

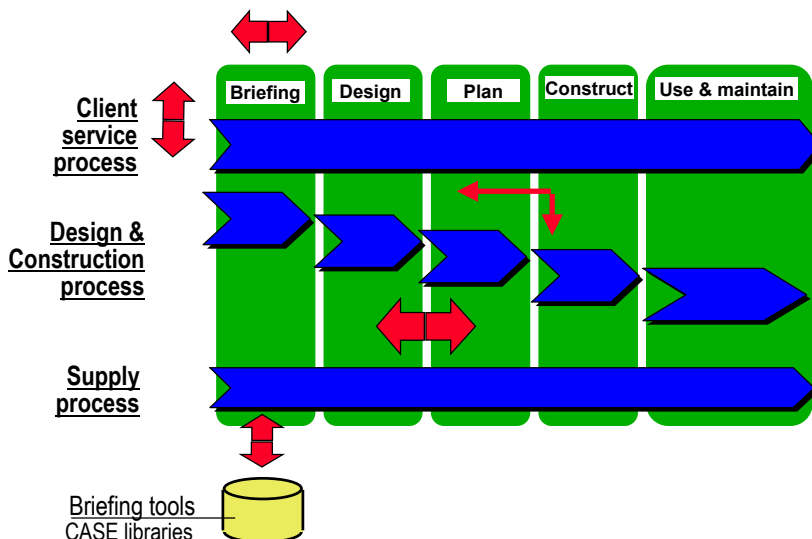
YIT in Brief



- YIT is the largest construction company in Finland
 - Net sales (estimated 1998) 6 billion Fim
 - Operating profit (1997) 314 million Fim
 - Average personnel (1997) > 6 500 employees
 - Regional offices (1997) 125 (abroad 25)
- COCON/FinnCORE development target
 - Manage the information (versus document handling)
 - To exploit designers' information as basic data for cost and value engineering
 - Build up an enterprise production model based on design data;
 - for tendering and cost and value engineering
 - integrate contractors activities (scheduling, logistics...) utilizing the same production model information
 - definition of customer decision support tool in the briefing phase

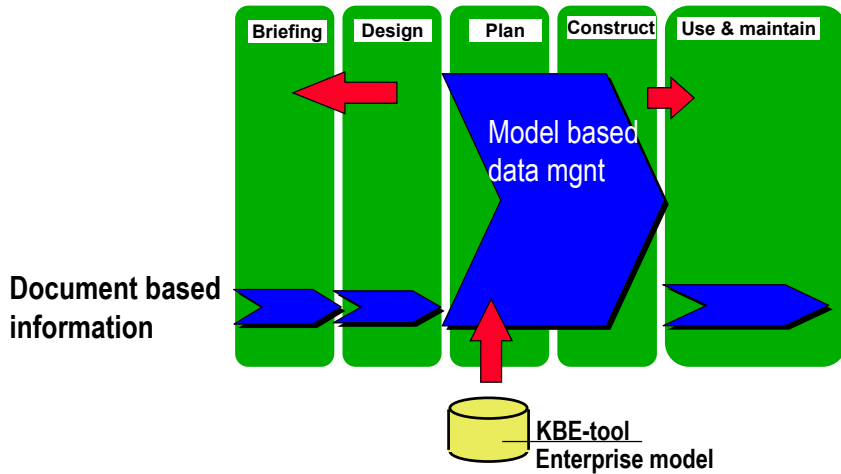
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Problems in the Construction Process Value Chains

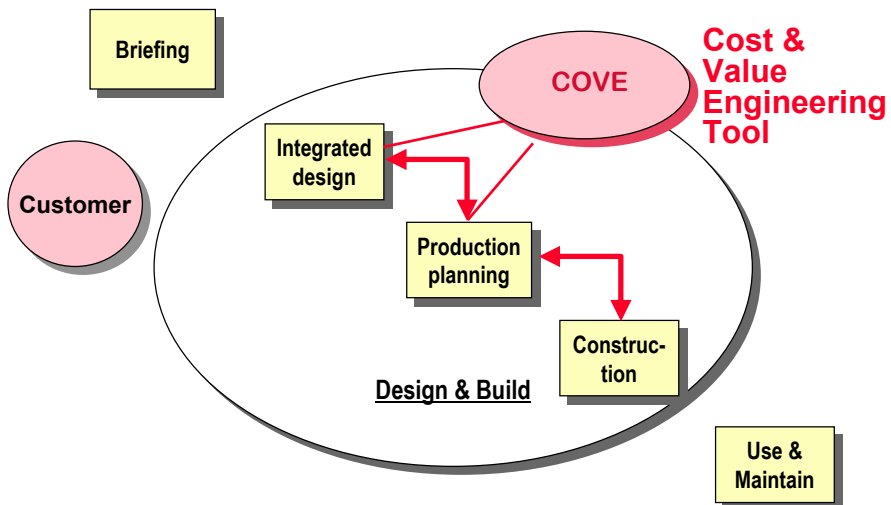


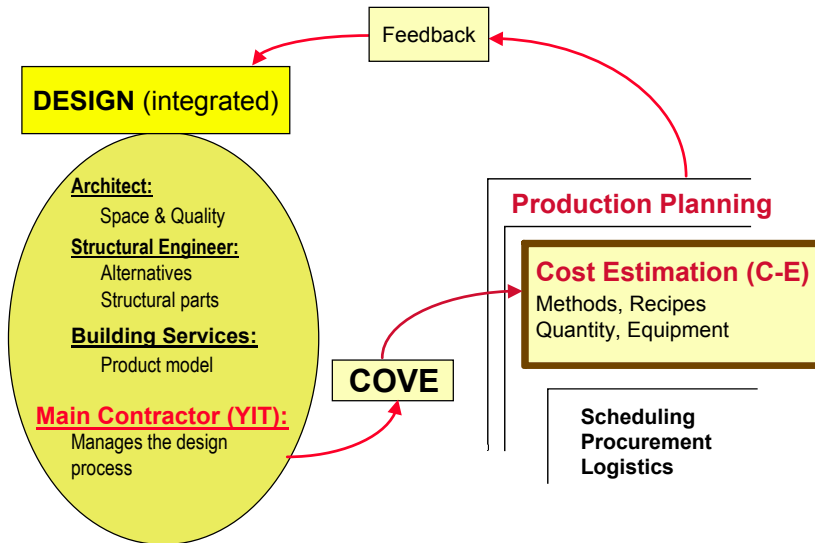
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Process (Information) Management

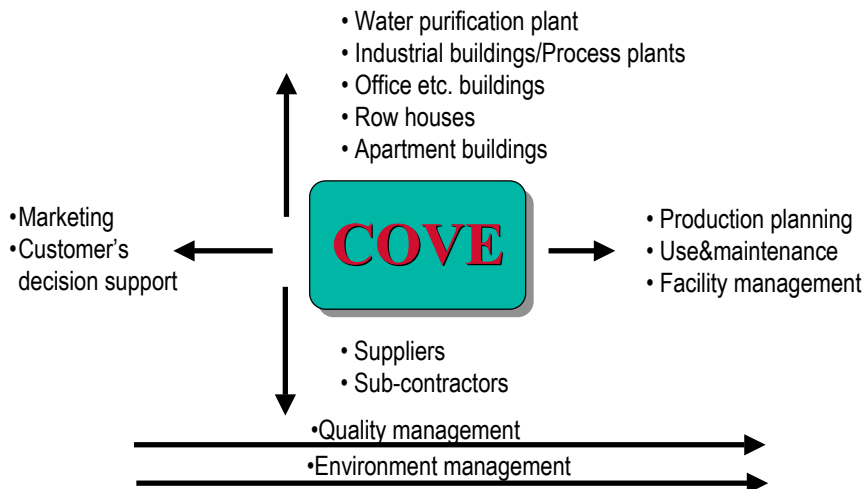


Model Based Integration



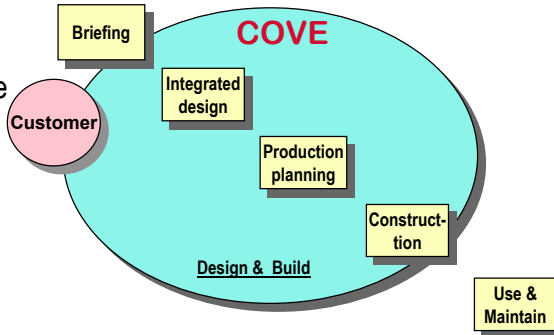


COVE, Future Development



Decision support

- Early in the briefing phase (space model)
- Reliable cost and schedule
- Life cycle economy analysis
- Environmental impact (based on to day's knowledge)
- Visualisation of alternative solutions (impact)
- Visualisation; 3D images, walk through



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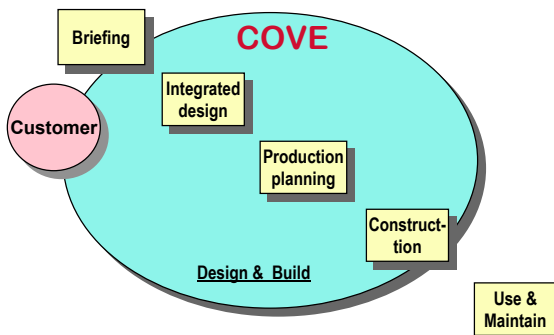
Design & Construction

Design management

- Analysis of design solution
- Cost & value engineering
 - Cost estimations
- YIT-solutions (standard product structures)
- Alternatives (total/sub optimisation)
 - Analysis of their impact

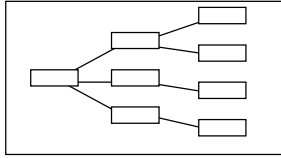
Production planning & management

- COVE-information directly to production planning as basic data (scheduling, task planning)
- Modeling of procurement and logistics
- Visualisation, 3D-images

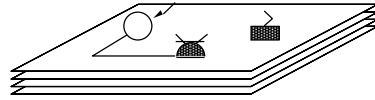
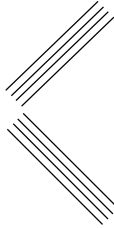


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Production Tools



Product Model
Design⁺⁺ a KBE-tool
Creating Data

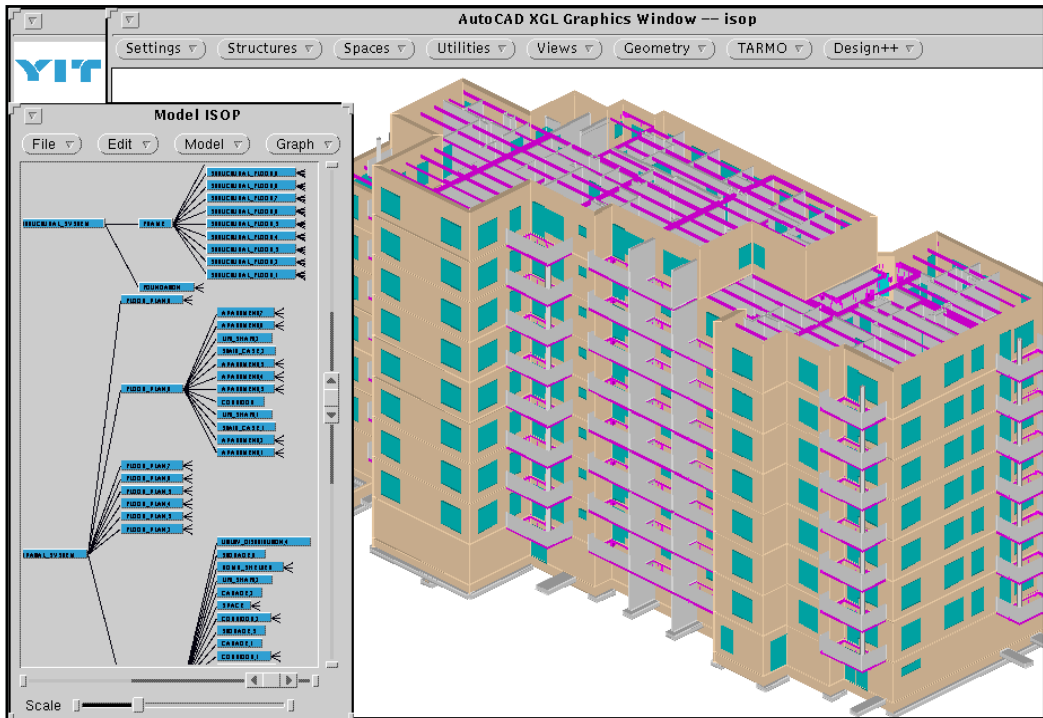


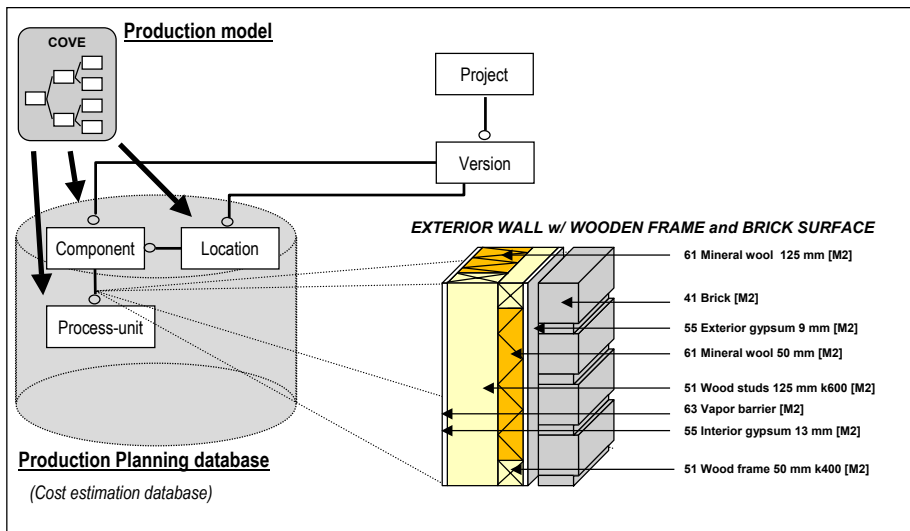
CAD-tool
e.g. AutoCAD
Visualizing Data

Database-tool
Managing Data

PL110211L	PINTORASSA	SUKIAMAADOTTITU	JL
PL110221L	PUHRASSA	SNAPAINEN	KV
PL234567L	PUHDI	MMLAJEJ	KV
PL110211L	JPP 20KIV	JAVKKA TP JPP 20	KV
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Results and future actions

- Ability to manage cost and value engineering
 - Analysis of the design solution
 - Check alternative solutions
 - Tendering lead time only 20% including analysis
- Better customer decision support
- Definition for the briefing phase tool
- Definition for the integration of contractor's activities

- Conclusion: Construction Process Management improved!

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