

Pains and benefits

Miki Skorkovský, PhD. for Department of Business
Economics ESF MU

Reasons for purchasing (buying)

- Pain
- Pain and vision distinction
- Searching for the pains depends on :
 - market segment
 - size of the company
 - ownership
 - position in SCM
 - position of the person

Reasons for purchasing (buying)

- dormant (latent) pain : it exists, but it is not presumed



A contemporary illustration of the meeting

'Dr. Livingstone, I presume?'

Example : collecting money late,
paying to early ->crippled cash-flow

Reasons for purchasing (buying)

- real pain
 - a real pain (lack, deficiency, shortage), which are wittingly admitted by the customer

Examples : high value of the stock, due date performance is low, laborious and not exact calculation of production cost...



Reasons for purchasing (buying)

- vision

- particular (tangible) idea of the pain killer

Example : use of a good algorithm for replenishment planning replenishment ...



Type	No.	Action Message	Accept Action M...	Replenish... System	Description	Location Code	Original Quantity	Quantity	Unit of Measure
Item	80214	Change ...	✓	Purchase	250MB Disks/2pack	BLUE	200	150	PCS
Item	80214	New	✓	Purchase	250MB Disks/2pack	BLUE		100	PCS
Item	80217	New	✓	Purchase	Power Supply Cable			30 000	PCS
Item	80217	New	✓	Purchase	Power Supply Cable			70 000	PCS

Creation of the pain chain

- **General pain** : difficult analysis reports from existing data
- **CEO view** : owners push me hard every week to supply results
- **Inventory manager** : I cannot optimise manipulation movement
- **IT manager** : to get right data in right time I must transfer and modified a lot heterogeneous data in takes time and I am overloaded

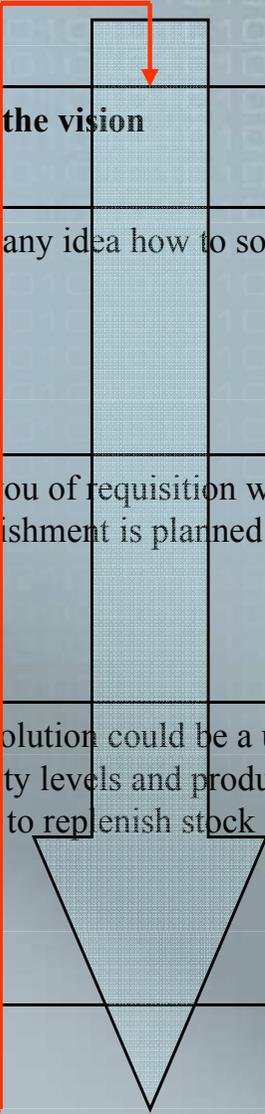
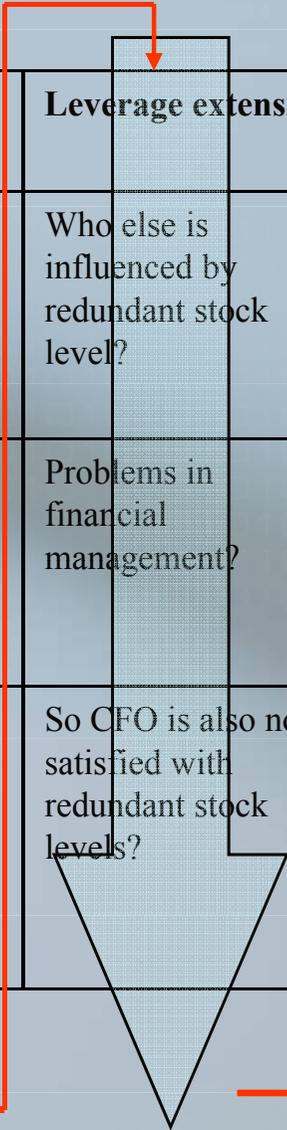
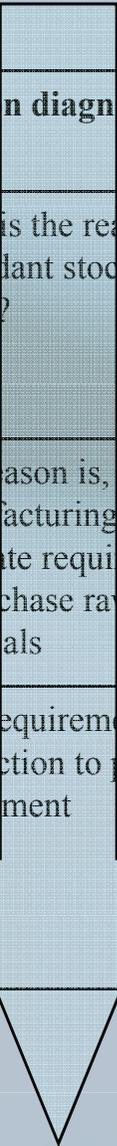
Reasons for purchasing (buying)

- what is the reason for the change (buying) ?
- what do you expect for the new solution ?
- reason for investment to the solution ?
- what do you think will be improved the most ?



Creation of the vision

	Reason diagnosis	Leverage extension	Creation of the vision
Opening	What is the reason of redundant stock levels?	Who else is influenced by redundant stock level?	Do you have any idea how to solve it?
Check	The reason is, that manufacturing does not generate requirement to purchase raw materials	Problems in financial management?	What about you of requisition worksheet where all the replenishment is planned automatically?
Confirmation	Late requirement form production to purchase department	So CFO is also not satisfied with redundant stock levels?	So the final solution could be a use of netting based on safety levels and production requirements to replenish stock optimally



Pains in the information processing

- All what any competitors is doing could be easily copied anywhere all over the world (e.g. China)
- You cannot duplicate culture (organization system, the way you manage people and relationship to information)
- The unique enterprise is specified first and foremost by access and links the people and information
- **Work on computer is not the same as a work with information !!**

Learning to think..



■ Indian Institute of Technology (IIT)

- 300 000 people sit for entrance exams
- 5 000 admitted (acceptance rate (AR) of 1,7 % compared to Harvard, Yale and Princeton, where they have AR 9-10 %)

■ IIT has

- mediocre equipment
- indifferent teachers
- unimaginative class work
- the quality of education remains extremely poor and many students leave the country to get trained abroad

■ India - PhD. in Computer Science per year : 35 – 50

■ USA - PhD. in Computer Science per Year : 1000

Resource: [Fareed Zakaria \(The Post American Word\)](#)

Pains in the information processing

- manual /batch processing
- **BAR code reader**
- heterogeneous databases
- **Homogeneous databases, XML ports,...**
- uncertain information
- **on-line data processing, automatic data integrity checking**
- errors
- **Total quality management (to avoid errors in the future)**

Pains in the information processing

- shaky system
- Transaction processing , stable DB , automatic backups
- difficult implementation of add-ons, customization and upgrades
- Tools for upgrade top object oriented development tools
- complicated way of system usage
- Standard commands for every application –unique user environment
- too much IT managers
- Modern ERP requires less of standard IT guys and more IT guys understanding methods used to control enterprise processes
- High price/ low system performance
- Long term TCO (Total Cost of Ownership)
-



TCO



Pains in the financial management (accountancy)



- late access to information, difficulties in finding the reason why any entry (transaction) was created
- Navigation functions, workflow, dimension, Business Analytics, ...
- comparing actual and expected is a foolish dream only
- Budget functionality, On-line data....
- difficulties in of applying (invoices<->payments)
- Functionality allowing manual or automatic apply using unique entry numbers and possibility easily un-apply recently wrongly applied entries



Pains in the financial management (accountancy)



- difficult analysis of the customer or vendor balances
- **Flow field (calculated fields)**
- unconvincing repairs of wrongly posted documents
- **Necessity to generate corrective documents**
- futile / doubled operations
- **Integrated database- every record is written only once**
- unequal load of the users during the period of one month
- **Continuous accounting** – decrease of number of the accountants and less stress during closing at the end of every period



Pains in the financial management (accountancy)



- out-of-date information
- CRM directly connected of Sales, Purchase and Inventory
- processes such are Sales, Inventory, Manufacturing, Purchase and Accounting are not connected
- All above mentioned processes are connected
- out – of - date or wrong information about customers
- Questioners – evaluation of their profiles, connected to Sales
- rigidity of sales processes
- Tracking of the business opportunities, tasks and activities and follow up procedures
- difficult substitutability of sales people
- Work flow and better and flexible access to the information
- no e-Shop
- Integration with Outlook, e-Shop application, B2B, B2C, document management



Pains in the manufacturing processes



- processes such as Sales - Inventory-Production- Accounting- Purchase are not connected internally
- Function Order tracking and Dynamics action tracking – see later
- lack of information about Work In Progress
- Automatic posting of 2140 (121|611 in Czech legislation)
- lack of actual cost information
- Good calculation setup, tracking of indirect costs – see value entries

See next slide

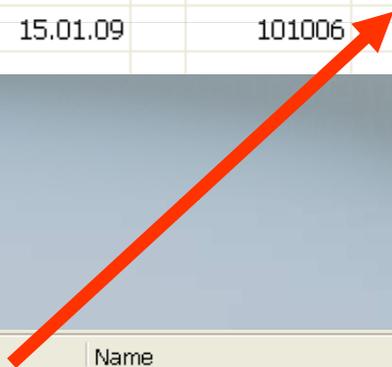


WIP



Posting Date	D...	Document...	G/L Accou...	Description	G...	G...	G...	Amount	B...
15.01.09		101006	2130	Direct Cost 1250 on 15.01.09				-0,35	G...
15.01.09		101006	2140	Direct Cost 1250 on 15.01.09				0,35	G...
15.01.09		101006	2130	Direct Cost 1250 on 15.01.09				-0,95	G...
15.01.09		101006	2140	Direct Cost 1250 on 15.01.09				0,95	G...
15.01.09		101006	2140	Direct Cost 1250 on 15.01.09				36,00	G...
15.01.09		101006	7791	Direct Cost 1250 on 15.01.09				-36,00	G...

No.	Name	I...	A...	Totaling	G...	G...	G...	Net Change	Balance
2140	WIP Account, Finished goods	B...	P...					37,30	37,30



Pains in the manufacturing processes

- useless manual work spent to issue documents
- Automatic Data Capture, XML data ports, PDA, touch screens
- difficult planning/ changes in production
- **MPS (Master Production Schedule)**, MRP-II, JIT and direct link to sales and production orders for direct planning from sales orders (netting), manual MRP, automatic suggestion of replenishment and automatic issuing of purchase orders
- difficulties in subcontracting management
- Subcontracting worksheet in MS Dynamics
- constrained capacities of resources in production
- Graphical planning tools, TOC application

Touch Screen application

MSS

- Grid
- Production
- Lot
- Packaging
- Parameters
- Allocations
- Planning
- Measuring
- Work Teams
- Setup
- Mob Scanners
- TouchScreens
- TouchScreen Manufacturing

User ID: ...** Annette Hill

Actions

- Run this... Login to machine.
- Run this... Logout from machine
- Run this... Start setup
- Run this... End setup
- Run this... Start processing
- Run this... End processing
- Run this... Post Output.
- Run this... Post RTS
- Run this... Measures and Checks
- Run this... Delay

Action data

120 Bryan Walton

No.	Name
120	Bryan Walton
130	Linda Mitchell
210	Packing table 1
220	Packing table 2
230	Packing Machine
310	Painting Cabin

Show Doc

Info text

Logout Annette Hill Process

Master Production Schedule

General Filters Options

Item Budget Name BUDGET 08

Show as Lines Item

Show as Columns. . . . Period

Date Filter

Customer Filter

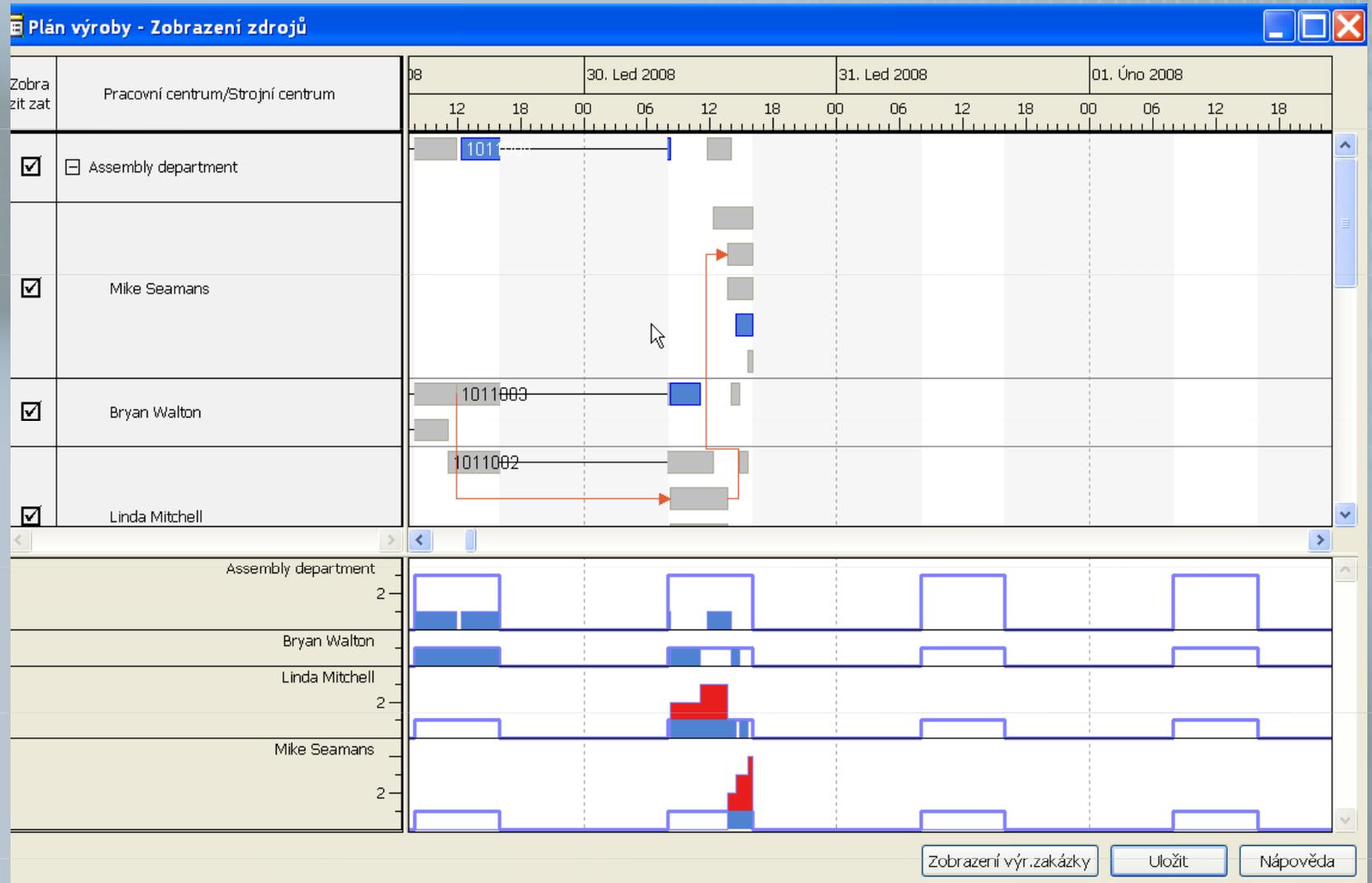
Item Filter

Show Value as Sales Amount

	Code	Name	Budgeted ...	Budgeted Sale...	01.01.09	01.02.09	01.03.09	01.04.09	01.05.09
	1000	Bicycle	0	90,00	10,00	20,00	30,00	30,00	
	1001	Touring Bicycle	0	130,00	20,00	30,00	30,00	50,00	
▶	1100	Front Wheel	0	440,00	60,00	100,00	120,00	160,00	
	1110	...	0



Graphical planning



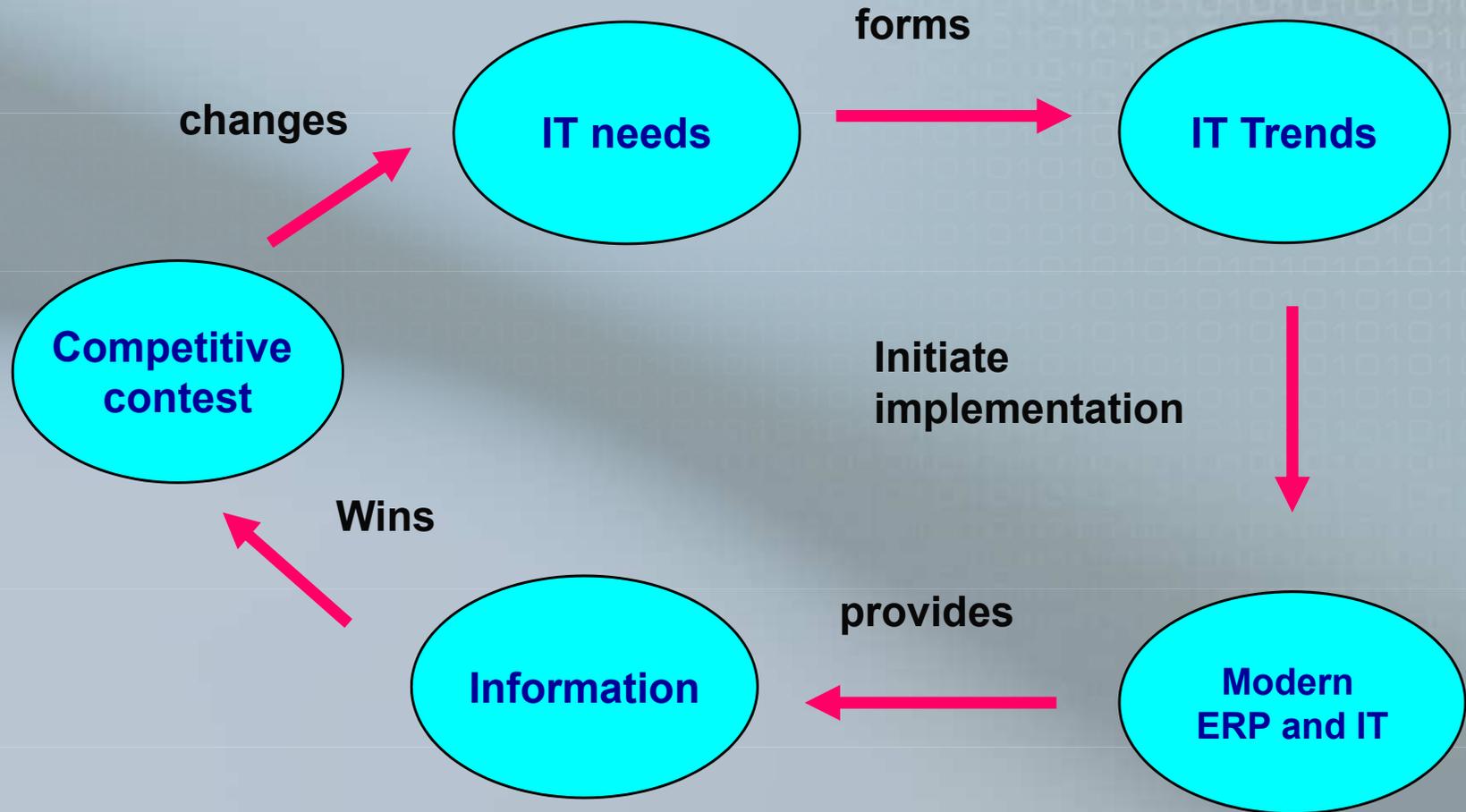
Pains in purchasing and inventory

- Processes such as Purchase-Inventory-Production-Accounting are not connected internally
- **Dynamic tracking**
- A huge volume of stock (value , quantity)
- **Use of appropriate reordering policies, properly setup of safety stock, netting, prognosis (forecasts)**
- Purchase is not flexible
- **EDI, automatic price generation, use of substitutions and cross references**
- Insufficient information about vendors
- **QM**
- Futile purchases/payments
- **Workflow and operation approve, netting, use of modifiers on the Item card**
- Difficult stock (inventory) management in different places
- **Use of location, bins and responsibility centers**

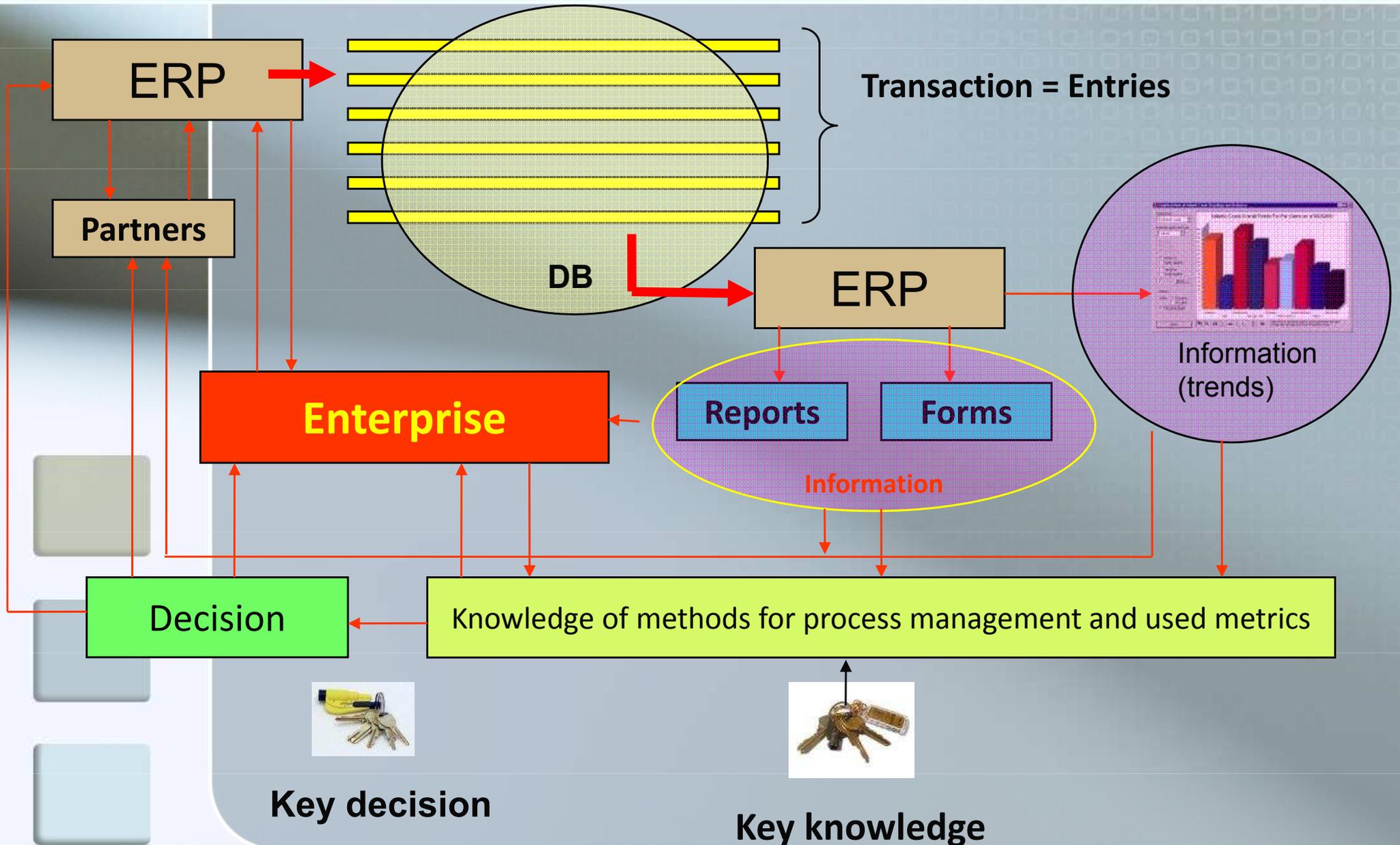
Bolesti ve skladu a v nákupu

- Not even workload of purchasers
- **QM, activities, tasks, business opportunities, priorities**
- E-Shop does not work or such a solution does not exist
- **Biz Talk**
- Difficulties in item tracking (lots, serial numbers, warranty expiration)
- Item tracking functionality of MS Dynamics
- **Virtual stock (D catalogues) does not exist**
- **Non-stock Items functionality**

Implementation cycle



Simplified diagram of ERP usage



Others

- Change log
- Inter-company posting (More companies)
- Business Notification
- Menu modified by users e
- Responsibility centres
- User Portal – Internet / Intranet
- Commerce Portal – B2C
- Commerce Gateway – B2B
- OLAP + Business Analytics