ERP Course: Re-Engineering
Readings: Chapter 2 from Mary Sumner

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Information Systems
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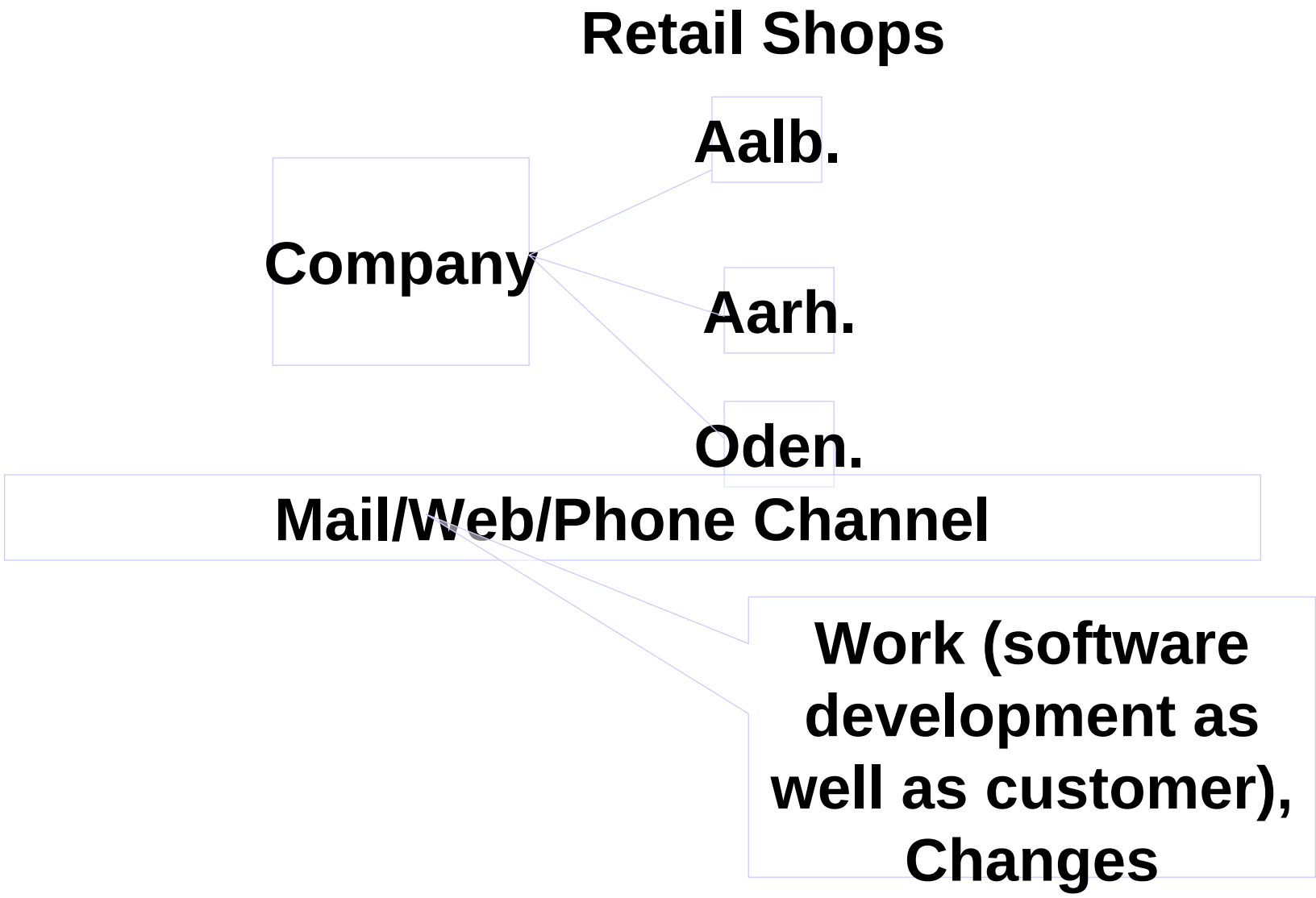
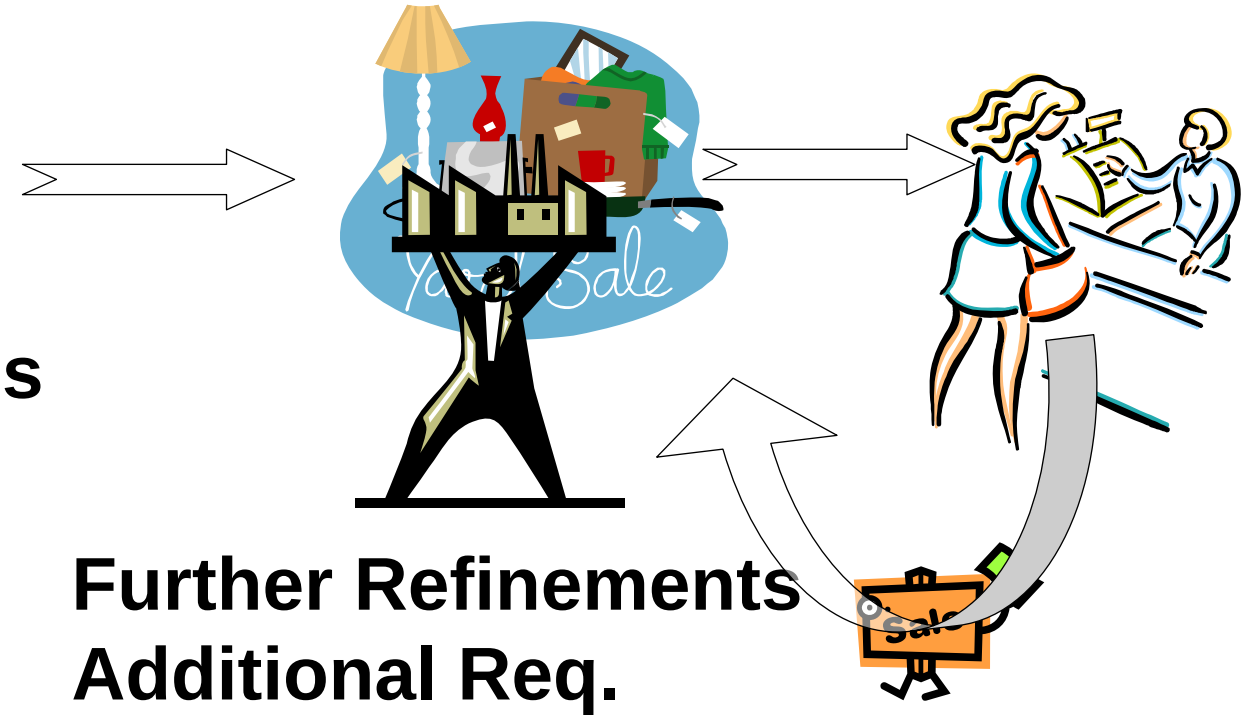
From Labs

A Case to set: A company XY (name it) would like to interact with new customers through mail and phone. A company deals with products which are configurable (please design your product line). A customer will express requirements on configurations in e-mail and a sales person need to record them in the system when an offer is generated. Customer should be able to express an interest in products offered independently from an order. A company has several branches distributed geographically. It has 2 warehouses which provide parts for the configurations. Some of the parts are developed by company branches themselves, some are taken from suppliers. Company management would like to have quarterly and annual reports about how offers, orders and interests are placed, analysis of the sales team behavior and prediction on future trends. The report should be made both, in financial terms and also in resources spent or used over time.

Please set the case in your selected system.


Retail Shops
Aalb.
Company
Aarh.
Oden.
Mail/Web/Phone Channel
Work (software development as well as customer), Changes

Configurations
Parts
Features



Further Refinements
Additional Req.
Pricing
…

Overall Picture

Business Process

Process

- A related and organized group of activities with result as a value for a customer

Business process

- Ordering of work activities across time and place with beginning, end, input, output and common goal (usually one departmental)

Enterprise business process

- End to end business process

Business Process ReEngineering

- ''the analysis and design of *work flows and processes* within and between organizations'';
- ''a methodological process that *uses information technology* to *radically overhaul business process* and thereby attain *major business goals*'';
- ''the *reconfiguration* of the business using *IT as a central lever*'';
- ''*overhauling of business processes* and organization structures that limit the competitiveness, effectiveness, and efficiency of the organization'';
- ''the fundamental analysis and *radical redesign of business processes* to achieve *dramatic improvements in critical measures of performance*''.

© Varun Grover and Manoj K. Malhotra: Business process reengineering: A tutorial on the concept, evolution, method, technology and application. Journal of Operations Management Volume 15, Issue 3, August 1997, Pages 193-213

Values

Economical
Informational
Emotional
Value innovation

Process Thinking

How business processes contribute to the value of the customer?

How am I going to change the processes, organizational structures, information flows and information to improve value for customer?

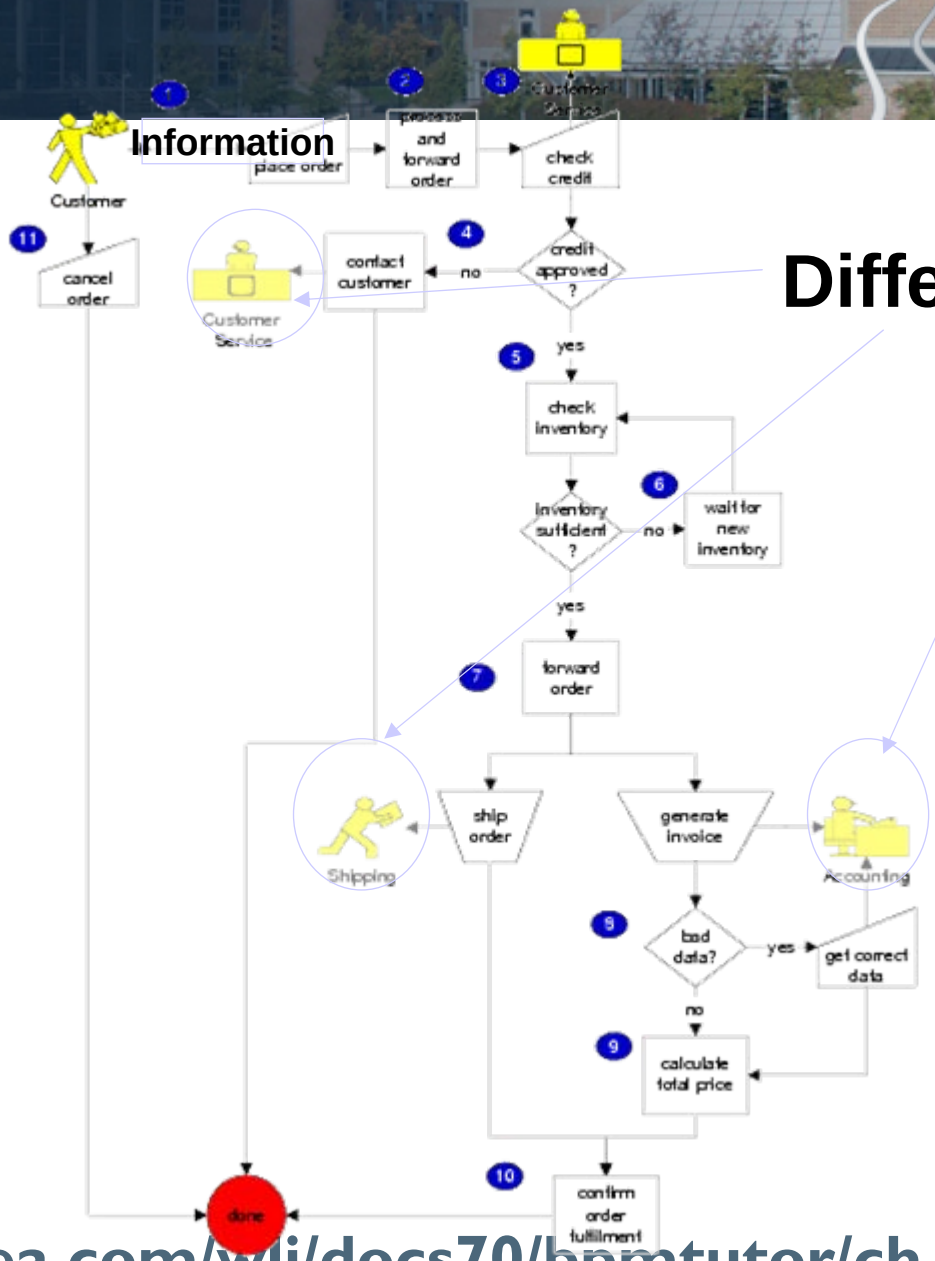
I am doing this to keep existing customers and attract new ones which will guarantee a continuous income for my company

How do I make the human resources involved to see that it is value added for them too?

Document Current Processes

Activity graphs
Document flow graphs
Unit Interaction graphs
Organization graphs

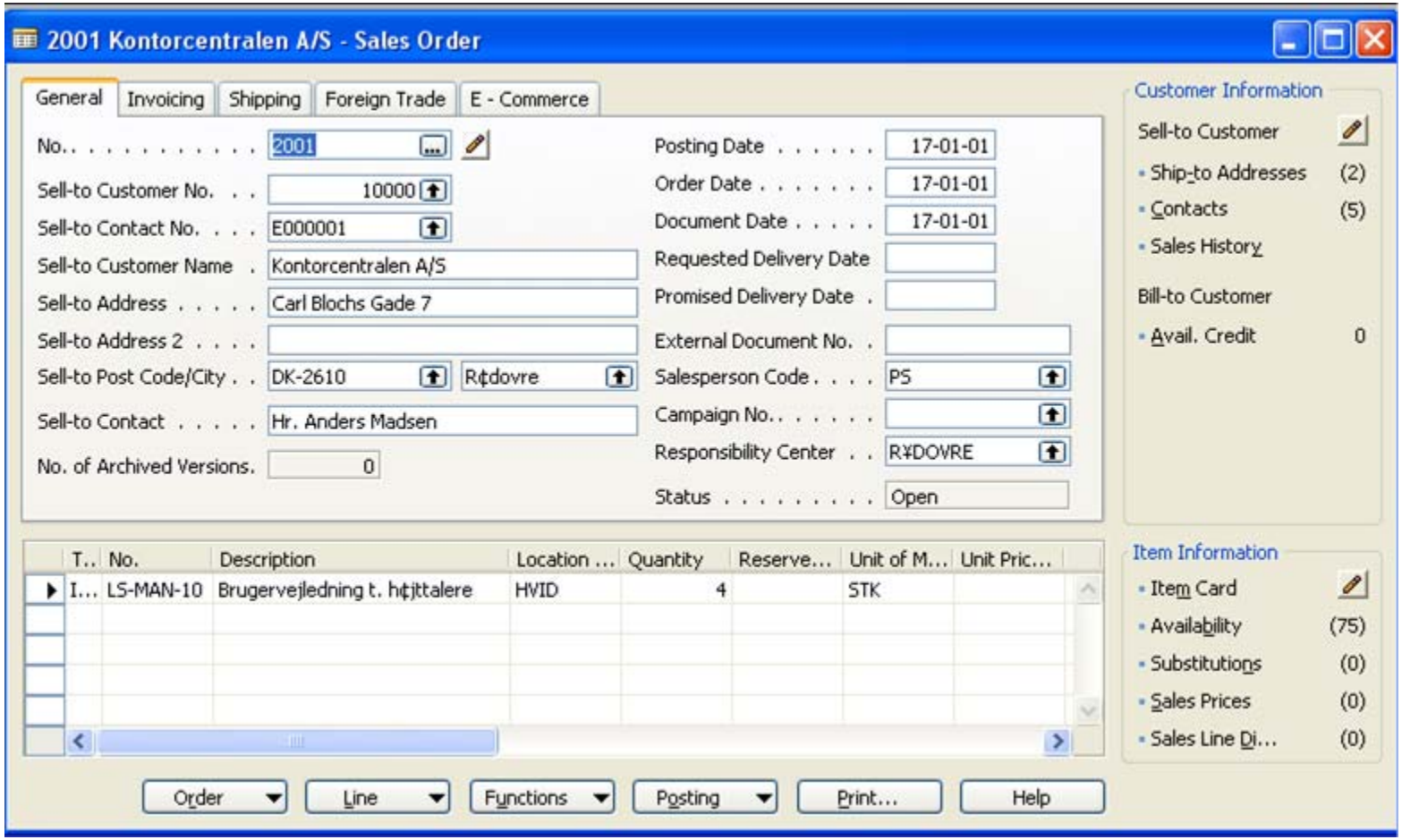
To understand how the company works and how it delivers value to a customer

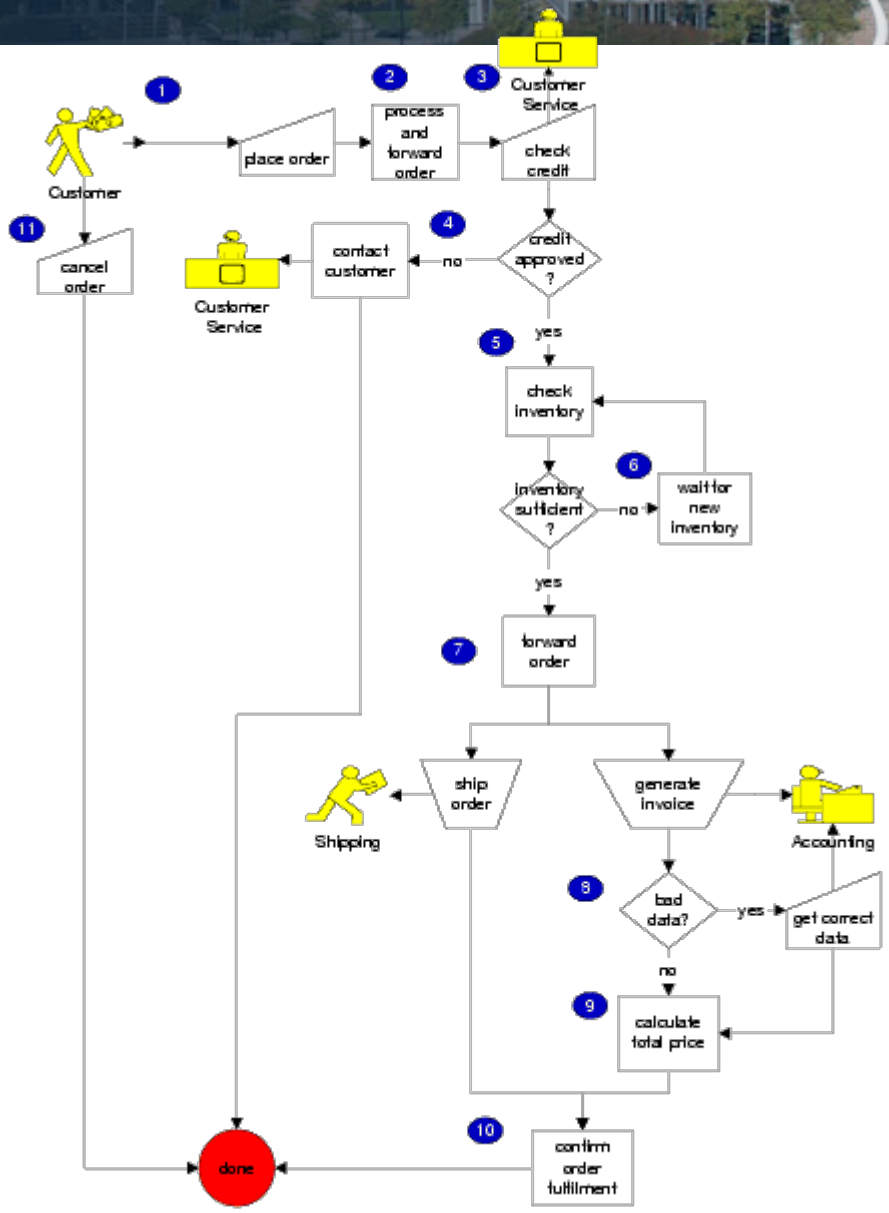


Different Units

http://edocs.bea.com/wli/docs70/bpmtutor/ch1.htm

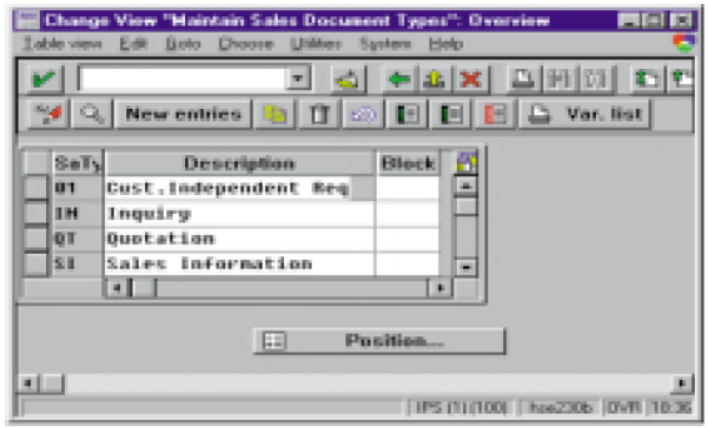
Place Order


2001 Kontorcentralen A/S - Sales Order
General
Invoicing
Shipping
Foreign Trade
E - Commerce
No. 2001
Sell-to Customer No. . . 10000
Sell-to Contact No. . . . E000001
Sell-to Customer Name . Kontorcentralen A/S
Sell-to Address . . . . . Carl Blochs Gade 7
Sell-to Address 2 . . . .
Sell-to Post Code/City . . DK-2610 R¢dovre
Sell-to Contact . . . . . Hr. Anders Madsen
No. of Archived Versions. 0
Posting Date 17-01-01
Order Date 17-01-01
Document Date 17-01-01
Requested Delivery Date
Promised Delivery Date .
External Document No. .
Salesperson Code . . . . PS
Campaign No. . . . . .
Responsibility Center . . R¥DOVRE
Status . . . . . Open
Customer Information
Sell-to Customer
Ship-to Addresses (2)
Contacts (5)
Sales History
Bill-to Customer
Avail. Credit 0
T.. No. Description Location ... Quantity Reserve... Unit of M... Unit Pric...
I... LS-MAN-10 Brugervejledning t. h¢jttalere HVID 4 STK
Item Information
Item Card
Availability (75)
Substitutions (0)
Sales Prices (0)
Sales Line Di... (0)
Order
Line
Functions
Posting
Print...
Help

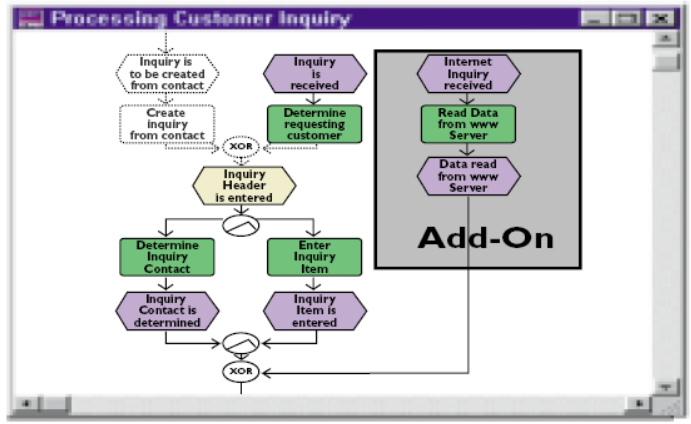

1
2
3
Customer Service
Customer
place order
process and forward order
check credit
11
cancel order
Customer Service
contact customer
4
no
credit approved ?
yes
5
check inventory
6
inventory sufficient ?
no
wait for new inventory
yes
7
forward order
Shipping
ship order
generate invoice
Accounting
8
bad data?
yes
get correct data
no
9
calculate total price
10
confirm order fulfillment
done

August-Wilhelm Scheer and Frank Habermann: MAKING ERP A SUCCESS

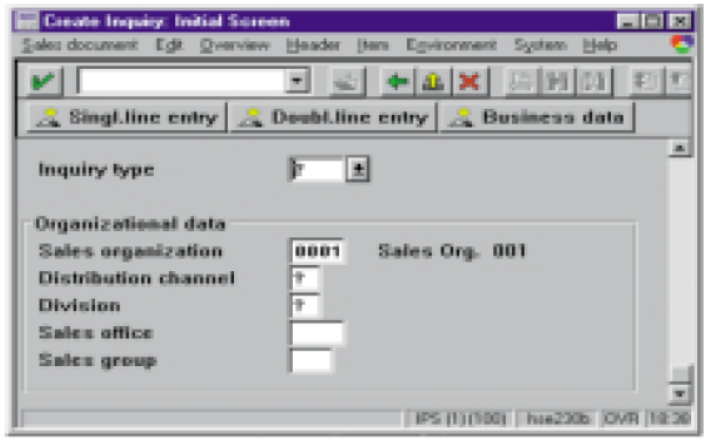
Figure 2. Model-based BPR and customization of ERP systems.



Customizing: Maintain Sales Document Types



Process Model



Function "Create Inquiry"

Process: Processing Customer Inquiry

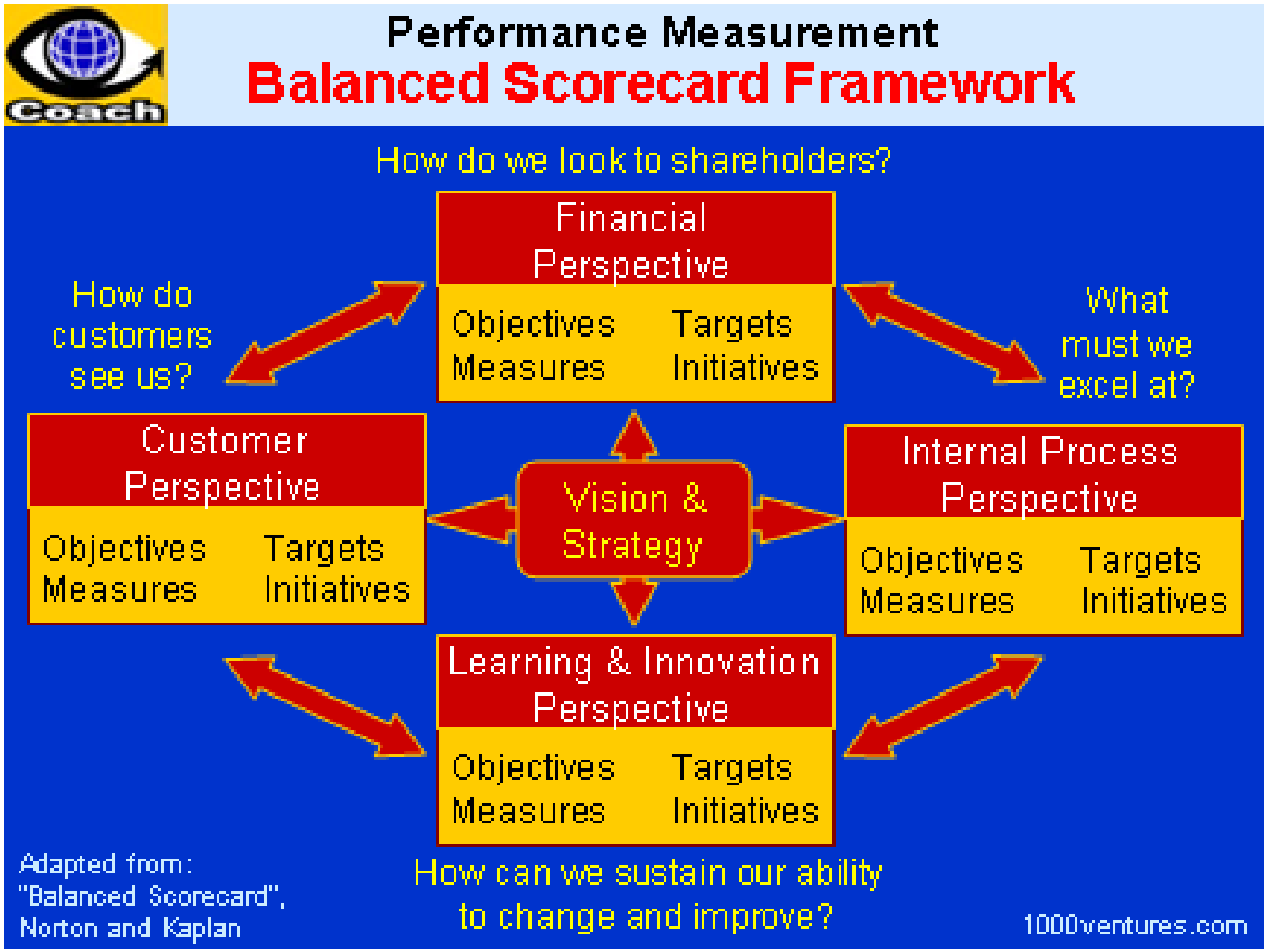
Function	As-is/Target	Unresolved Issues	Interface	In Charge	Date	Effort
1. Determine Ordering Customer	From now on, ordering Customers will be queried in Accordance with ISP Country Codes	CPD Customer necessary	Customer Master Data (internal)	C. Jones	May 29	Standard
2 Determine Inquiry Contact	Define third-party as new Partner Type in customi-zed Version	None	Customer Master Data (internal)	P. Miller	May 29	Standard
3 Enter Inquiry Item	Use AFN Item Type as Standard	None	Customer Master Data (internal)	P. Miller C. Jones	May 30	Standard

Documentation of Results

Creating Metrics

Performance Measurement to perform better
Balanced scoreboard
Economic value added
Measuring cleaner production

Balanced Scoreboard



Example Balanced Scorecard: Regional Airline

***Mission:** Dedication to the highest quality of Customer Service delivered with a sense of warmth, friendliness, individual pride, and Company Spirit.*

***Vision:** Continue building on our unique position -- the only short haul, low-fare, high-frequency, point-to-point carrier in America.*

Theme: Operating Efficiency	Objectives	Measures	Targets	Initiatives
Financial 	• Profitability • Fewer planes • Increased revenue	• Market Value • Seat Revenue • Plane Lease Cost	• 25% per year • 20% per year • 5% per year	• Optimize routes • Standardize planes
Customer 	• Flight is on -time • Lowest prices • More Customers	• FAA On Time Arrival Rating • Customer Ranking • No. Customers	• First in industry • 98% Satisfaction • % change	• Quality management • Customer loyalty program
Internal 	• Fast ground turnaround	• On Ground Time • On-Time Departure	• <25 Minutes • 93%	• Cycle time optimization program
Learning 	• Ground crew alignment	• % Ground crew stockholders • % Ground crew trained	• yr. 1 70% yr. 4 90% yr. 6 100%	• Stock ownership plan • Ground crew training

© http://www.balancedscorecard.org/

Metrics

Customers

- Performance against requirements
- Customer satisfaction

Internal work processes

- Cycle times
- Product and service quality
- Cost performance

Metrics II

Financial

- Profitability (company level, product line level, or individual level)
- Market share growth

Employee satisfaction

Performance of suppliers against your requirements

Other metrics

Economic Value Added

- Efficiency with which the company used their resources
- It is a difference between return received on resources and cost of the resources

Measuring Cleaner Production

- Producing less waste – using less raw material, using recycled material, ...
- Lean manufacturing: doing more with less: less time, inventory, space, people and money

Factors of Reengineering

Focusing just one activity or one unit usually fails to improve globaly

Too general focus usually fails too

Important is to understand a problem