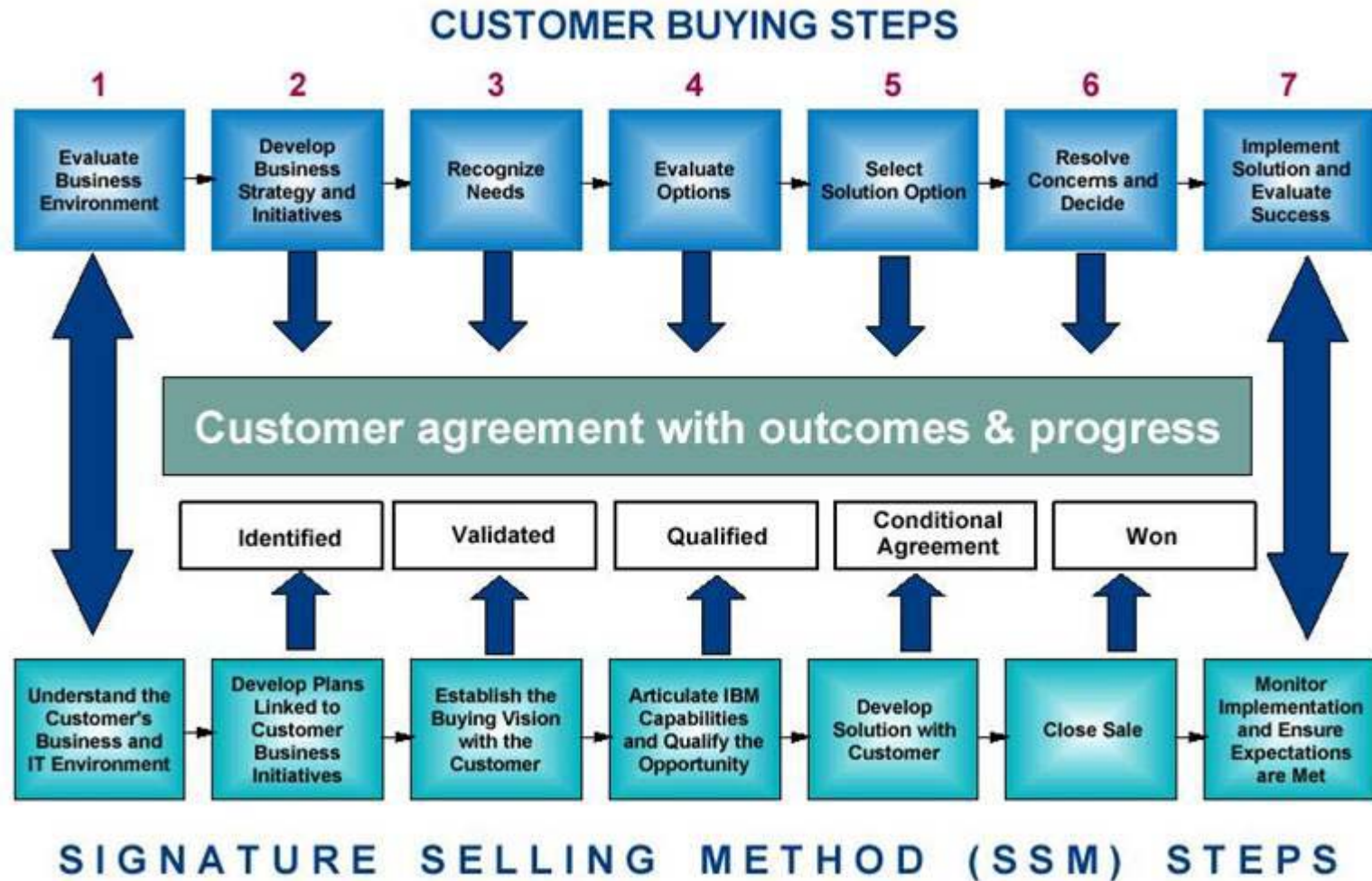


IBM Product Lifecycle Management
New World. New Rules. New Ways to Win.



Engineering Presentation Industrial Equipment

The Signature Selling Process





Agenda

Product Lifecycle Management

-  Key Business Initiatives
-  Consultant Messages
-  Process overview

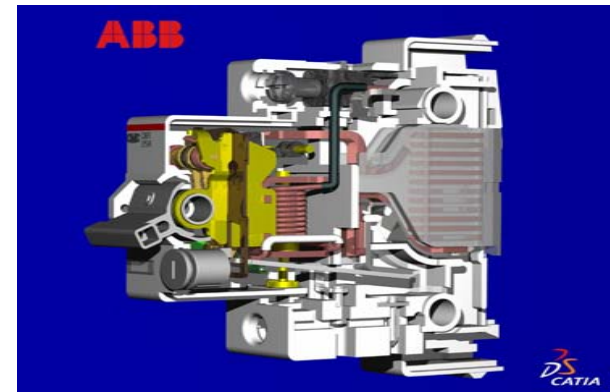
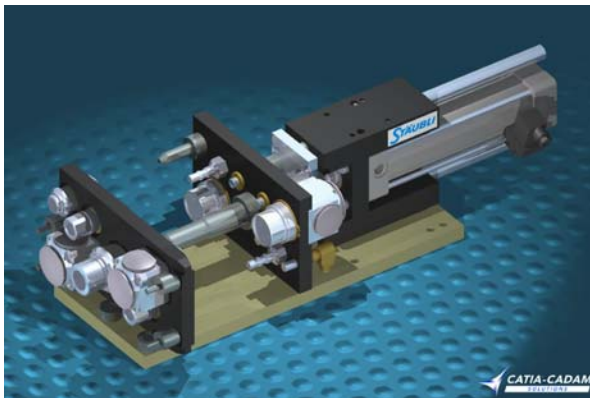
PLM Process Scenario

-  Bidding Process
-  Design Planning
-  Supply Chain Collaboration
-  Service After Sales

Product Lifecycle Management

Key Business Initiatives and Challenges

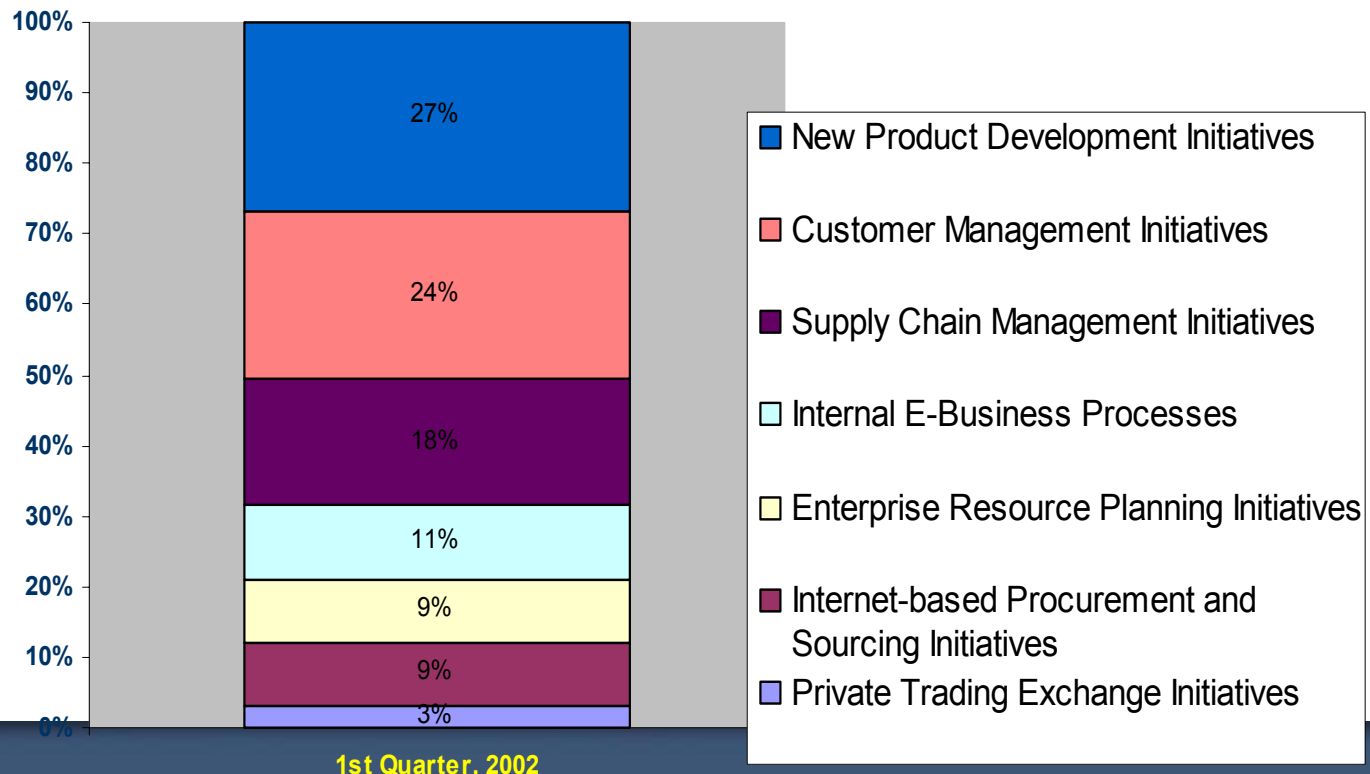
- Nearly half of all new products do not justify the resources it takes to launch them
- Long cycle time at bidding stage
- Cut cost or lose your competitive edge
- Customers are driving unprecedented level of demand and complexity
- Partners and suppliers demand increasingly extensive interfaces



AMR Research: PLM Messages

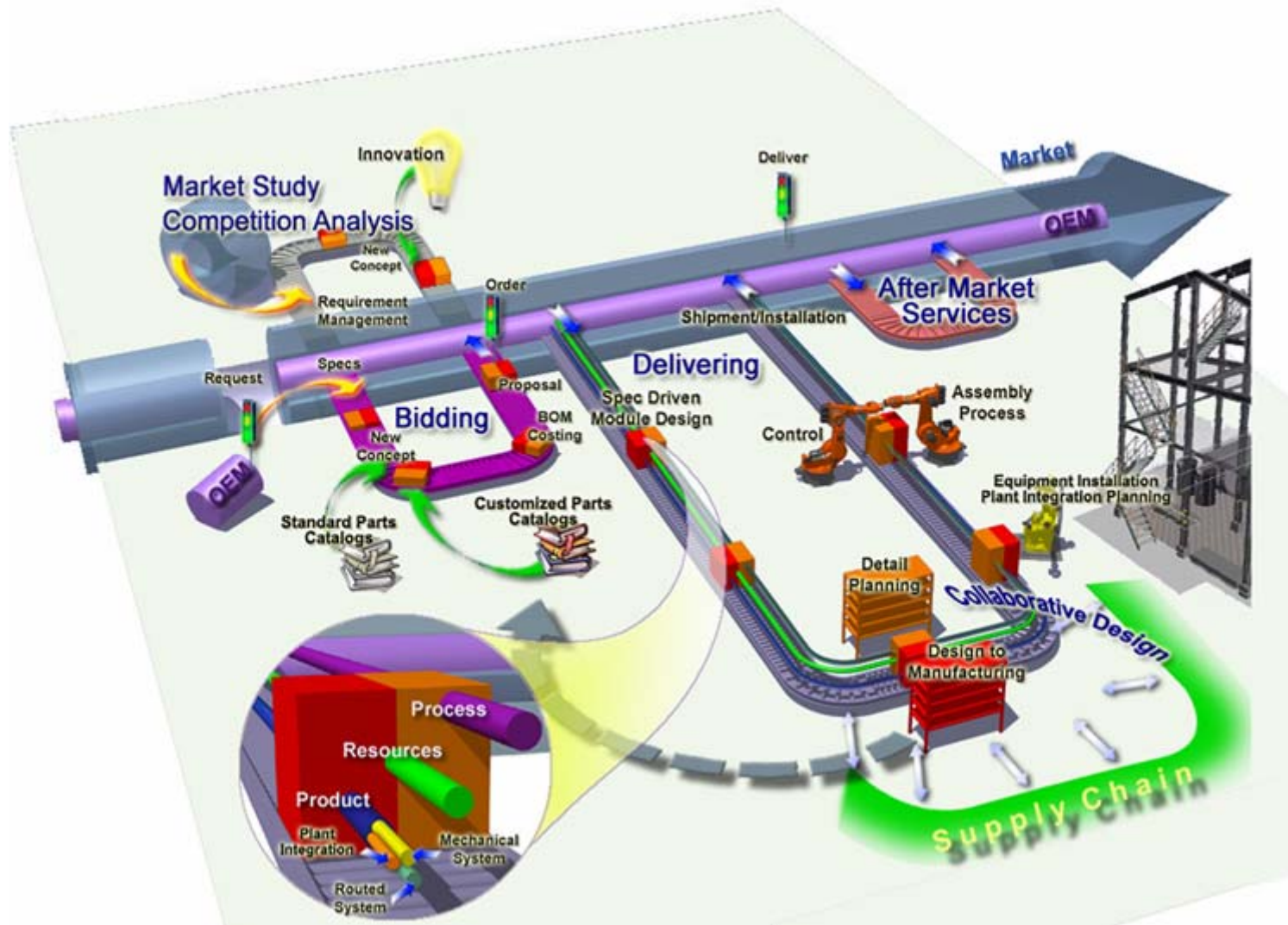
- ④ **PLM is inevitable. CEO's take notice.**
- ④ **PLM cannot be bought in one piece.**
- ④ **PLM Roadmap starts with Corporate Strategy.**

Enterprise Application Initiatives with the Biggest Impact on Overall Business



Main Pains

Right To Market and Business Growth




PLM Process Scenario

4 Scenario

-  Bidding process
-  Design Planning
-  Supplier Integration
-  After Sales

Scenario to include

-  Objective, Customer Challenges, Customer benefits and capabilities

Bidding Process

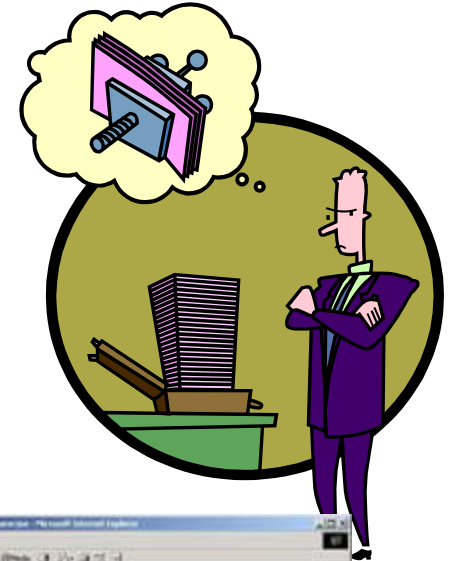
Objective – Reduce long cycle time for bidding, provide ability to respond to changing customer requirements, need to search in existing portfolio to find appropriate project/product for re-use



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.
 - ✓ Not easy to make new design from old
- 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!



Requirement	
ID	Requirement-072
Description	Requirement For New Hose Connector Machine 2003
Productivity	120 Parts / Min.
----> Other	
Assembly Tolerance	+0.5 / -0.5
Air Vacuumed	<input type="checkbox"/>
Clean Air	<input type="checkbox"/>
Dust	<input checked="" type="checkbox"/>
Grease	<input type="checkbox"/>
Dirt	<input checked="" type="checkbox"/>

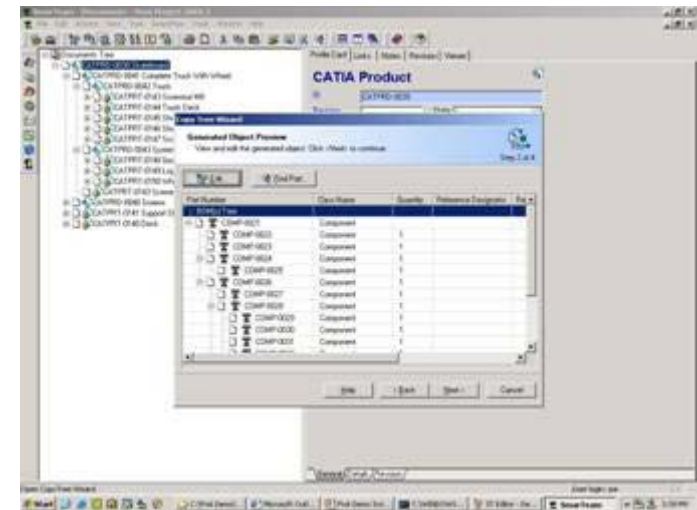
Do you quote quickly or quote accurately?

If you produce a response quickly:

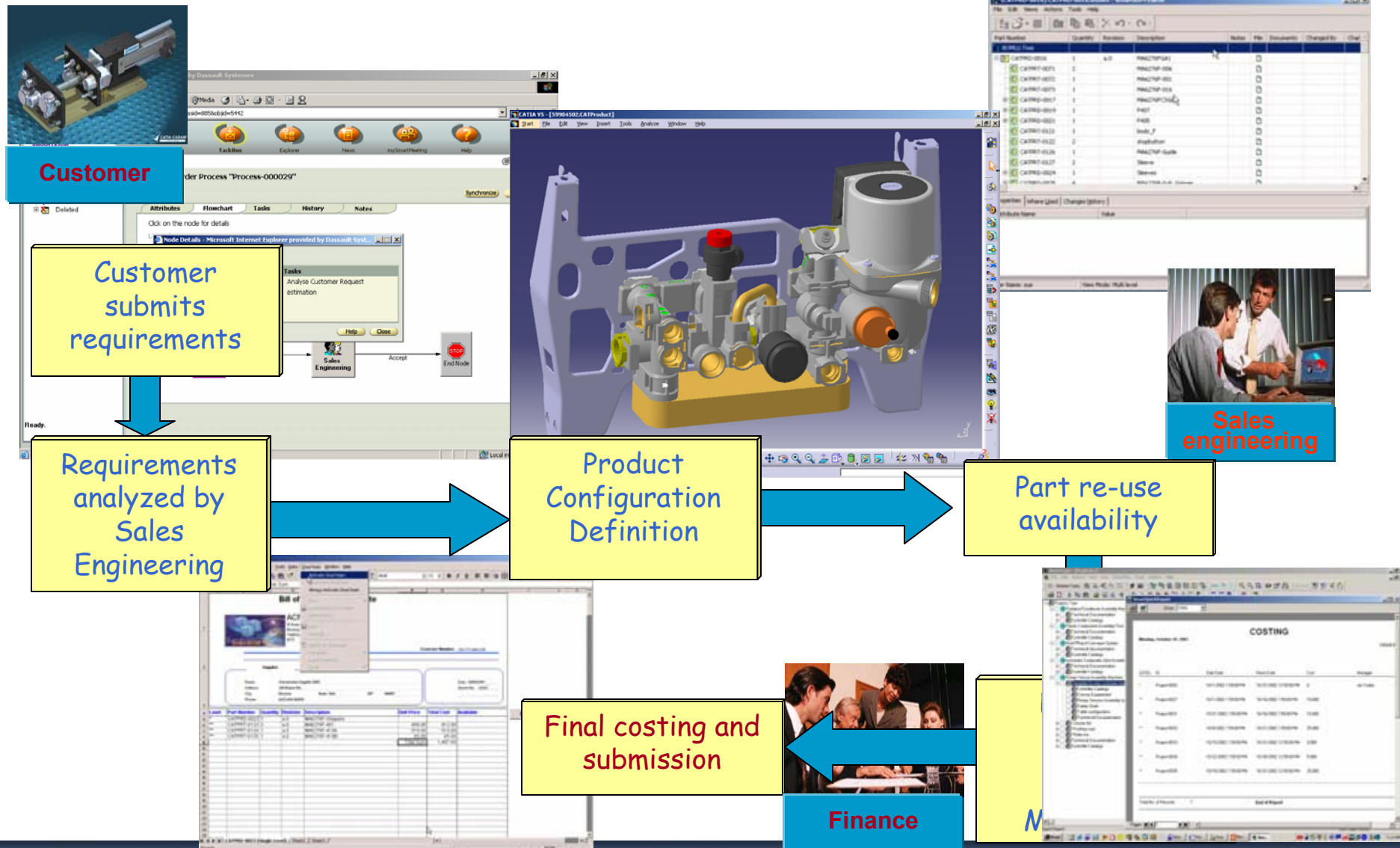
- Is the quote accurate?
- Does it cover all the correct points?
- Can you respond too quickly?

If you respond in detail:

- Is the cost of replying to the quote too high?
- Does the customer understand the issues and proposal you make?
- If the customer changes his mind, is there a lot of wasted effort?



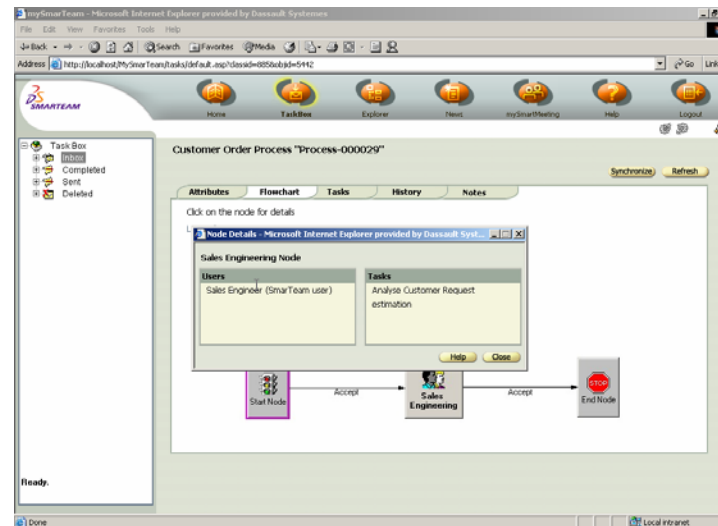
Bidding Process Overview



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 rapidly bring new product to market and respond to changing customer and market requirements



**Design
& engineering**



Marketing



**Outsourced
engineering**



Procurement



**Manufacturing &
Fabrication**

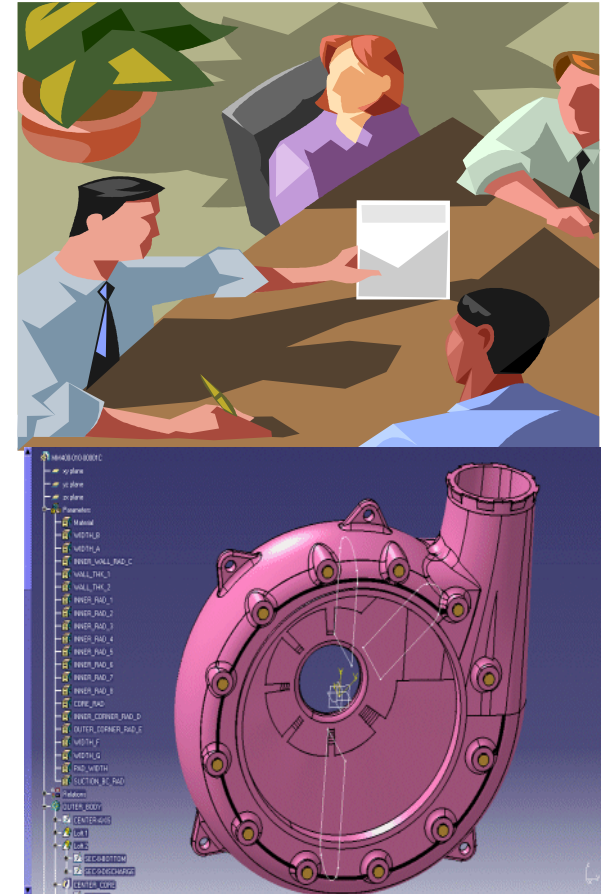


Customer

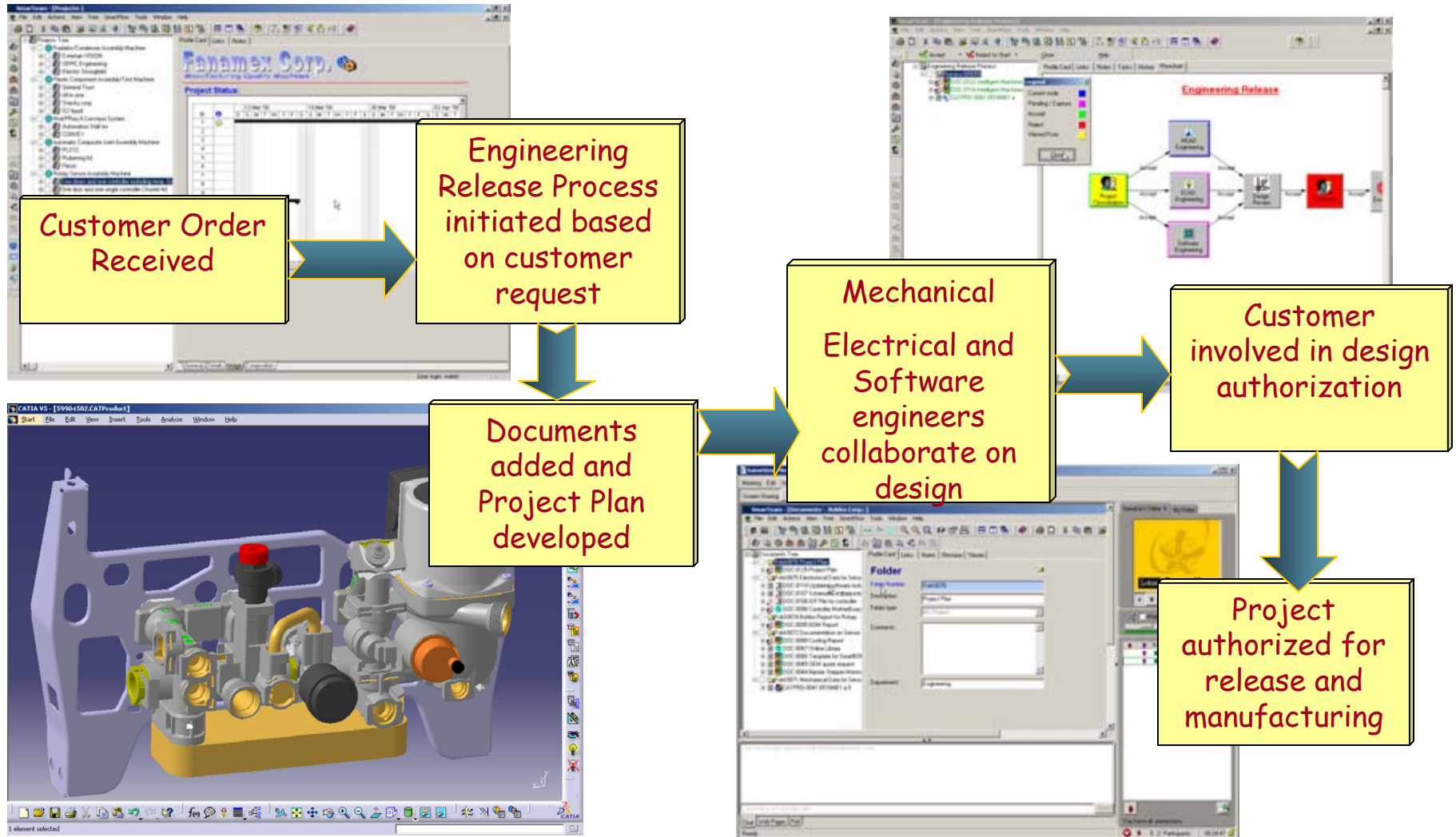
Design planning

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.
- Nobody knows all the international standards or only one person knows all the international standards
- 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?



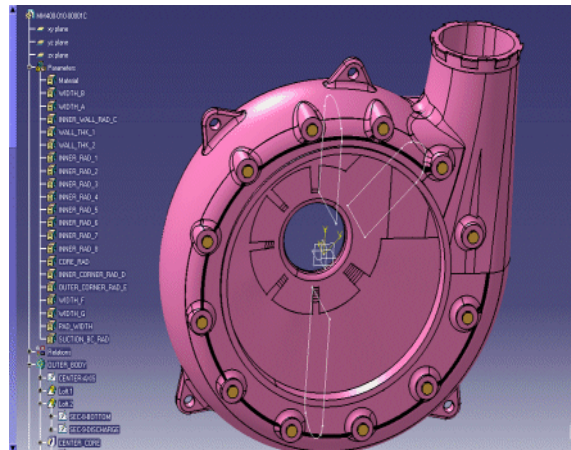
Design Planning



Design Planning

Capabilities used and Customer benefits

- Speed up design process with Workflow, Collaborative Workspace, New proactive 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.**



Supplier integration

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



Supplier integration

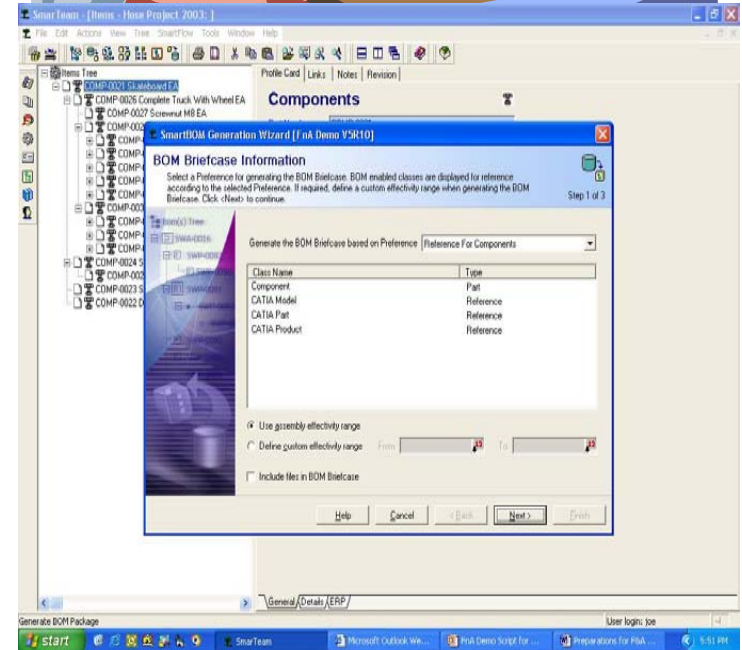
Assumptions are made, that then need to be delivered:

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

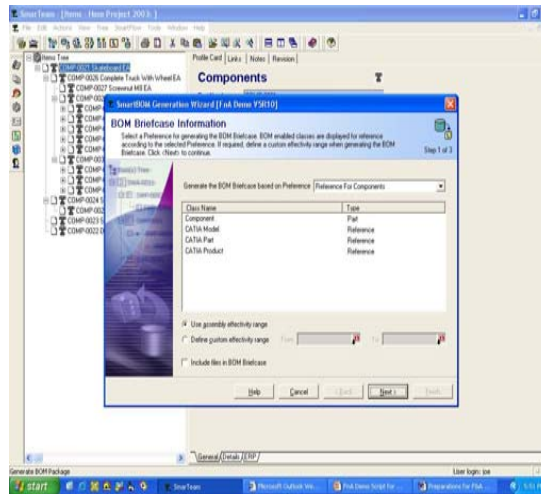


Supplier Integration



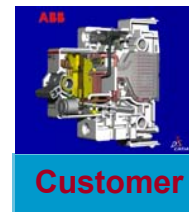
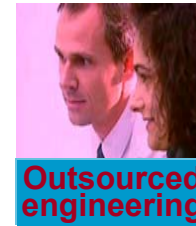
Capabilities used and Customer benefits

- 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.



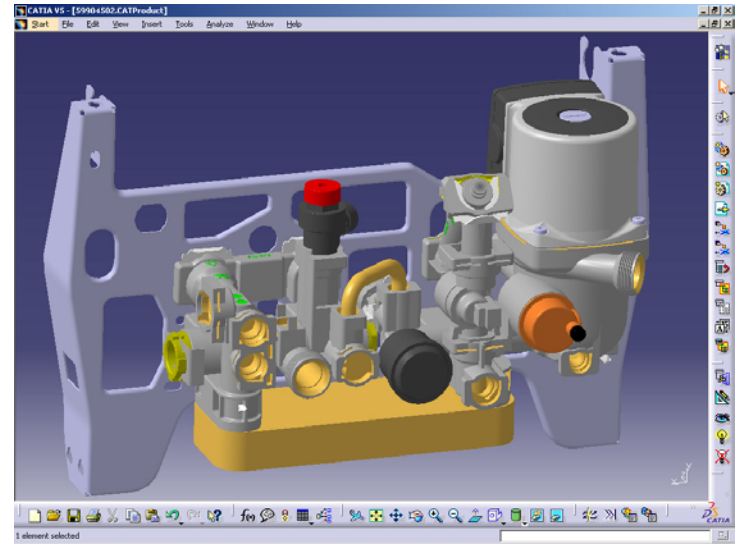
After Sales

Do you still get Christmas cards from your customers?

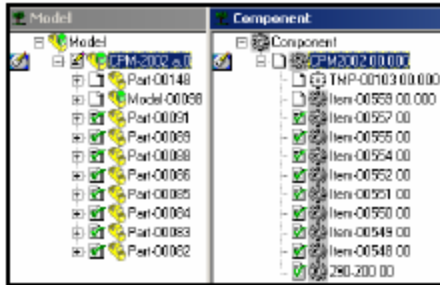
Normal Procedure:

- Service work by third party.
- No feedback from customer.
- Paper documentation for mounting/unmounting process
- You know what parts made the equipment 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



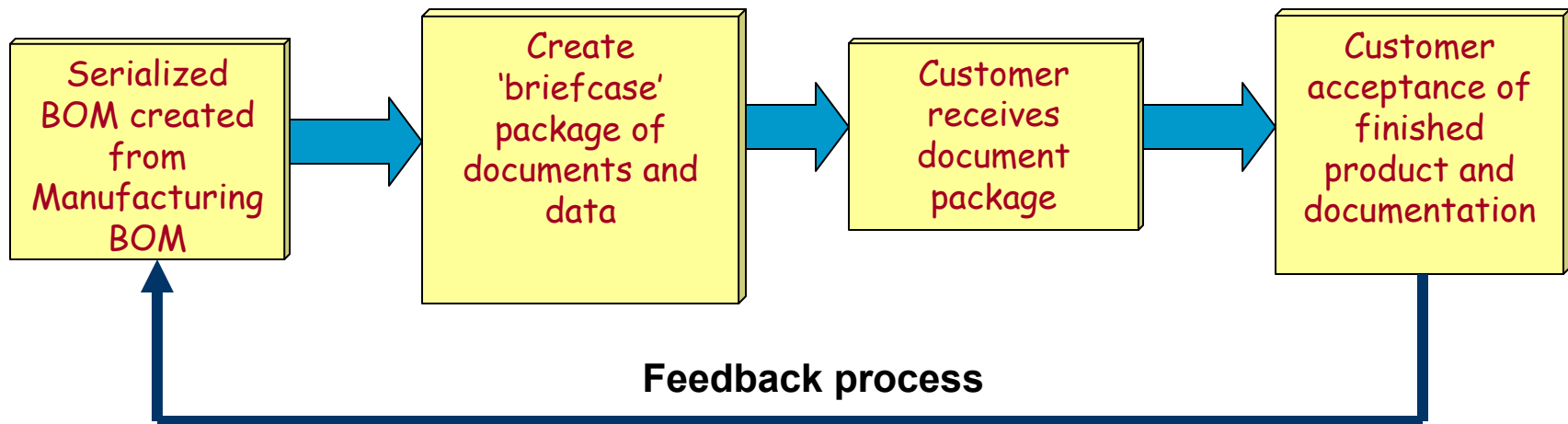
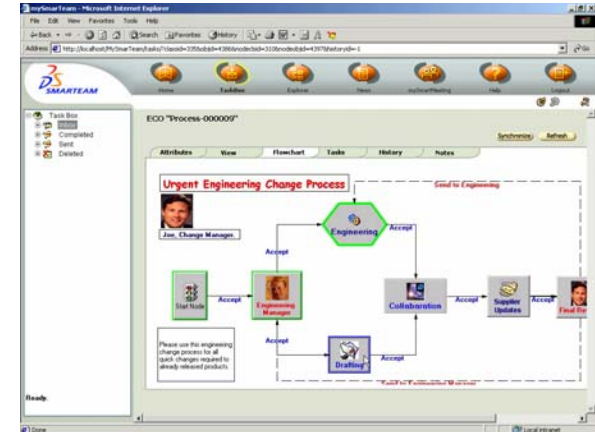
After Sales



The screenshot shows the Microsoft Access 2007 interface. The main window displays the 'Table Design' view of the 'tblEmployees' table. The table structure is as follows:

Field Name	Table Name	Primary Key	Field Size	Field Properties
EmployeeID	tblEmployees	Yes	AutoNumber	Primary Key
LastName	tblEmployees	No	Text (50)	Index
FirstName	tblEmployees	No	Text (50)	Index
MiddleInitial	tblEmployees	No	Text (10)	Index
Title	tblEmployees	No	Text (50)	Index
Department	tblEmployees	No	Text (50)	Index
HireDate	tblEmployees	No	Date/Time	Index
Salary	tblEmployees	No	Number (Double)	Index
CommissionPct	tblEmployees	No	Number (Single)	Index
PhotoPath	tblEmployees	No	Text (255)	Index

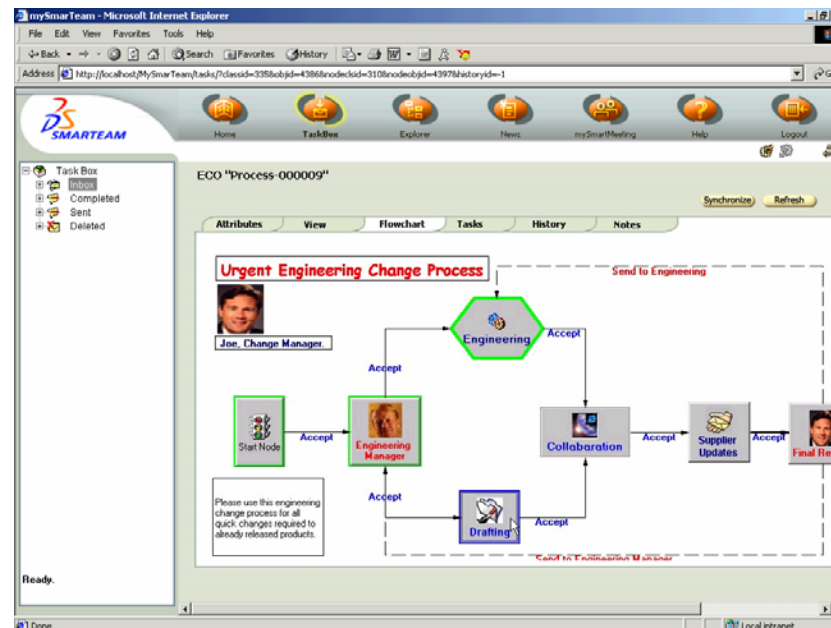
The 'PhotoPath' field is currently selected, and its properties are displayed in the 'Field Properties' task pane on the right. The task pane shows the 'Field Name' as 'PhotoPath' and the 'Field Size' as 'Text (255)'. The 'Table Design' ribbon is active, and the 'Field Properties' task pane is visible on the right.



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
- Equipment lifecycle management ensures you know what is installed, when it is to be maintained and what it is to be maintained with.



Conclusion

Thank you

