



Global Networking Address

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Basis for Networking

- Technology
 - Infrastructure and platform
 - Software & hardware to plug in
 - Moving “beyond the documents”
- Communication
 - AEC is very information intensive branch
 - AD HOC project teams, one-of-a-kind products
 - Information and communication technologies merging ⇒ **ICT**



Basis for Networking

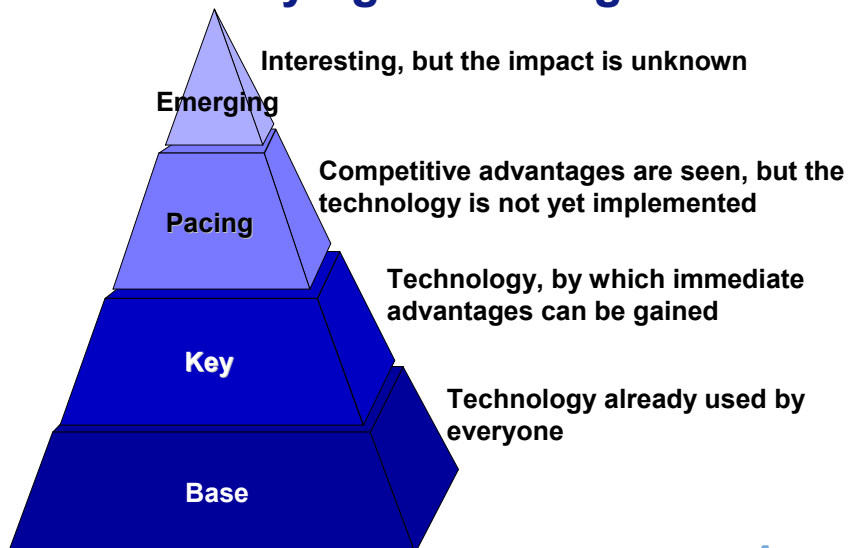
- Education for new processes
 - Automation of old processes is not sensible
 - Re-engineering is a difficult task – old habits die hard
 - Rapidly changing working environment is a constant challenge
- Culture
 - Human behavior
 - Common understanding
 - Trust

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Identifying technologies



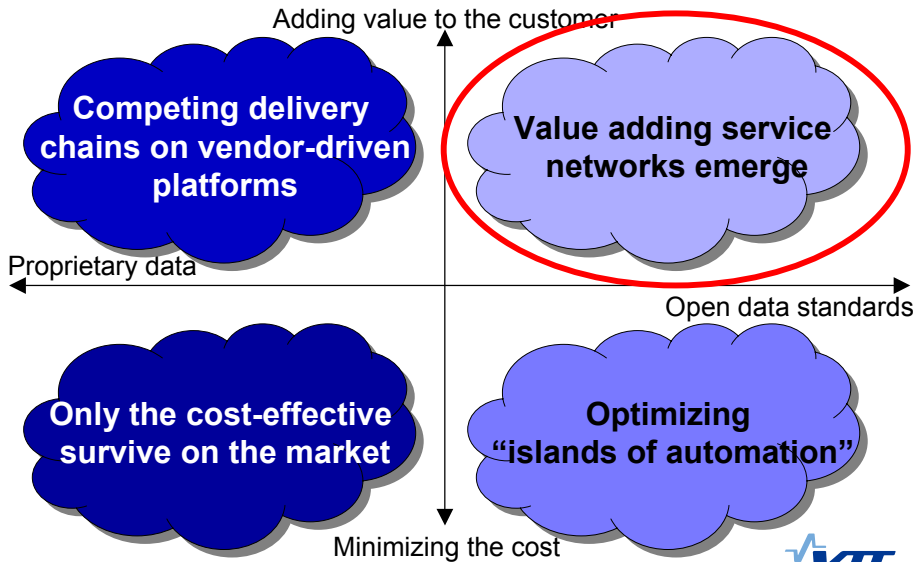
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Source: Tapio Koivu, VTT

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4 Scenarios of Future



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Moving beyond documents

What if the competitive factor is the quality,
and not only the lowest price...

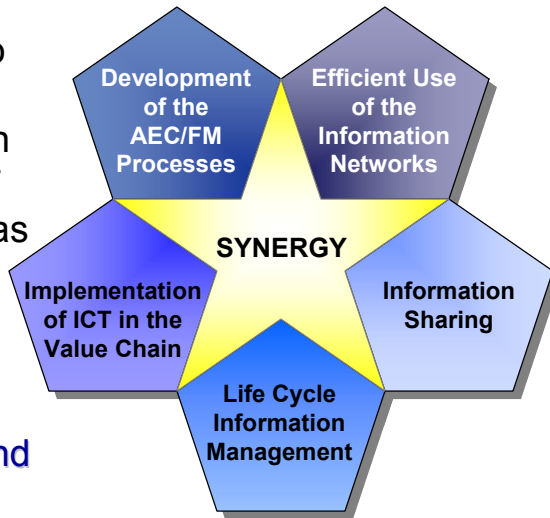


Booth #303
or
12:15-1:00PM



Target of Vera Technology Program

The target is to promote the implementation and use of ICT and networks as the enabling technologies to re-engineer the design, construction and FM processes

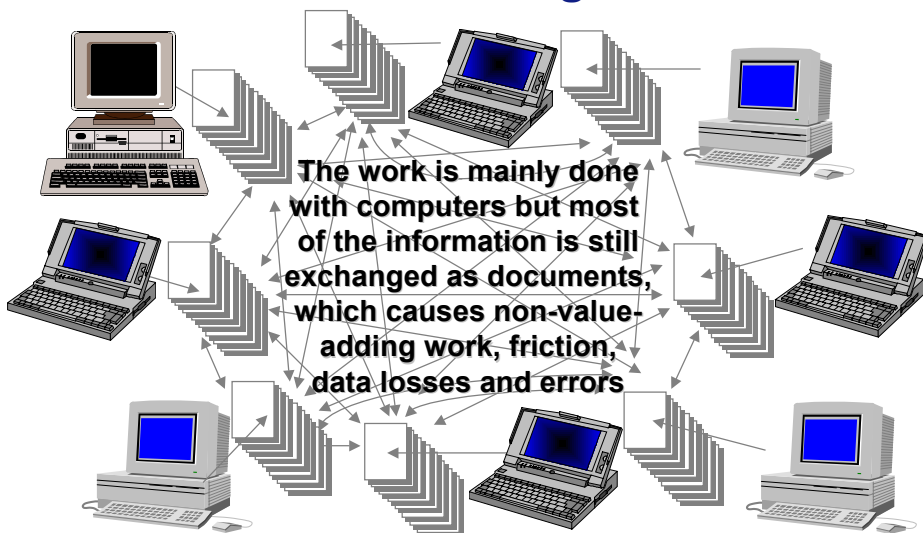


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Information Sharing Problem

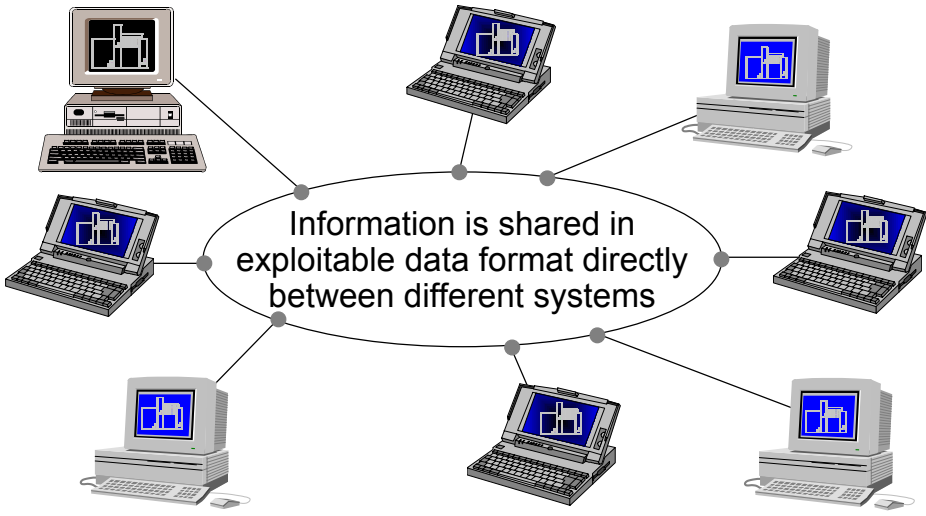


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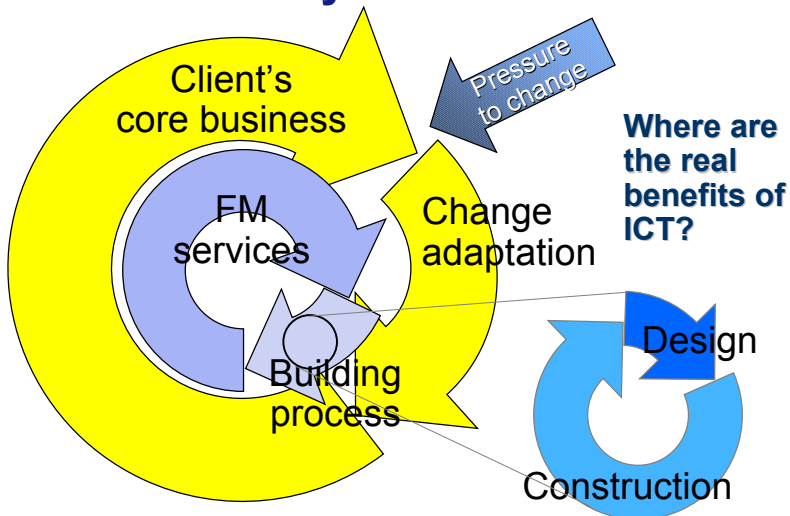
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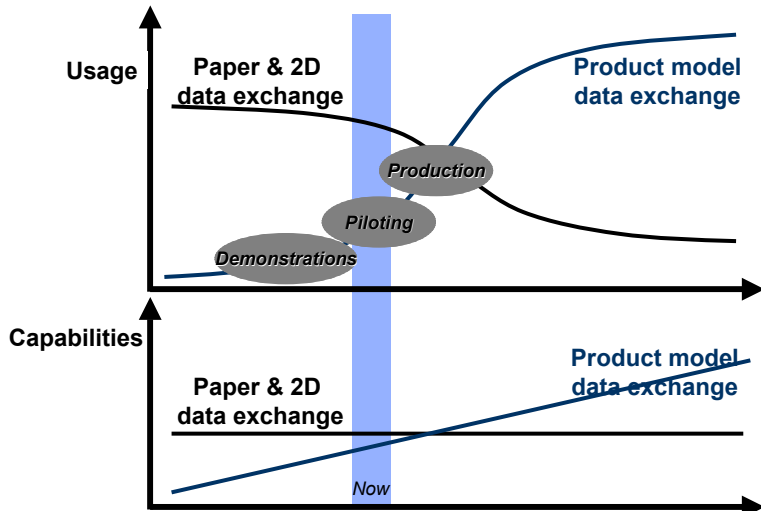
Goal in the Future



Life Cycle View ?



IFC Capabilities and Usage



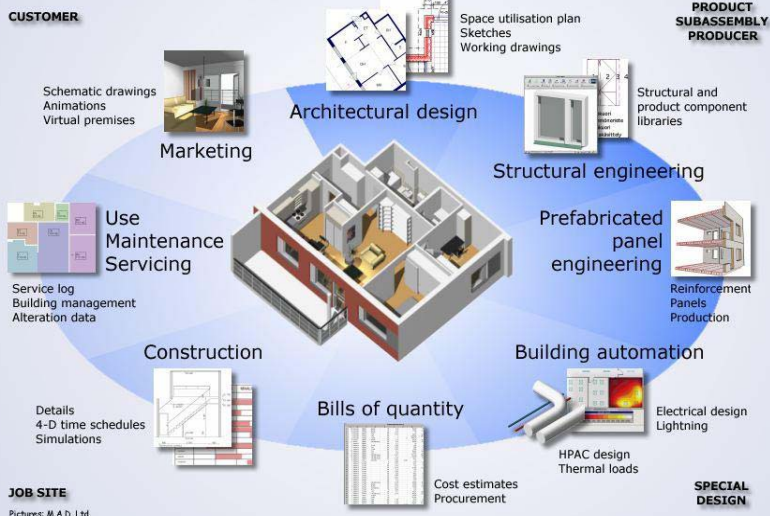
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Product model-based design



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Why PM (Product Model) pilot?

- Research goals:
 - *Use of product model in the early phases of a project*
 - *Information exchange using product model*
 - *4D-approach*
- Management goals
 - *Proof of concept for new technology*
 - *Life-Cycle calculations – LCC / LCA*
 - *Visualization*
 - *Cost control: Design and construction phases*

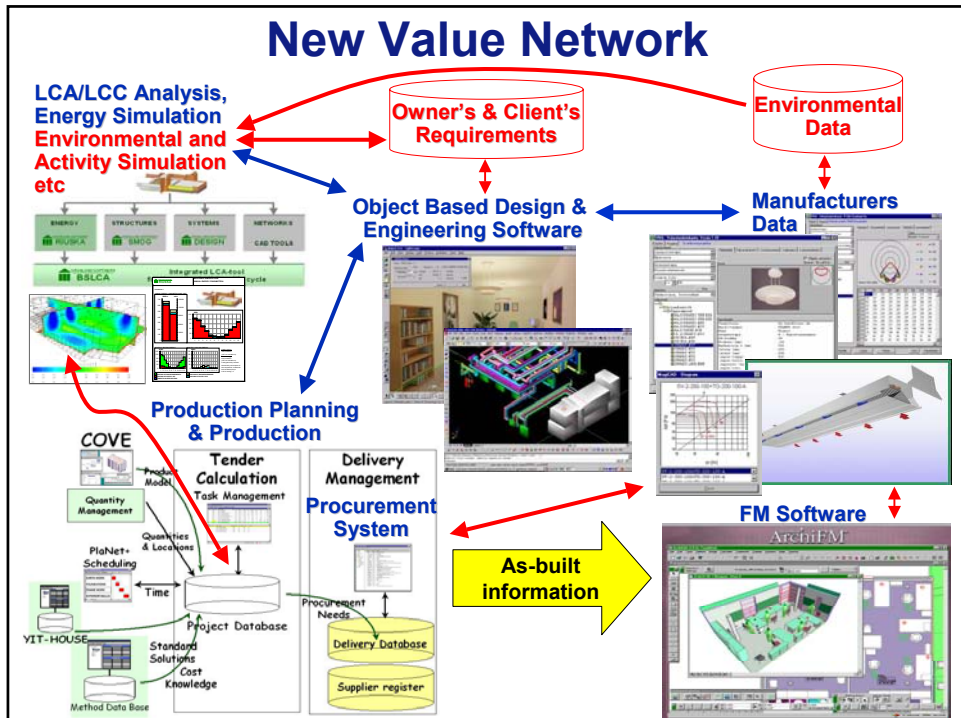


What did we benefit?.....

- Life cycle studies and alternative comparisons
 - *Full life-cycle analysis available in early design*
 - *Decisions based on accurate information*
 - *Minimizing of risks in decision making*
- Reliable budget and cost control
 - *Supply management: quantities*
 - *Impact of each change evaluated*

How do we continue?.....

- A new pilot project using PM (Product Model) approach
 - *Piloting Product Model in Pre-Project Planning*
- Modeling of existing buildings
- Participating in PM development
- Facilities management software developers – get along
- New Business practices
 - *processes, roles, responsibilities*
 - *requirements to use PM-enabled tools*



New Business Concepts

- "Drafting" ⇨ information management
 - "document" ⇨ a view of the model from a specified angle at a specified moment
 - **still many technical and juridical problems**
- Environmental issues are coming more and more important
- Information will be produced for:
 - decision making and production
 - use and maintenance of buildings
- Minimizing the cost ⇨ maximizing the added value through the whole building life cycle

Some conclusions

- Boundaries will not be physical, but mental;
 - Our skills and ability to serve our client's needs and adopt new technologies
- Distances are not physical,
 - Defined by the technological infrastructure
- Need for differentiation
 - Competing on the cheapest price gives no possibilities to develop
 - What added value can we bring in the process and to our customers?