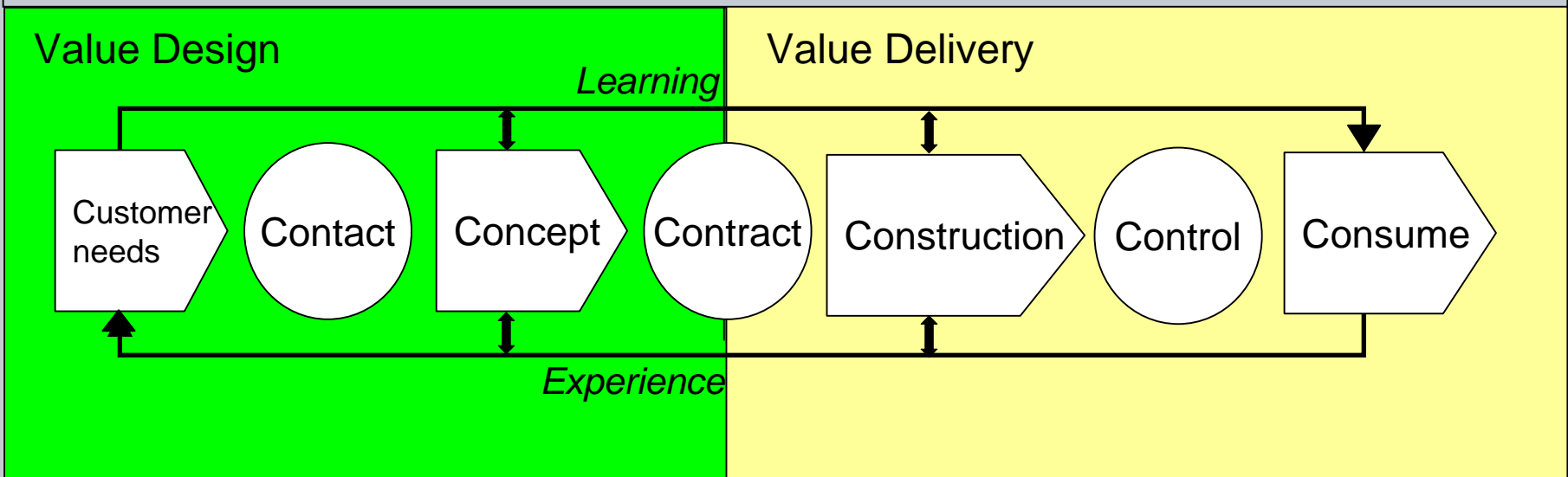
VALUE MANAGEMENT – A TRANSFORMATION



A VALUE BASED APPROACH TO PROJECTS



A NEW VALUE BASED BUILDING PROCESS - 7 C'S

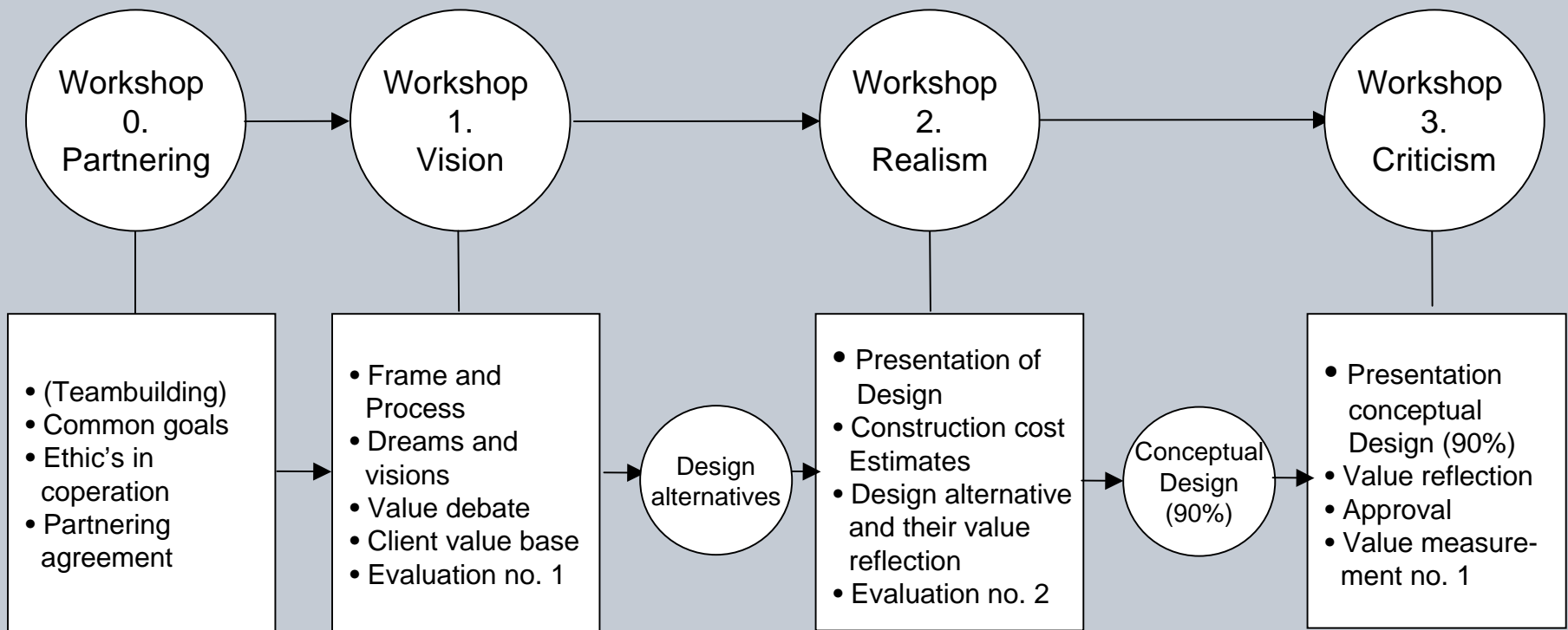


VALUE DESIGN IN THE EARLY PHASES



- Identify stakeholders
- Identify needed competences
- Organise and prepare them for the process
- This goes for the Architects, Engineers and Contractors as well.
- Create an optimal communication and decision making forum.
- Define process values (ethics, communication, performance)
- Define product values.

THE WORKSHOP METHODOLOGY

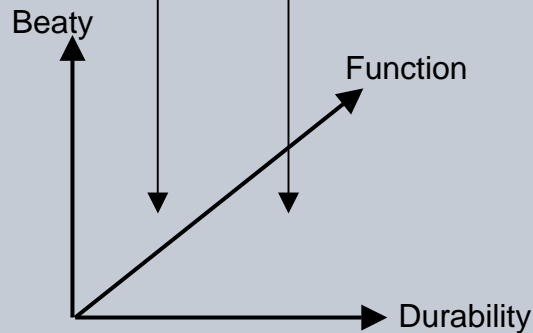


THE CUSTOMER'S/CLIENT'S VALUE – THE DELIVERY TEAMS DESIGN SOLUTIONS



The Customer/Client:

- Complexity/organisation?
- Vision?
- Dreams?
- Needs/Requirements?



The Value Universe:

- Holistic approach
- "Standard" value agenda
- Basic Client Values



The delivery team:

- Present design solutions
- Which reflect the customer values
- And the framework (time, costs etc.)

TOOLS/METHODS



- The partnering agreement as one of the Human Resource Management tools defining Process values.
- Vision, Realism and Criticism as a mental tool/framework.
- The standard value agenda as a tool to define the basic client values to the product.
- The basic client values represented by the value tree as a guiding star for the building design process.

VALUE DELIVERY IN THE CONSTRUCTION PHASE



- Transformation from creativity in design to effectiveness in delivery – From Value Management to Value Engineering.
- A series of workshops focusing on Buildability and Value Engineering
- Finalising the design (predesign and final design) with the use of Last Planner System thinking introducing focus on effective delivery in the design team.
- Making production layout for the construction using LPS and SCM.

MANY EXPERIENCES FROM 5 YEARS OF WORK



- The more complex a project is with respect to the client organisation and the design of the project the more needed the value approach is.
- A growing understanding of how important the value approach is to achieve growing productivity (defining Values is a basic condition for being effective) and client satisfaction.
- A growing number of Clients are interested.
- We are achieving excellent reviews from our clients.
- We are bringing the value thinking from a project level to a strategic level of understanding and use.