Industrial Machinery & Mobile Equipment

Engineering Presentation

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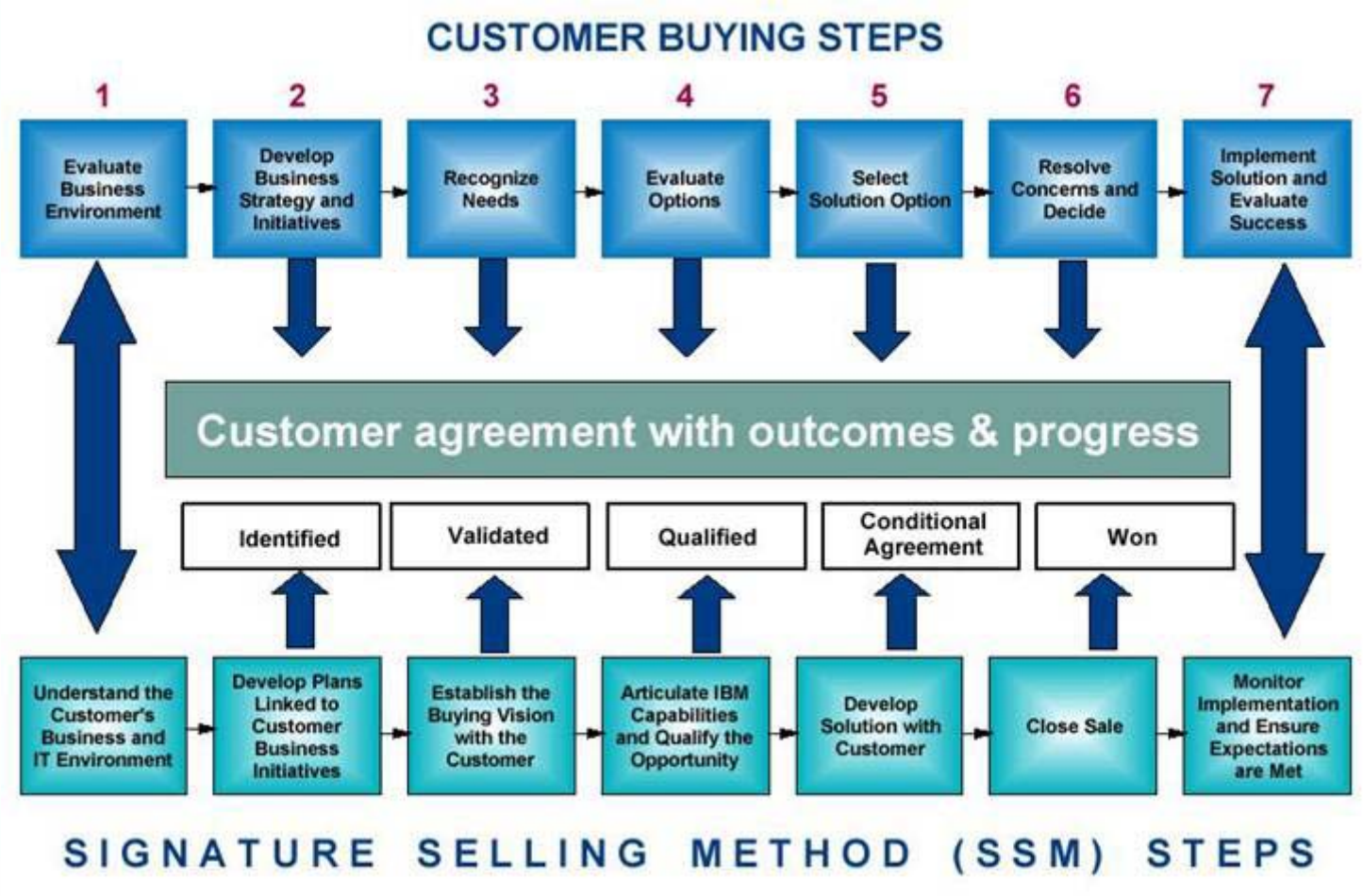
The Signature Selling Process



Agenda

- Product Lifecycle Management
  - Key Business Initiatives
  - Consultant Messages
  - Process overview
- PLM Process Scenario
  - Bidding Process
  - Design Planning
  - Supply Chain Collaboration
  - Service After Sales

Product Lifecycle Management

Key Business Initiatives and Challenges

- Nearly half of all new products do not justify the resources it takes to launch them
- Business must innovate … or die
- Cut cost or lose your competitive edge
- Customers are driving unprecedented level of demand
- Customers want desirable, customized products accomplish by responsive, highly available services
- Partners and suppliers demand increasingly extensive interfaces

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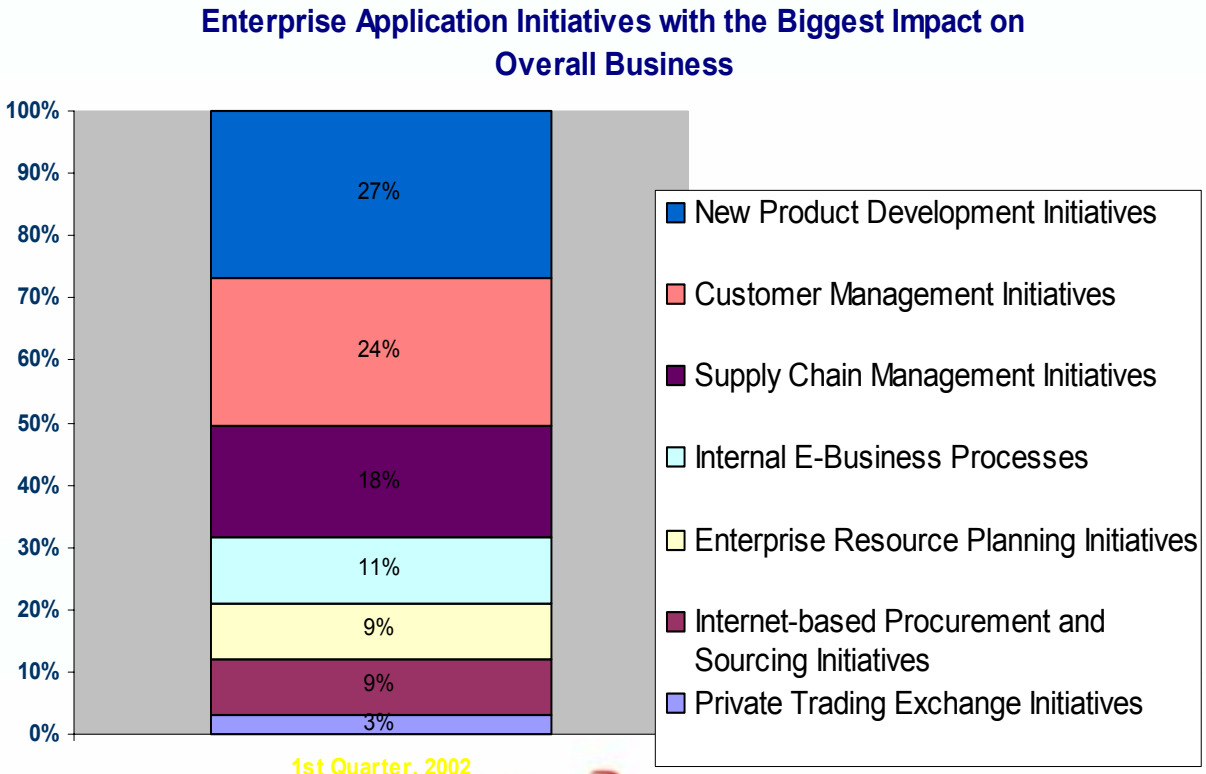
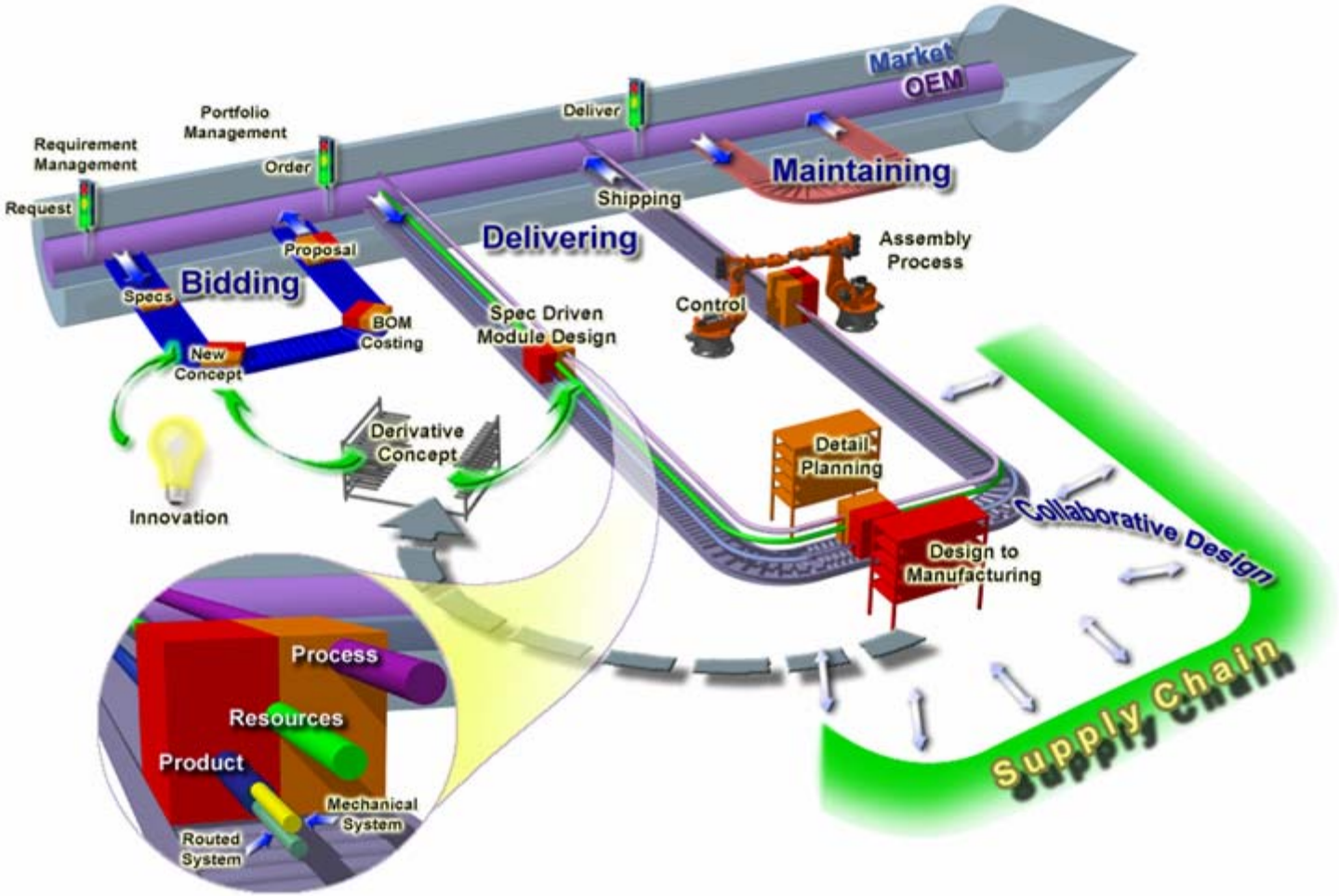
AMR Research: PLM Messages

- PLM is inevitable. CEO's take notice.
- PLM cannot be bought in one piece.
- PLM Roadmap starts with Corporate Strategy.



Process overview and dreams



PLM Process Scenario

- 4 Scenarios
  - Bidding process
  - Design Planning
  - Supplier Integration
  - After Sales
- Scenario to include
  - Objective, Customer Challenges, Customer benefits and capabilities

Bidding Process

- Objective
  - Reduce long cycle time for bidding, provide ability to respond to changing customer requirements, need to search in existing portfolio to find appropriate project/product for re-use

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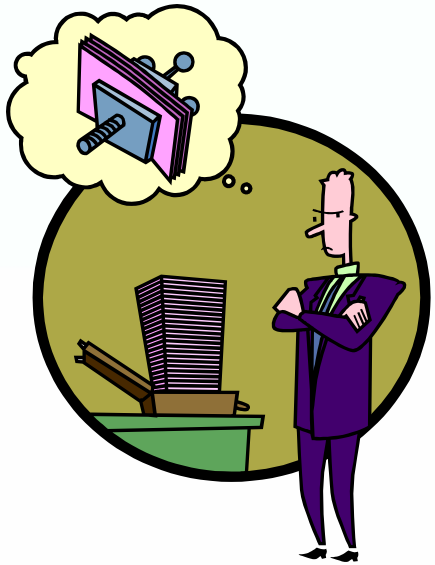
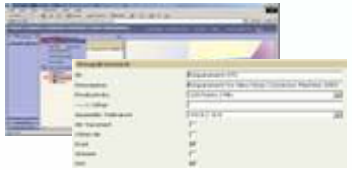
Cost of bidding can be almost as much as winning the business!

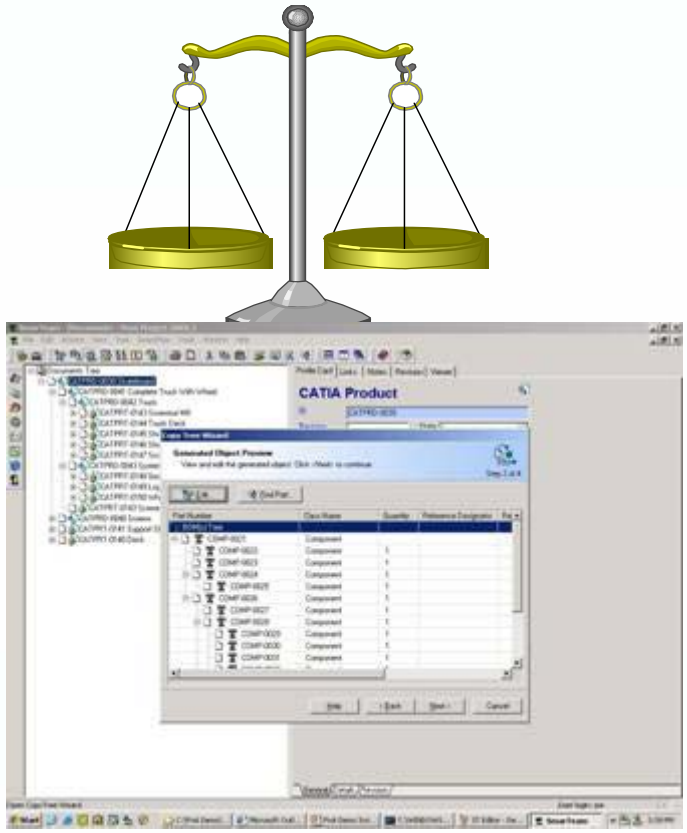


- Normal procedure
  - Believe that we can use an existing design but:
    - Did we do it correctly the 1st time.
  - Believe that we can just extend a new design and update it
    - Was the last one an extension of an extension
  - Believe that we need a new design
    - Can anyone remember how to do a new design?
  - Who needs to contribute?
    - 10% of team respond on time
    - 30% of team respond on time but wrong
    - 50% of team respond late
    - 20% play golf!



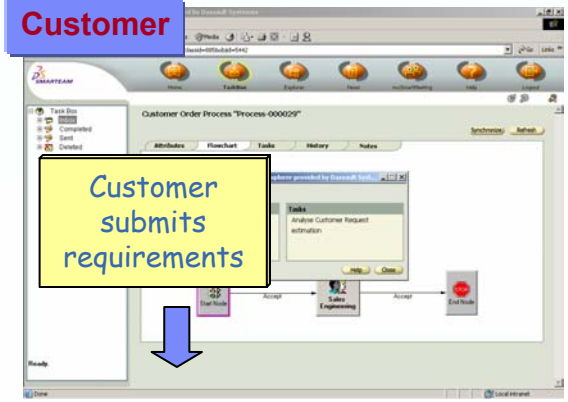
Do you quote quickly or quote accurately?

- If you produce a response quickly:
  - Is the quote accurate?
  - Does it cover all the correct points?
  - Can you respond too quickly?
- If you respond in detail:
  - Is the cost of replying to the quote to high?
  - Does the customer understand the issues and proposal you make?
  - If the customer changes his mind, is there a lot of wasted effort?



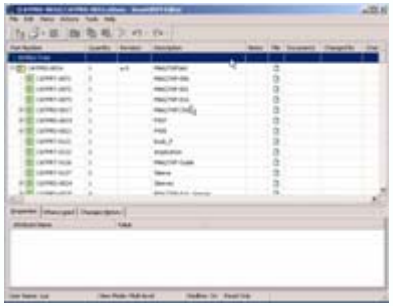
Bidding Process Overview

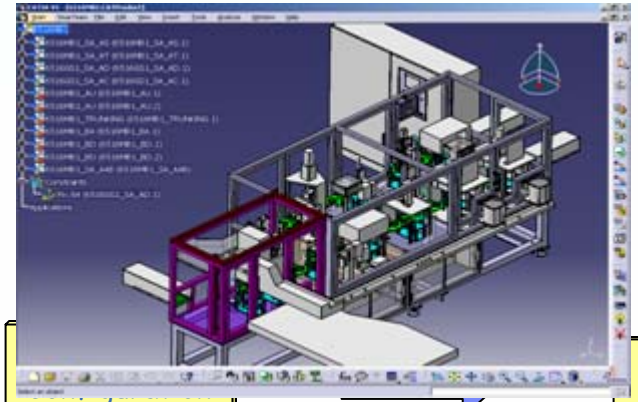
Customer



Customer submits requirements

Requirements analyzed by Sales Engineering

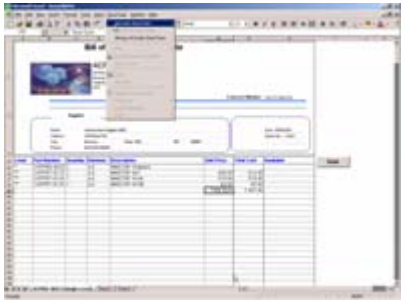




Definition

Sales engineering

Part re-use availability



Final costing and submission

Finance

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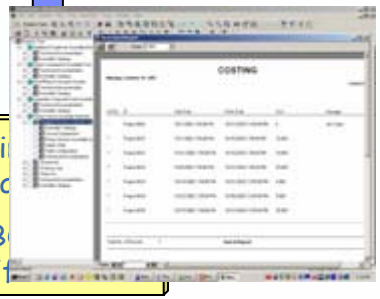
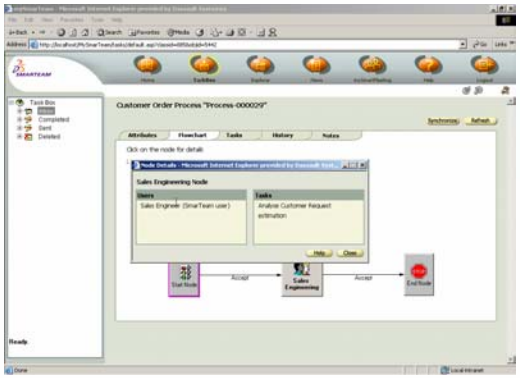


Bidding Process Summary

- Capabilities used and Customer benefits
  - Put in place automated process to deliver and capture information from appropriate departments and customer requirements
  - Rapid re-use of existing industrial data.
  - Rapid modification of existing designs and processes to match the new customer requirements.
  - Complete control of the bidding process using Workflow capabilities with interactive customer input
  - With RFP best practice you may achieve 30% faster response with higher win probability

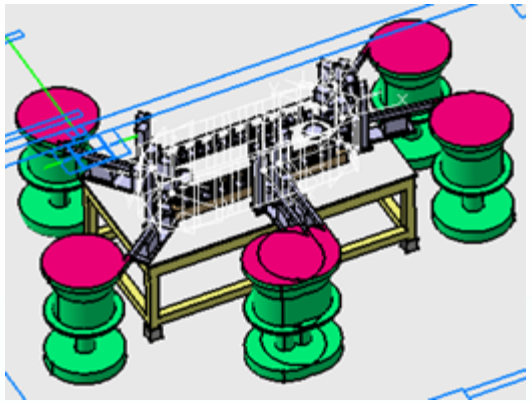


Design planning

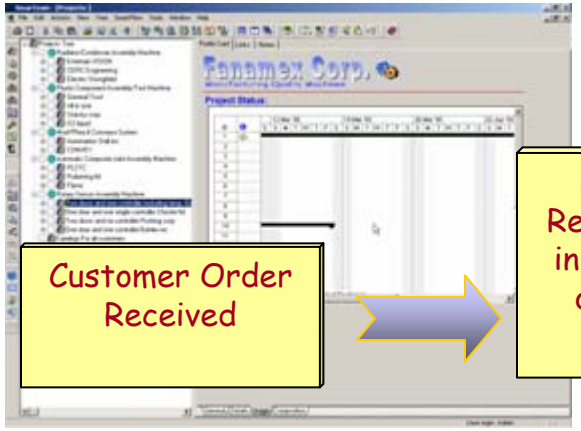
- Objective
  - Need to involve other departments in the design process to reduce long cycle time for design/build to order, to rapidly bring new product to market and respond to changing customer and market requirements

Design planning

- Normal procedure:
  - Plan to reuse existing project data
  - Redesign 60% of parts because you couldn't understand the original design
  - Have to re-design with other departments comments - process planning, manufacturing, certification,
  - Procurement to have access to design data for review.
  - Use existing parts to make it easy for manufacturing
  - Manufacturing use the old drawing that they had kept in their tool box
  - Manufacturing say that this part will not work, just like they told you last time that it will not work.
  - Part doesn't work.
  - Is the new project scheduled into the shop floor?

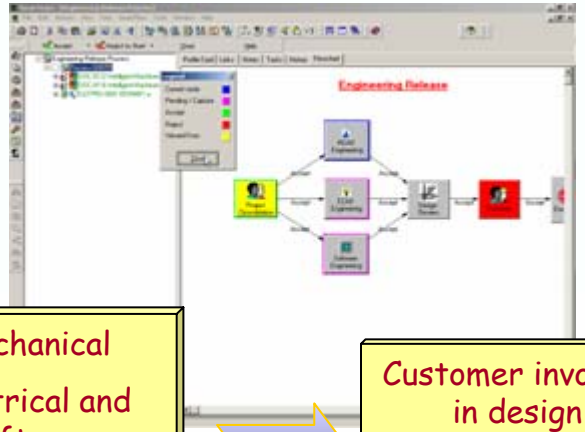


Design planning



Customer Order Received

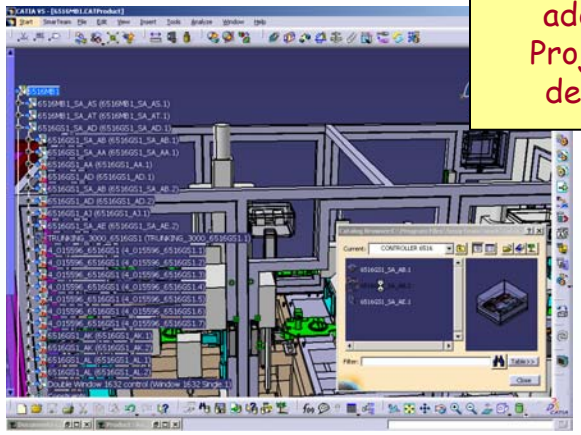
Engineering Release Process initiated based on customer request



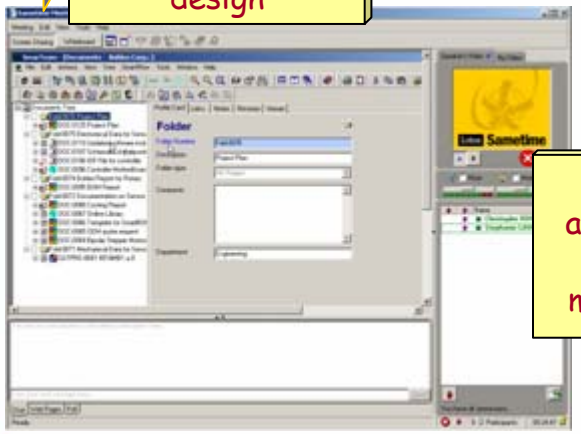
Mechanical

Electrical and Software engineers collaborate on design

Customer involved in design authorization



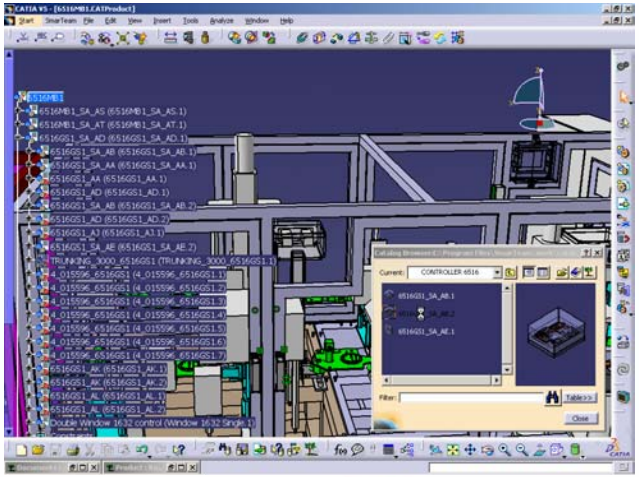
Documents added and Project Plan developed



Project authorized for release and manufacturing

Design planning

- Capabilities used and Customer benefits
  - Speed up design process with Workflow, Collaborative Workspace, New pro-active design methodologies to incorporate and enforce best practices.
  - Using Workflow the customer can make the EC process up to 90% faster
  - By optimizing internal performance the customer could increase new product introduction success rate by 2X
  - By improving customer facing performance the customer can achieve 30-50% faster time to market
  - Customer satisfaction improvement by actively responding to his requests.



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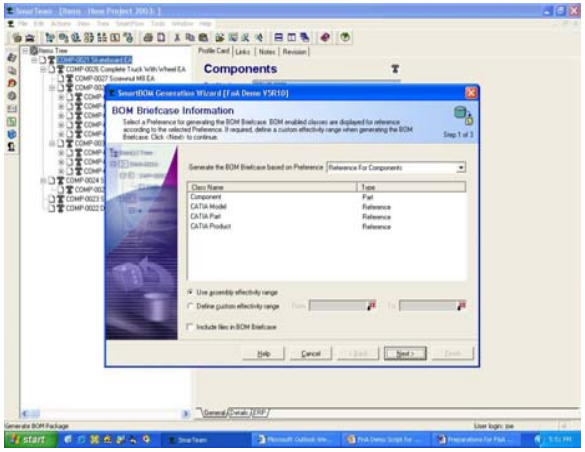
Supplier Integration

- Objective
  - Need to involve supplier in design process by sending and receiving engineering data with your suppliers

Supplier Integration

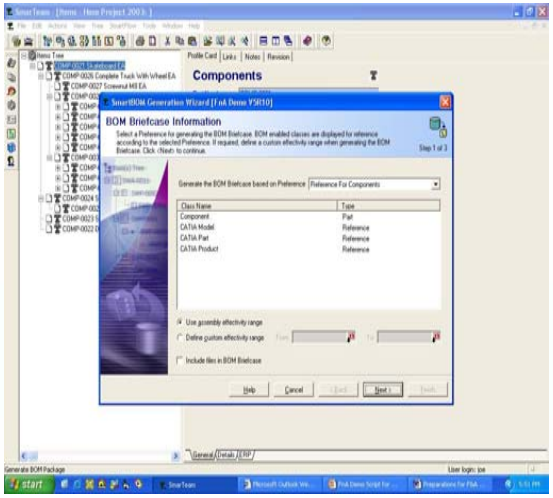
Assumptions are made, that then need to be delivered:

- Normal procedure:
  - Suppliers give vague responses based on vague information
  - You and supplier make assumptions
  - Price and timescale get squeezed
  - Limited recollection of what was agreed
  - Need to completely renegotiate deal.
  - Competing suppliers
  - Offer chalk and cheese
  - Integration and validation has to wait!
- The risk of the new:
  - New processes, mean new mistakes, means new delays
  - Old processes, may be slow, may be haphazard, but we know them
  - Communication shouldn't cost you time and money



Supplier Integration

- Capabilities used and Customer benefits
  - Speed up design process with Workflow
  - Active and timely data collaboration between you and your suppliers
  - Using Workflow incorporating suppliers the company can make EC up to 90% faster
  - By introducing Specification management and Component selection via Supplier Collaboration the company may achieve 2-5% materials savings
  - With RFP best practice with supplier involvement you may achieve 30% faster response with higher wins
  - Better collaboration between you and suppliers aides your competitive advantage



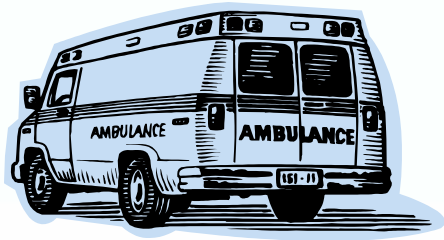
After Sales

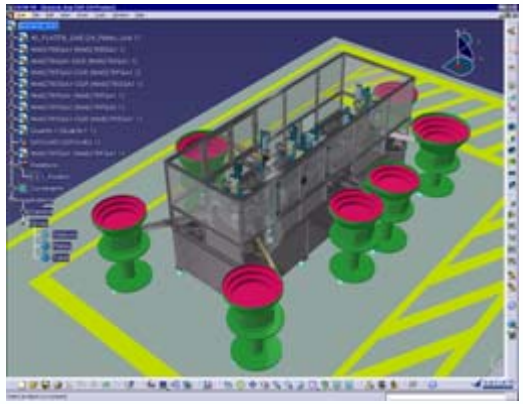
- Objective
  - Provide customer with released engineering information to be used for maintenance and communication

After Sales

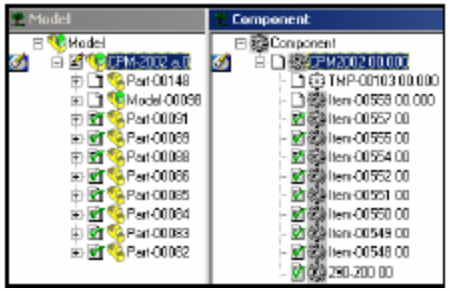
Do you still get Christmas cards from your customers?

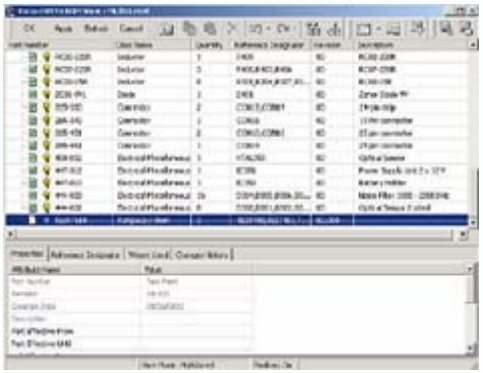
- Normal Procedure:
  - Four weeks are planned for onsite build and validation.
  - After five weeks your engineer stops answering your calls
  - After ten weeks your engineer submits his receipts to cover his divorce settlement
  - Machine works perfectly when being watched
  - Operators spill coffee on operating procedures
  - Ordering new parts involves strange animal noises.
  - You know what parts made the machine when it left the design office
  - You think you know what parts were on it when it left the shop floor
  - You have no idea what parts are on the machine after three years of operation
- What's the lifetime cost
- How many visits does it take to make the customer happy?

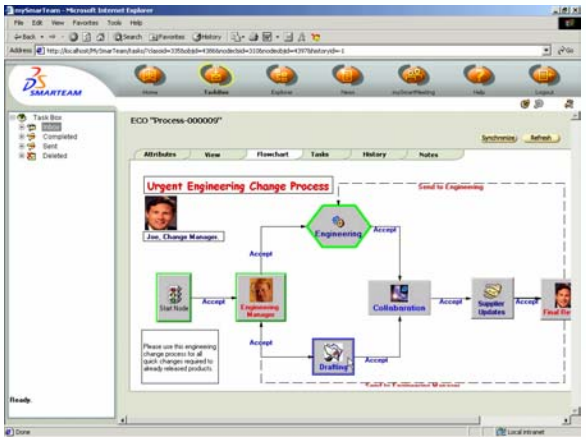




After Sales







Serialized BOM created from Manufacturing BOM

Create 'briefcase' package of documents and data

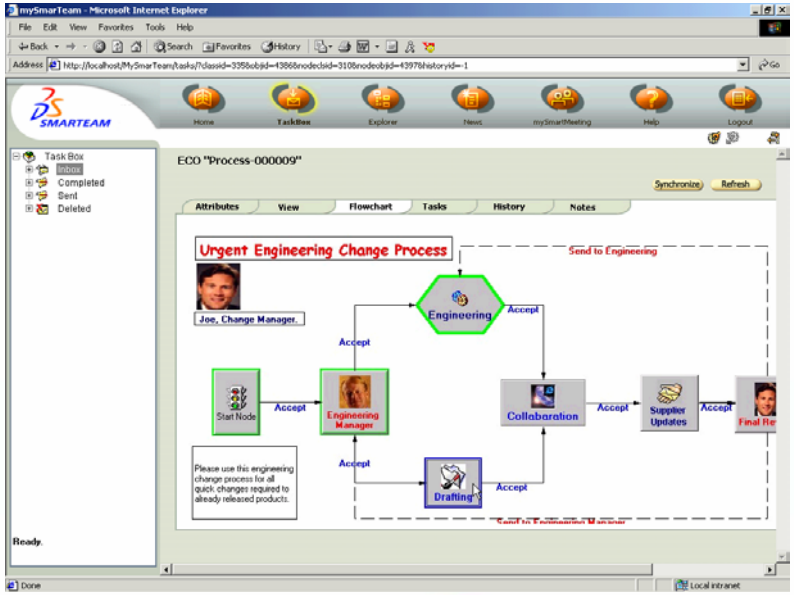
Customer receives document package

Customer acceptance of finished product and documentation

Feedback process

After Sales

- Capabilities used and Customer benefits
  - With document handling the company may achieve 80% cost reductions
  - With higher customer satisfaction the company gains market share and new orders – F&A customers are loyal
  - Disaster avoidance, process compliance (environmental requirements) – re-use for future projects
  - Machine lifecycle management ensures you know what is installed, when it is to be maintained and what it is to be maintained with.



Thank you