ERP Project Activities

Skorkovský, ESF MU, Department of Business Economics , version 20140917

Countries from where you probably came

- France
- Greece
- Uruguay
- Germany
- Ukraine
- Kazakhstan
-

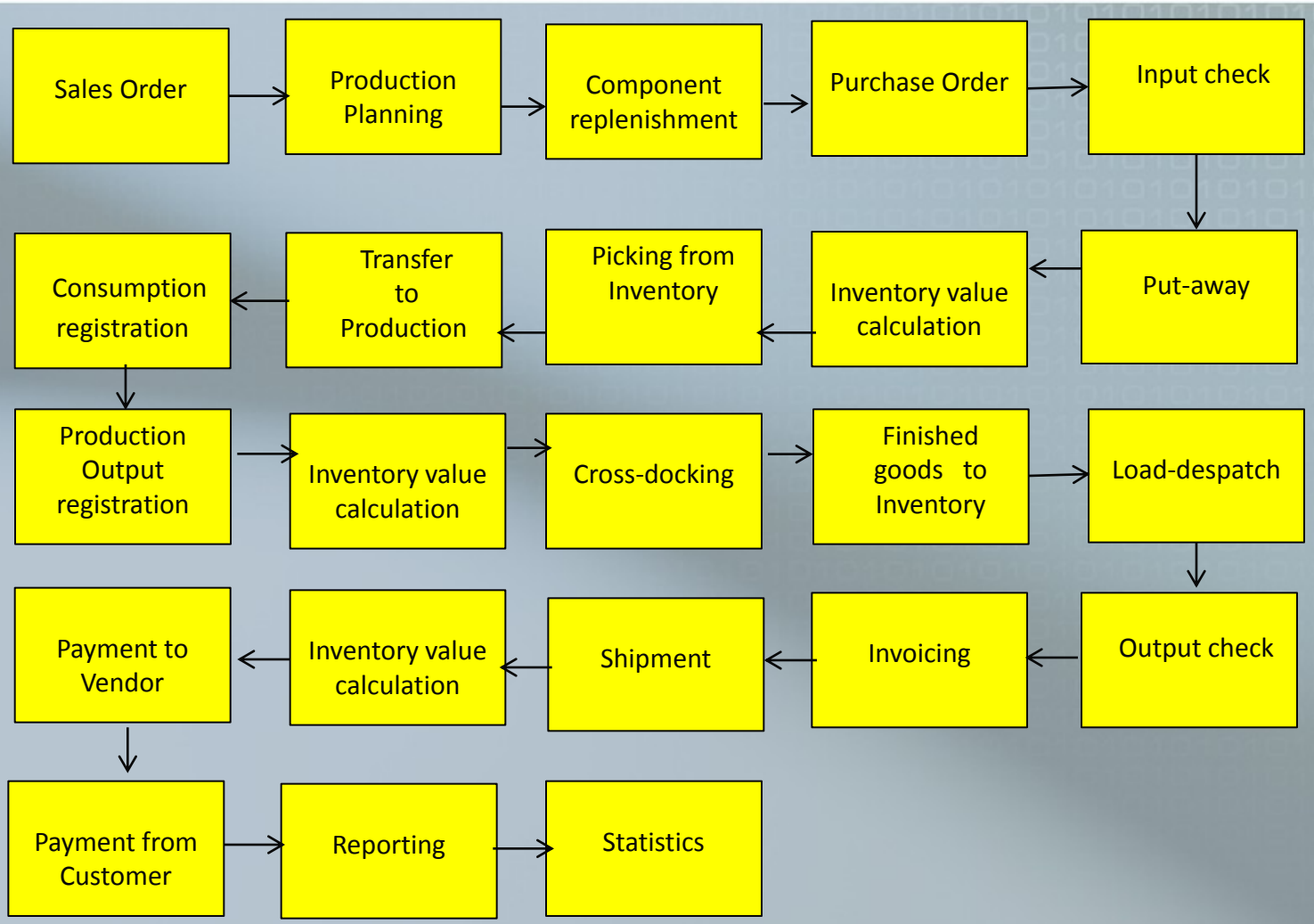
Teacher

- Department of corporate economy (V. Floor)
- External free lance consultant on contract – www.navertica.com
- Training manager – Navertica South Africa
- 1730@mail.muni.cz; miki@econ.muni.cz; jaromir.skorkovsky@navertica.com

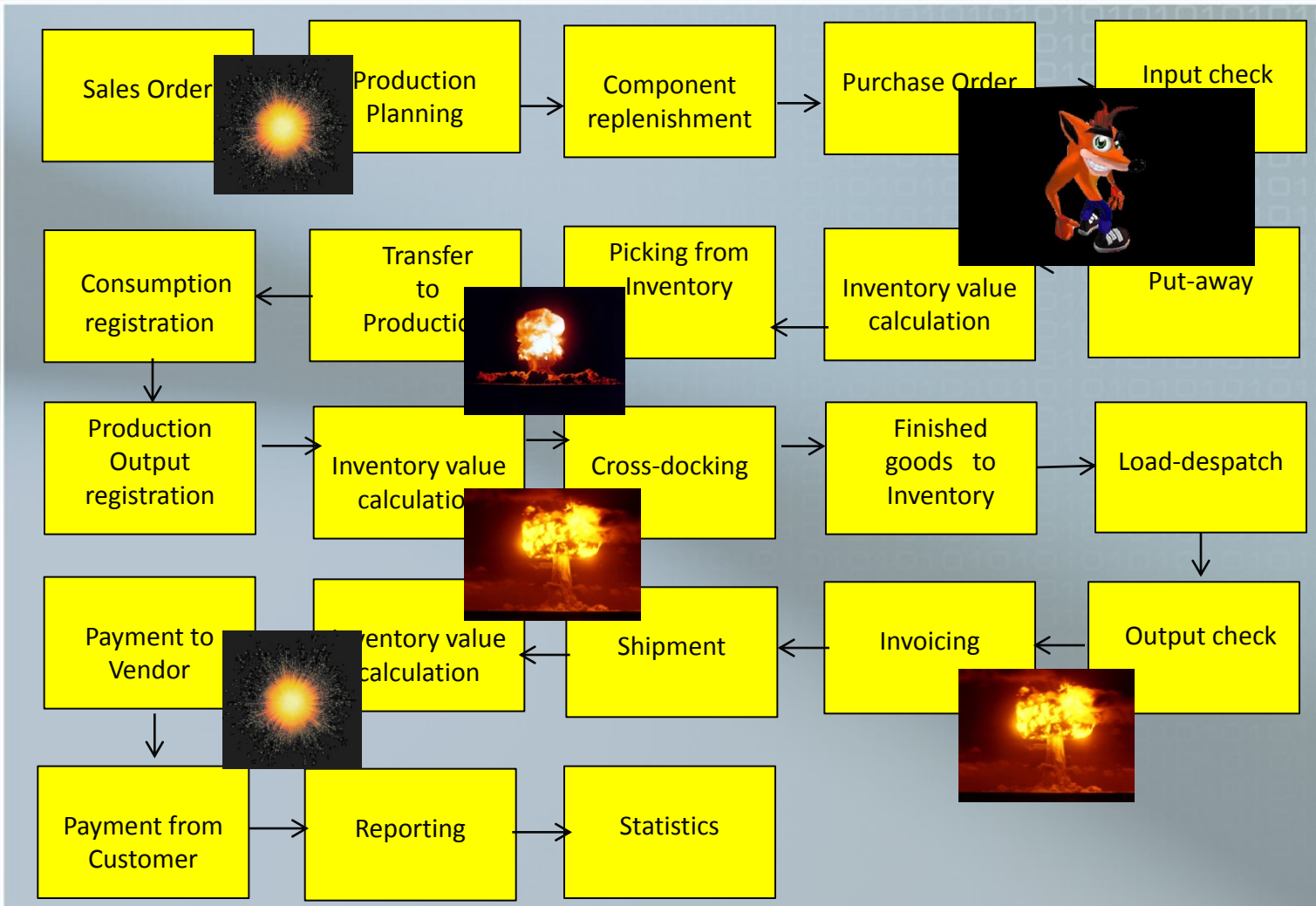
Your main task (not organised set of processes)

Load-despatch	Purchase Order	Reporting	Statistics
Consumption registration	Production Output registration	Inventory value calculation	Output check
Delivery	Production Planning	Sales Order	Component replenishment
Transfer to Production	Put-away	Cross-docking	Input check
Finished goods to Inventory	Picking from Inventory	Invoicing	Payment

Your main task (organised set of processes)

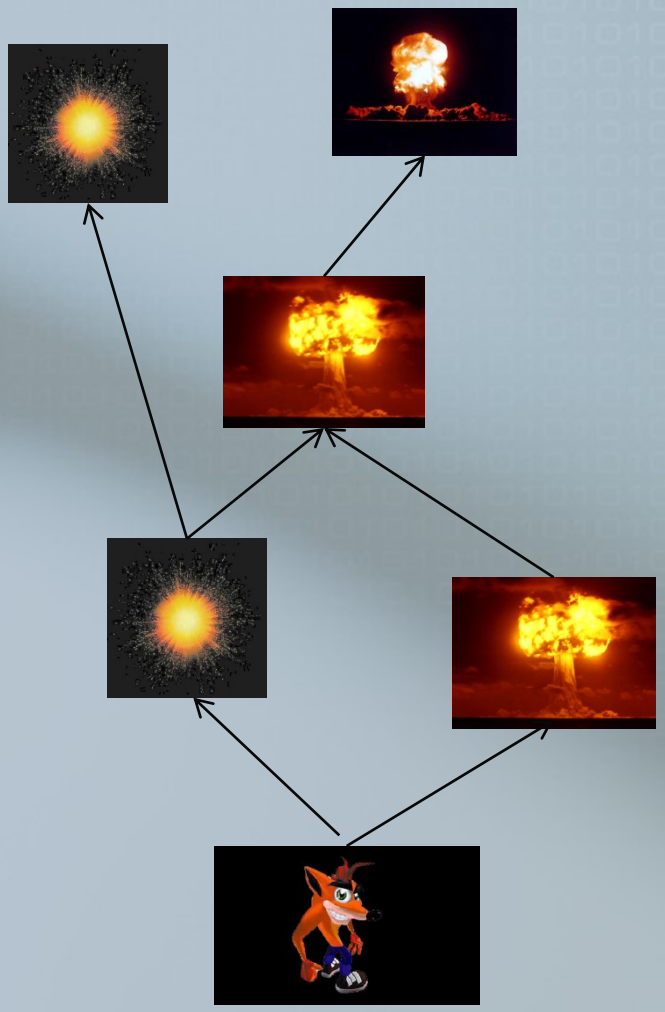


Your main task (possible problems, bottlenecks,..)



Your main task

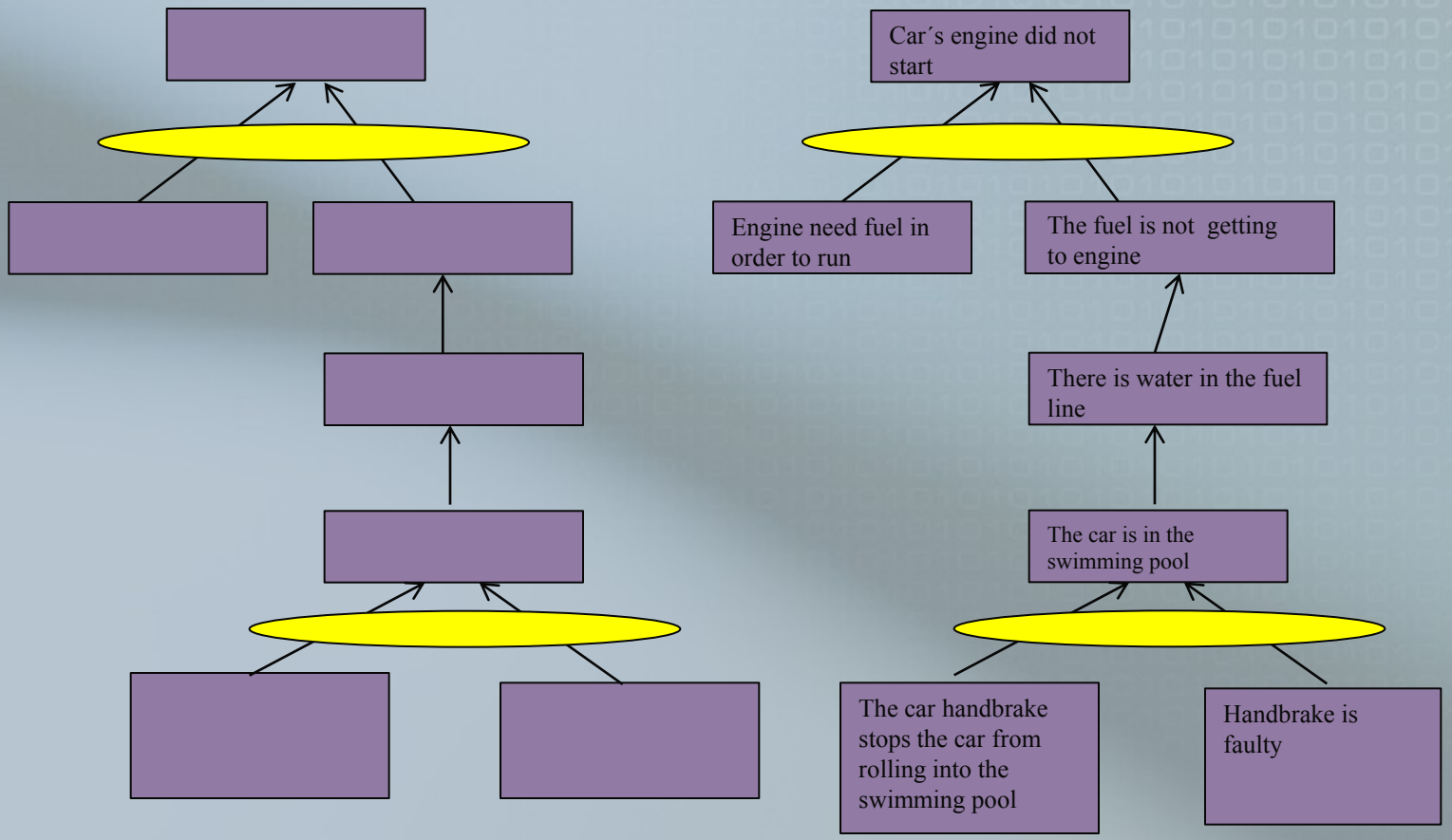
(Search problems **- HOW** ??? Measure impacts –**HOW** ??? and Destroy – **HOW** ???)



Some events and some undesirable effects

- The car is in the swimming pool
- The fuel is not getting to the engine
- Handbrake is faulty
- There is water in the fuel line
- Car´s engine did not start
- Engine need fuel in order to run
- The car handbrake stops the car from rolling into the swimming pool

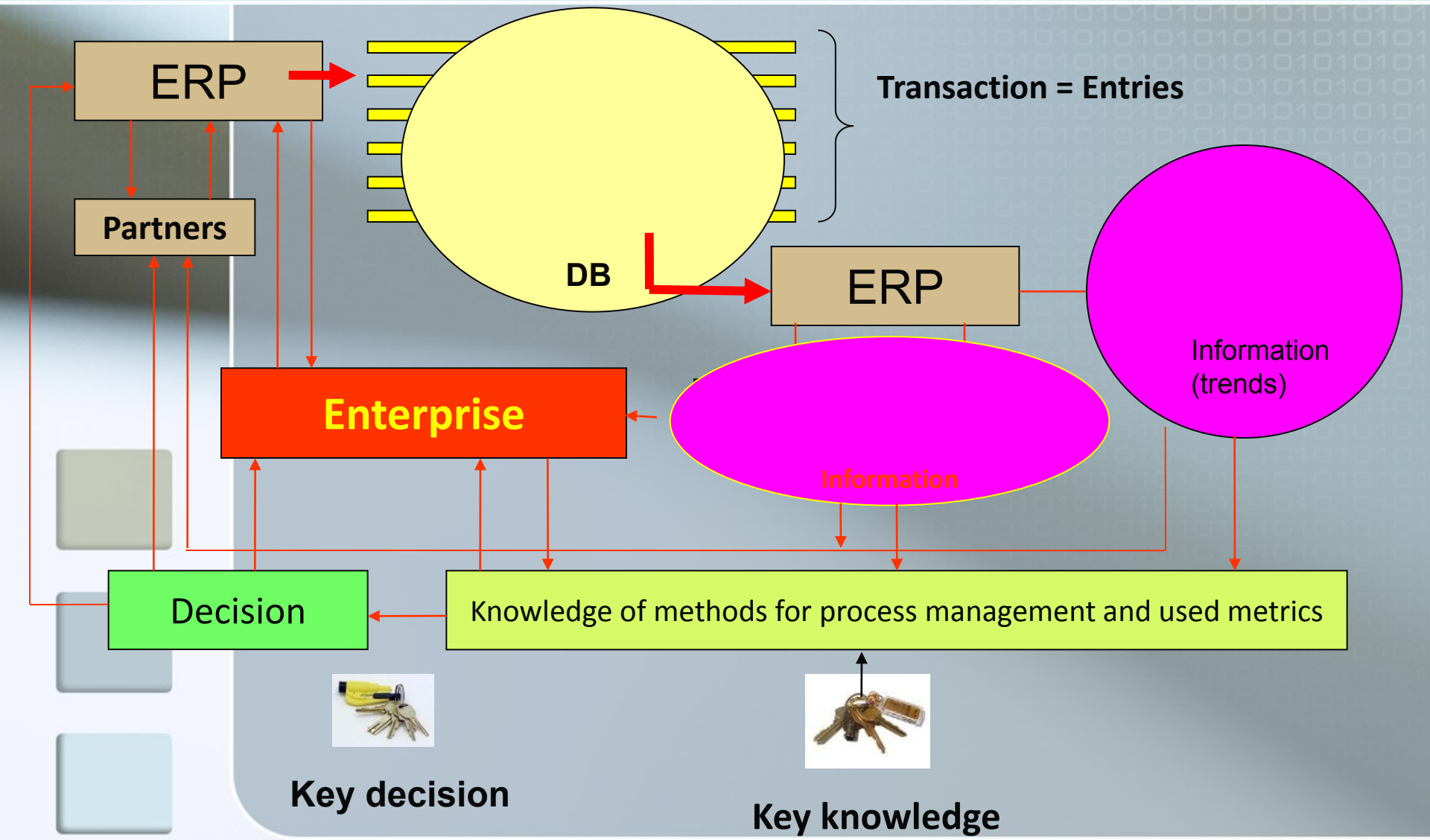
Your main task – model problem

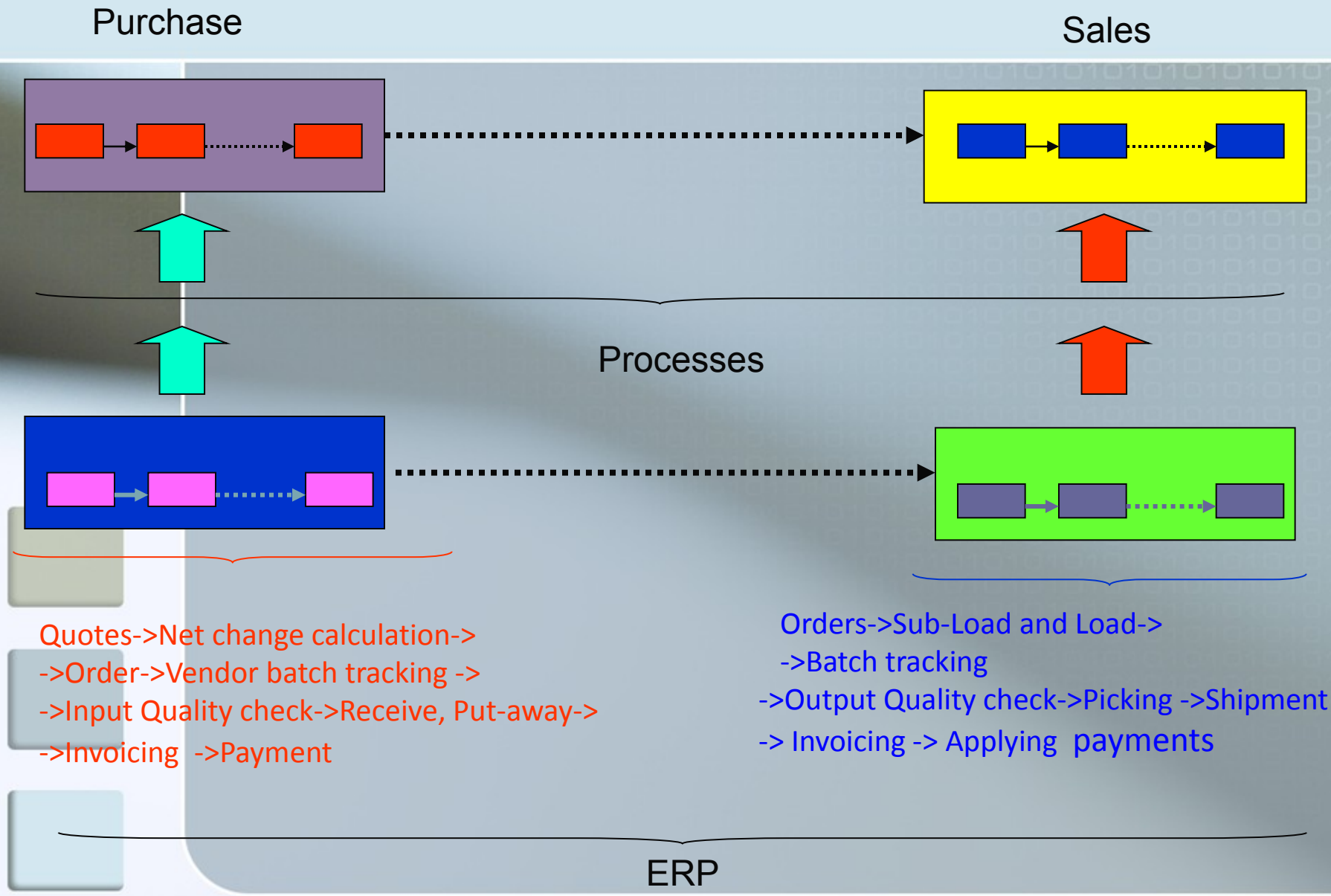


Methods (not sorted so far !!!!!!!!!)

- Theory of Constraints – how to control efficiently
- Critical Chain – project management issue
- Ishikawa Fishbone Diagram – quality management
- Pareto Analysis - – quality management
- OLAP (On-Line Analytic Processing)- data management
- Kepner –Tregoe method –decision making
- MaxMax and MaxMin (Hurwitz) - decision making
- SWOT – marketing, analysis
- ERP Statistics and reporting – mail tool
- Balanced Scorecard – company strategy
- Little´s law – production planning
- And many, many more…..

Simplified diagram of ERP usage




Purchase
Sales
Processes
Quotes->Net change calculation->
->Order->Vendor batch tracking ->
->Input Quality check->Receive, Put-away->
->Invoicing ->Payment
Orders->Sub-Load and Load->
->Batch tracking
->Output Quality check->Picking ->Shipment
-> Invoicing -> Applying payments
ERP

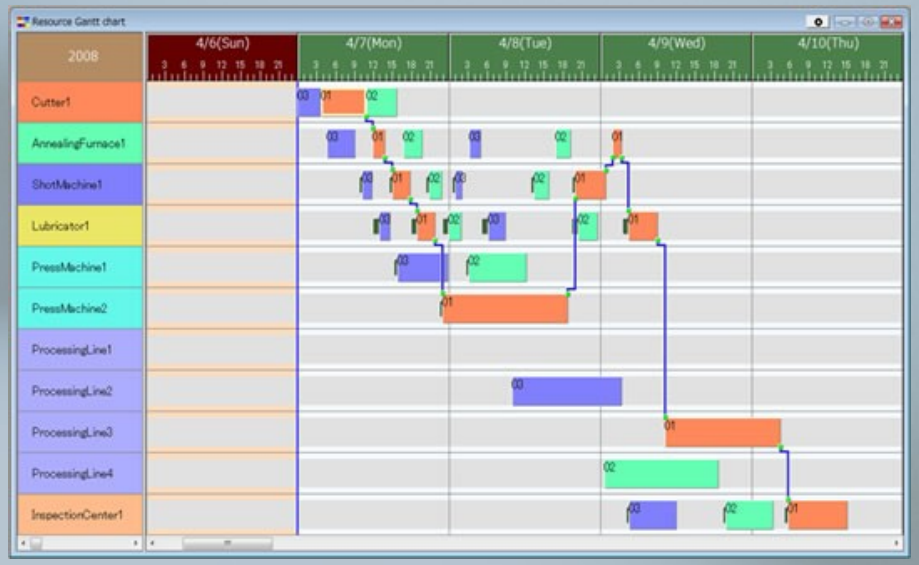
Main problem (one of many)

..and at the same time a minimum information which could be used for **making decision**

We have a huge data quantity

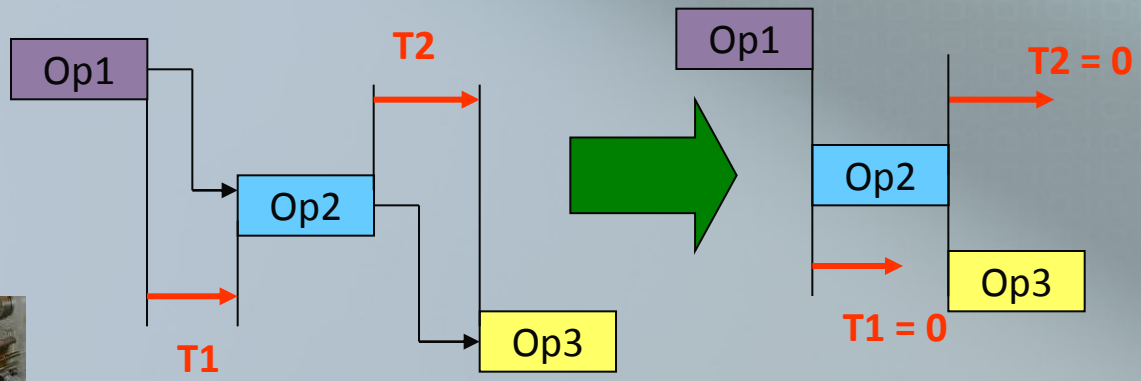
Main problem II (need of reliable data)

Wee need finite capacity scheduling (APS)



T1+T2=X

Opt=Min(X)



Why we cannot manage it ?

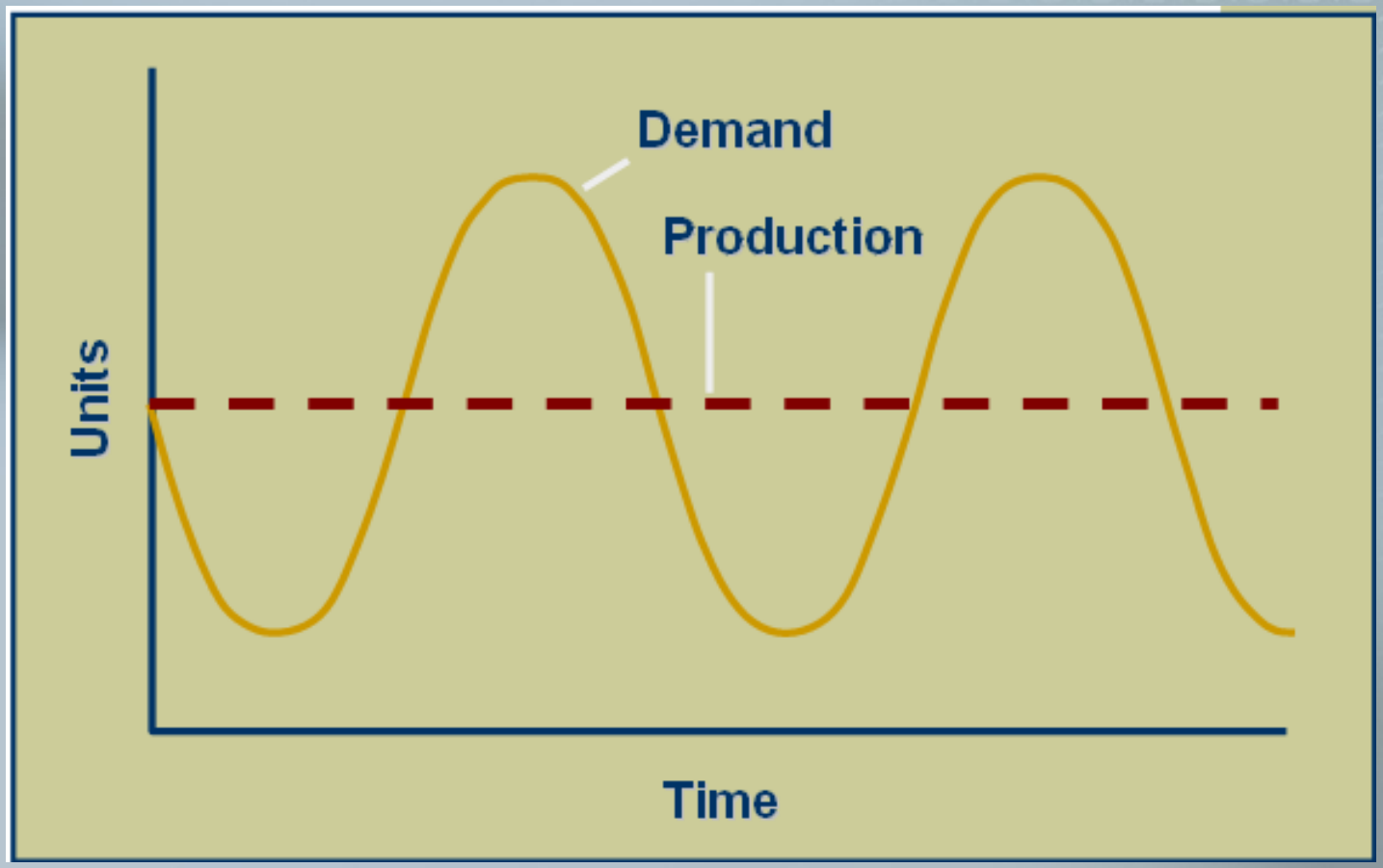
Unclear priorities, bad = SOP ,…

(SOP = Standard Operation Procedures)

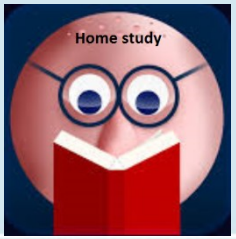
SOUTH AFRICAN project

SEE extra powerpoing file

Level production



Level production strategy



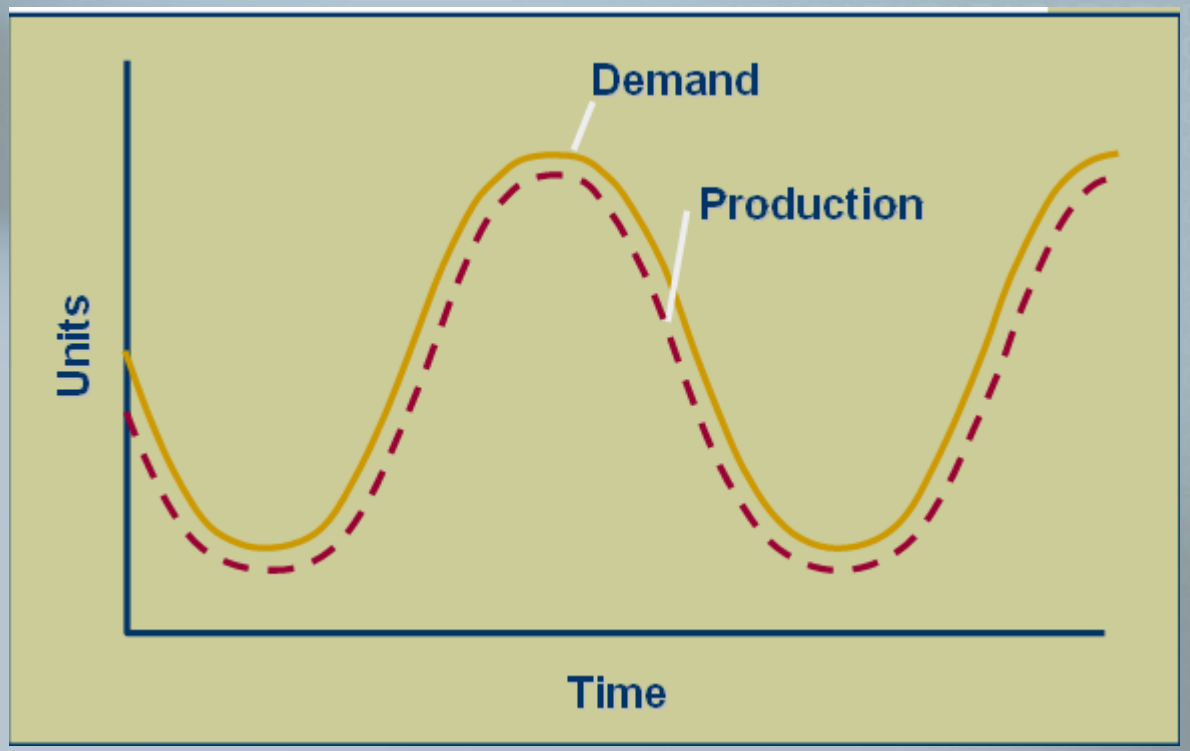
Period	Sales Forecast (kg)	Production plan (kg)	*Inventory (kg)*
Spring	80 000,00	100 000,00	20 000,00
Summer	50 000,00	100 000,00	70 000,00
Fall	120 000,00	100 000,00	50 000,00
Winter	150 000,00	100 000,00	0,00
		400 000,00	140 000,00

Hiring cost/worker	100,00
Firing cost/worker	500,00
Production cost/kg	**2,00**
Inventory carrying cost /kg	**0,50**
Production cost/kg/worker/quarter **Production capapcity of one worker**	1000,00
Beginning work force (workers)	100,00

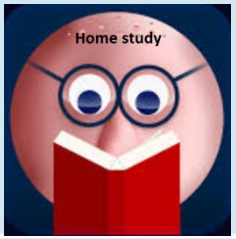
Russell & Taylor
Operations Management
Sixth Edition , p.586-595

Cost of Level Production Strategy
(400,000 X $2.00) + (140,00 X $.50) = $870,000

Chase demand



Chase demand strategy



Period	Sales Forecast (kg)	Workers needed	Workers hired	Workers fired
Spring	80 000,00	80,00	0,00	20
Summer	50 000,00	50,00	0,00	30
Fall	120 000,00	120,00	70,00	0
Winter	150 000,00	150,00	30,00	
			100,00	50,00

Cost of Chase Demand Strategy

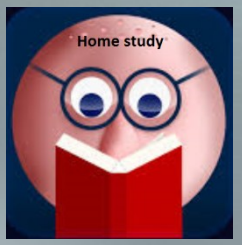
(400,000 X $2.00) + (100 x $100) + (50 x $500) = $835,000

Chase demand without optimization (Chase demand strategy)

Chase demand				Cost	835000
Workers start	100				
Products/worker/Quarter	1 000	Production cost	2,00	Firing cost	500
Inventory start	0	Inventory cost	0,50	Hiring cost	100
			Demand/1000		
QUARTER	Demand	Production	Need for workers	Hired	Fired
Spring	80000,00	80000,00	80	0	20
Summer	50000,00	50000,00	50	0	30
Autumn	120000,00	120000,00	120	70	0
Winter	150000,00	150000,00	150	30	0
Total	**400000,00**	**400000,00**		**100,00**	**50,00**

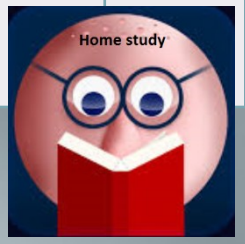
Cost of Chase Demand Strategy

(400,000 X $2.00) + (100 x $100) + (50 x $500) = $835,000



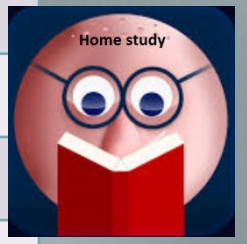
Chase demand with optimization (step one)

	Page 594 Ruseel and Taylor								
	Chase demand					Cost	0		
	Workers start	100							
	Product/worker/Q	1 000		Production cost	2,00	Firing cost	500		
	Inventory start	0		Inventory cost	0,50	Hiring cost	100		
Q	Demand (P)	Production (V)	Inventory(I)	Workerd needed (PD)	Hired (H)	Fired (F)	Demand constraints (OP)	Production constraints (OV)	Workforce constrtaints (OD)
1	80000,00	0,00	0,00	0	0	0	0	0	100
2	50000,00	0,00	0,00	0	0	0	0	0	0
3	120000,00	0,00	0,00	0	0	0	0	0	0
4	150000,00	0,00	0,00	0	0	0	0	0	0
Celkem	400000,00	0,00	0,00		0,00	0,00			
		Solver will put solution here					These cells contain constraint formulas : Example 14.3.		

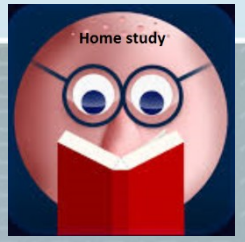


Chase demand with optimization (step two) – constraints formulas

		Demand		
Demand constraints	V1-I1	80000		
	I1+V2-I2	50000		
	I2+V3-I3	120000		
	I3+V4-I4	150000		
		Workers needed =PDi		
Production constraints	1000*PD1	1000* PD1		
	1000*PD2	1000* PD2		
	1000*PD3	1000* PD3		
	1000*PD4	1000* PD4		
		H=hired, F= fired		
Workforce constraints	100+H1-F1=PD1			
	PD1+H2-F2=PD2			
	PD2+H3-F3=PD3			
	PD3+H4-F4=PD4			

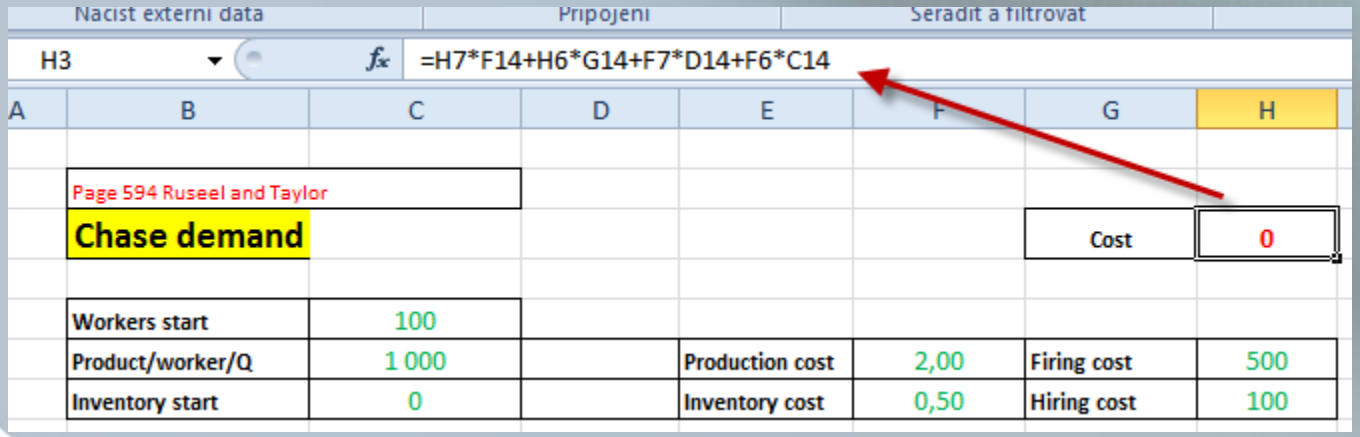


Chase demand with optimization (step three) – setup of the objective function

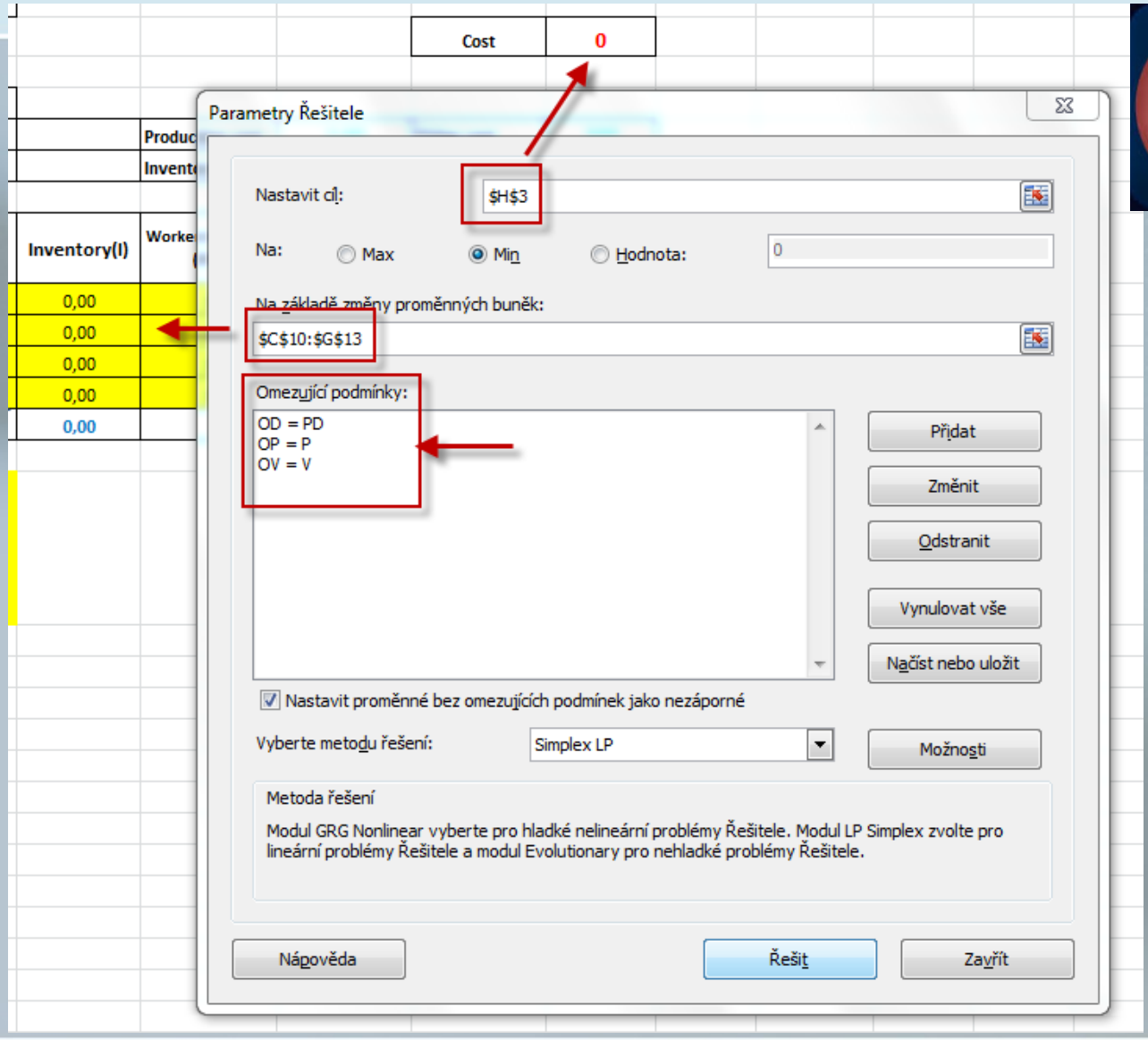


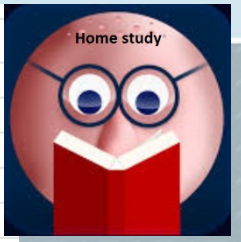
Minimize : 100*(H1+H2+H3+H4) +
500 *(F1+F2+F3+F4) +
0,50* (I1+I2+I3+I4) +
2*(V1+V2+V3+V4)

This formula is necessary to put to excel (cell cost)

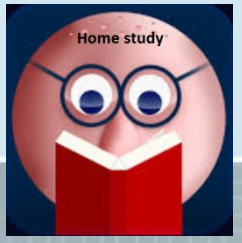


Chase demand with optimization (step four) – setup of the solver





Chase demand with optimization (step five) – solution created by Solver



	Page 594 Ruseel and Taylor								
	Chase demand					Cost	832000		
	Workers start	100							
	Product/worker/Q	1 000		Production cost	2,00	Firing cost	500		
	Inventory start	0		Inventory cost	0,50	Hiring cost	100		
Q	Demand (P)	Production (V)	Inventory(I)	Workerd needed (PD)	Hired (H)	Fired (F)	Demand constraints (OP)	Production constraints (OV)	Workforce constrtaints (OD)
1	80000,00	80000,00	0,00	80	0	20	80000	80000	80
2	50000,00	80000,00	30000,00	80	0	0	50000	80000	80
3	120000,00	90000,00	0,00	90	10	0	120000	90000	90
4	150000,00	150000,00	0,00	150	60	0	150000	150000	150
Celkem	400000,00	400000,00	30000,00		70,00	20,00			
		Solver will put solution here					These cells contain constraint formulas : Example 14.3.		

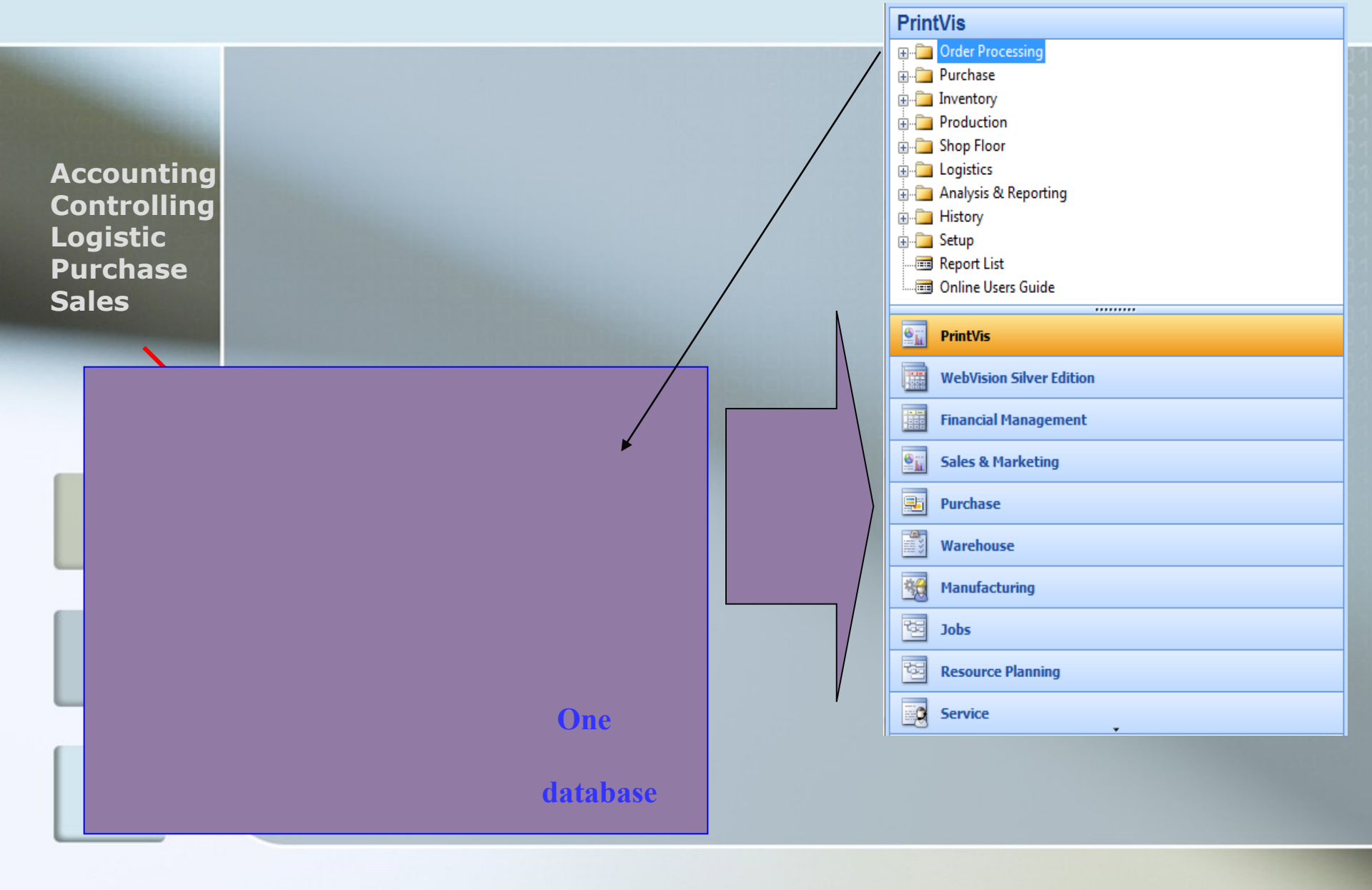
A simple business case....(example)

- Printing Company in Upper Lower Corner village somewhere in backwoods has a small problem :
- They use for managing printing procedures :
  - a very basic economic system **Sunshine** written by Six grade student (a son of the owner) – written in Pascal
  - another different systems for quotes calculation, logistics, production planning and control written in :
    - v obsolete FOX PRO

    - by 3 different programmers from 3 different companies
    - MS Office

Microsoft Office

Solution fully integrated to standard ERP package



Actual situation (example)

Supplier
John Brown
Software

Accounting

Supplier
Chinese
SW Kings

Business

ESKIMO
Virtual
Manufacturing

Production

Applications

Databases

causes what ????

Effects

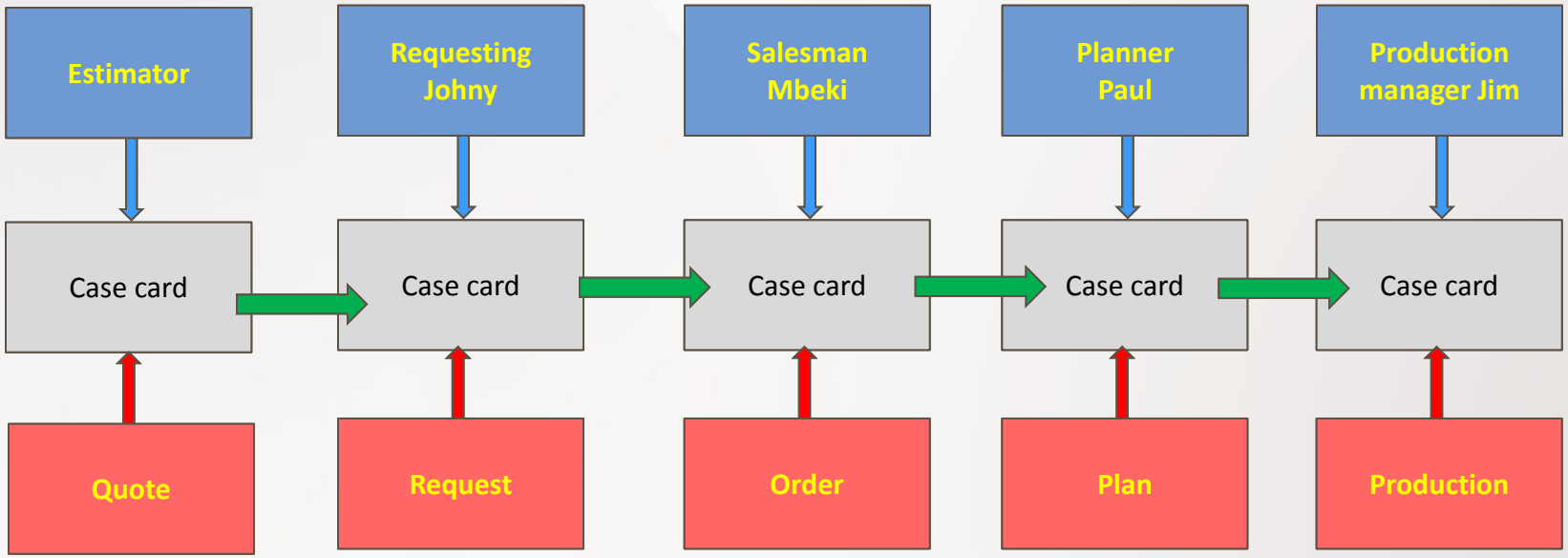
- difficult upgrades of applications
- difficult communication between different applications
- reduplicated data (redundant data)
- non actual data->bad decisions
- etc.

A simple business case (printing industry)….example - benefits

- Competitive market could requires for instance :
  - **fast reaction** to quotes
  - variable quotes and their immediate costing (calculation) –> **price variability**
  - **shortening of delivery times**
  - shortening lead times and cycle times -> **fast reaction**
  - reduction of inventory values (paper, colors)->**higher liquidity**
  - quality improvement ->**8D reports should be used**
  - processes driven by flexible workflow -> **flexible op management**
  - exact evaluation of finished jobs (production orders) in order to know real costs -> **better cost control**
  - feed backs to external and internal signals such as :
    - reasons of quotes dismissals (why ???????)
    - reason of unexpected costs (why ???????)

NAVERTICA
A BETTER BOTTOM LINE

PrintVis Workflow (in order to find easily e.g. Flexo order)



A simple business case….

- Competitive markets also requires :
  - Modern and efficient SW tools to control these processes :
    - **prepress:** desktop publishing, computer to plate, …
    - **purchase** of material (paper, colors,..)
    - **imposition** (how to put locate texts on the paper)
    - printing using different technologies (sheets, rotary press,..)
    - production planning and shop floor control
    - finishing operations such as
      - cutting
      - gathering
      - stitching

      } special printing operations
    - flexible invoicing
    - on-line accounting and so on and so on

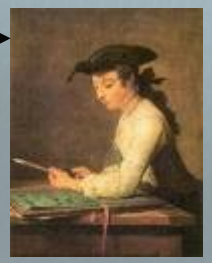
Printing machine

A simple business case….

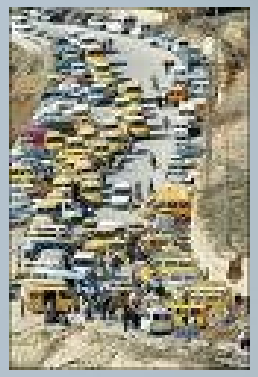
- Bottlenecks (TOC) – Threats (SWOT) :
  - obsolete information system, which requires all time some changes, patches,…
  - all parts of information system form an heterogeneous is IT tools heterogeneous hydra : finance management, costing, production, inventory, HR,… ,which **never provides user with real picture of the business !!!!!!**
  - inaccurate data from one application is inherited by another one, so the picture of the business always late
  - Costing depends on human failing factors
  - one author of every single subsystem
  - these authors **never meet each other** to coordinate their efforts…

A simple business case….

- Bottlenecks (TOC) – Threats (SWOT) :
  - internet auctions favour competitors which are cheaper and faster
  - the size of paper and colour purchase orders are based on inexact assessment of purchasers (if we have a lot of orders, types of papers, various machines and so on, the optimum assignment of the purchase batches sizes is beyond ability of human being with paper and pencil) →



Gaza gate →



A simple business case….

- Messiah arrives and says : “ I have for you this :“
  - modern and flexible and **standard** ERP system
  - background of IT company with tradition and experience
  - background of global IT vendor
- On the other hand an arriving messiah did not offer:
  - the knowledge of printing industry
  - printing application fully integrated with **standard** ERP
- Arriving applicant must :
  - understand processes in printing industry **(or any other base on chosen branch)**
  - be able to write printing application using development tools (languages) of standard ERP system
  - implement the solution
  - **OR** instead of **these three blue marked points** to find already existing vertical solution for printing industry, which is used all over the globe

A simple business case….

Finding a vertical is right !

- Let say, that we have found a foreign company having already **Print** SOLUTION developed (NovaVision),which was implemented 200-times and in different languages

One database only

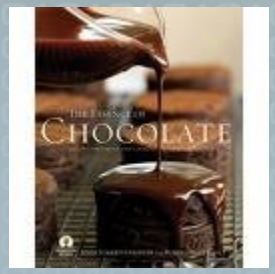
Other standard ERP modules :

Service Management
Human Resources
Business Analytics..

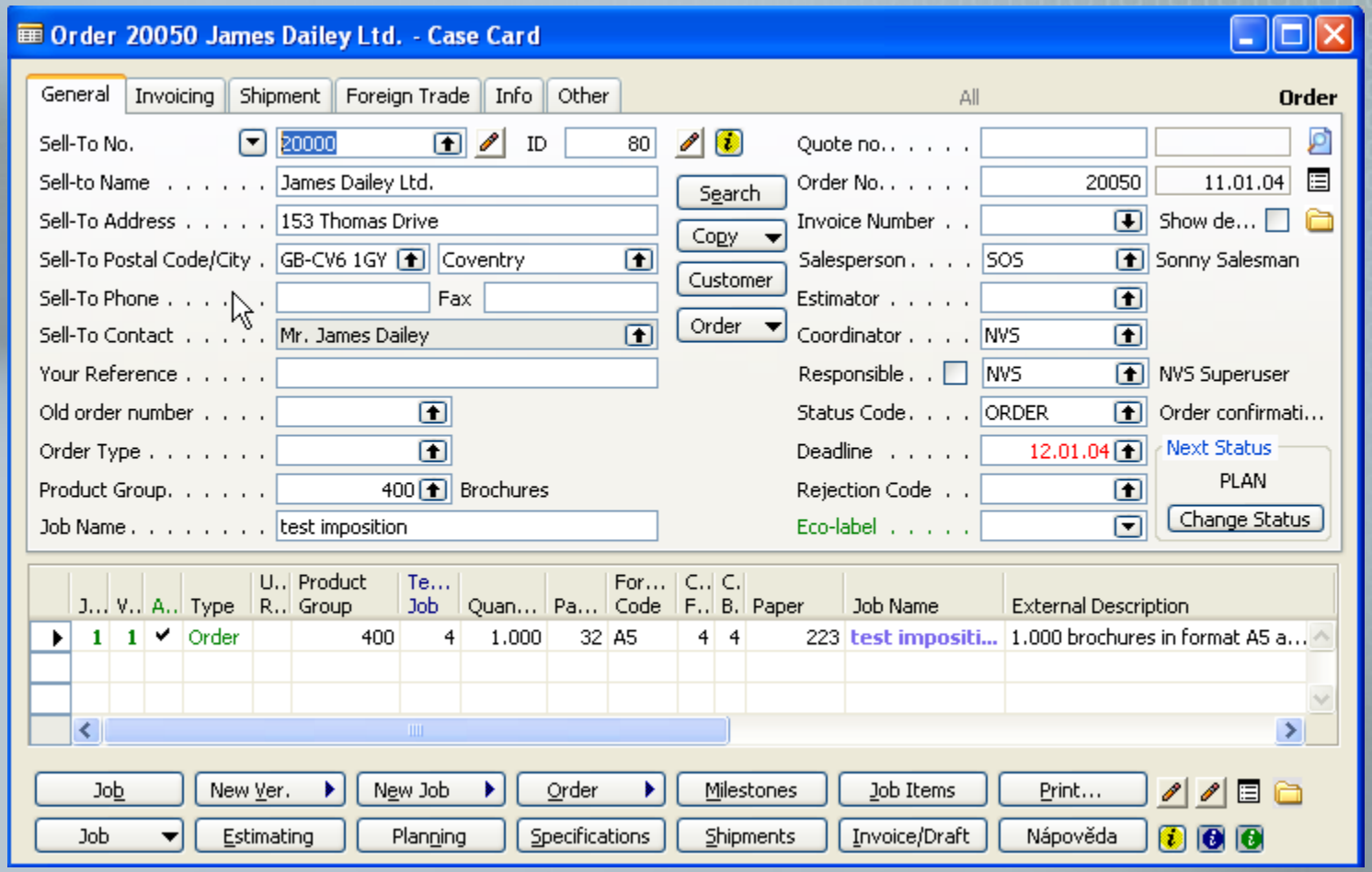
Accounting
Logistics
Purchase and Payables
Sales and Receivables
Standard production
CRM

A simple business case….project management – introduction

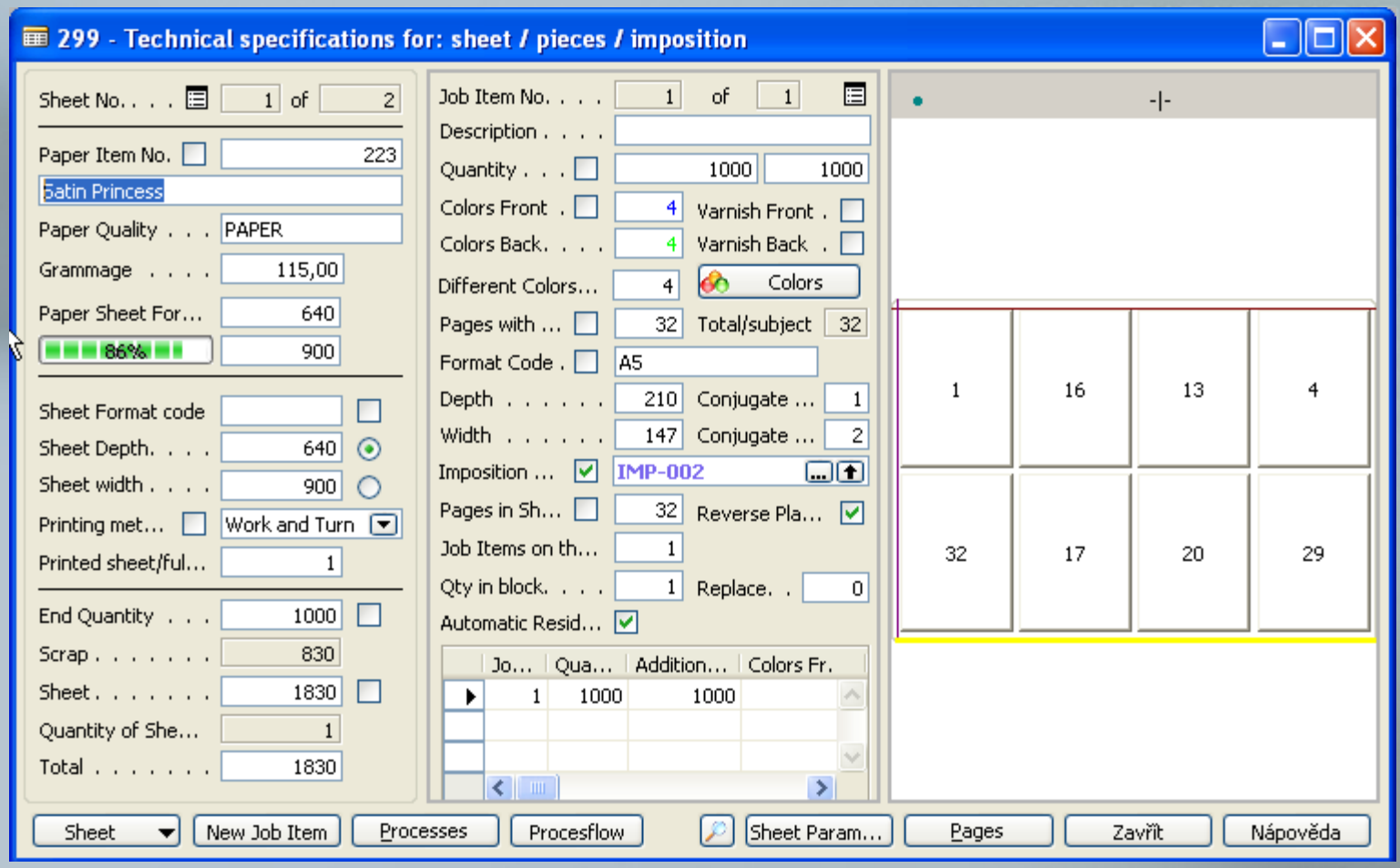
- Live Meeting:
  - application setup
  - basic functions and a „sweet points“
  - business case workflow (all the stages)
- Customer was happy and awaited consequential actions
- Vendor signs a contract about localisation and selling in pre-determined geographical areas



A simple main form of printing application **PRINT** integrated to ERP Navision



Another form of printing application **PRINT** integrated to ERP Navision (imposition and colours)



A simple business case….

- Some reasons which persuaded ERP vendor to sign a contract with vendor of vertical solution PRINT:
  - local market analysis (SWOT, GAP Analysis, BPM,BSC, Pareto, Ishikawa Fishbone diagram, TOC, CCPM....)
  - expectation of repetitive sales – promising market segment ->CRM application (pains and benefits)
  - analysis of the competitors-> CRM
  - possible co-operation with other PRINT experts abroad (sales of services)

Project entries..

- Activities
  - acquire necessary printing industry knowledge
  - introduction training provided by supplier of PRINT application (vertical solution)
  - team building
  - budget (costs „business plan“- revenues)
  - language localization **ENG->CZE**
  - modification ERP and a **Print** for Czech conditions (market specifications and legislation)
  - cope with inner application

Project entries..

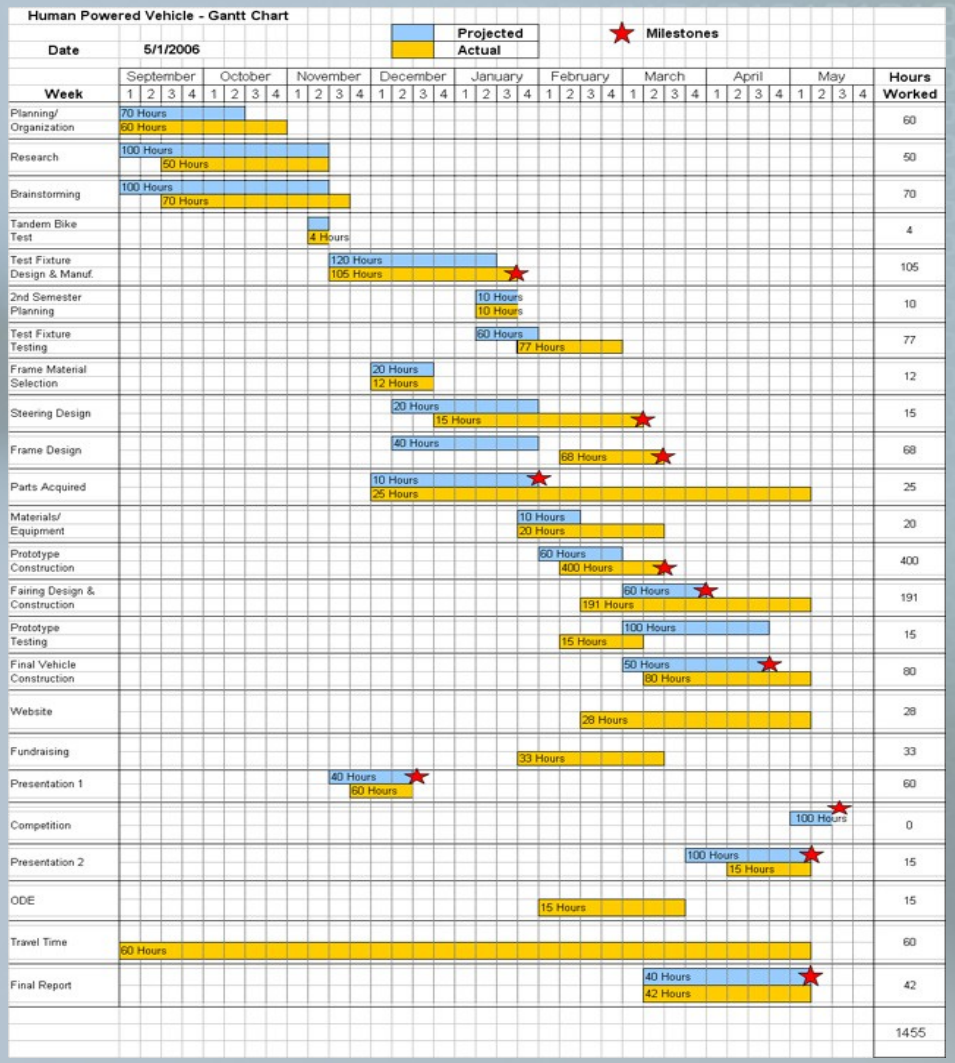
- Activities
  - translation of marketing material (fact sheet) and its printing in compliance with predefined templates
  - creation of PWP presentation for selling
  - prospect prediction – segments of market
  - naming of benefits „selling against“
  - presentation to chosen prospects and reaction to questions- use of feedbacks to improve knowledge of printing industry
  - **Print** price list generation

Project entries..

- Activities
  - „Kick-Off“ meeting
    - when, who, what and why (Kick-Off)
    - PWP presentation
    - invitation, graphic design
    - selling invitation and follow-up
    - Kick-Off
    - mapping of interests, business strategy modification and resource planning

Project entries…(will be part of **Critical Chain** theory, which will be show to students later)

- Gantt



Project entries…

- Activities
  - Contract signature with pilot customer
  - System implementation (only some important activities are mentioned here..)
    - feasibility study, analysis, target solution draft ……
    - introduction training
    - system customization – *will be shown in Dynamics NAV*
    - tests of introduced modifications
    - data transfers and setup of technological „master data"
    - generation and selling licences and HW tools such as servers, …
    - change management

Project entries…

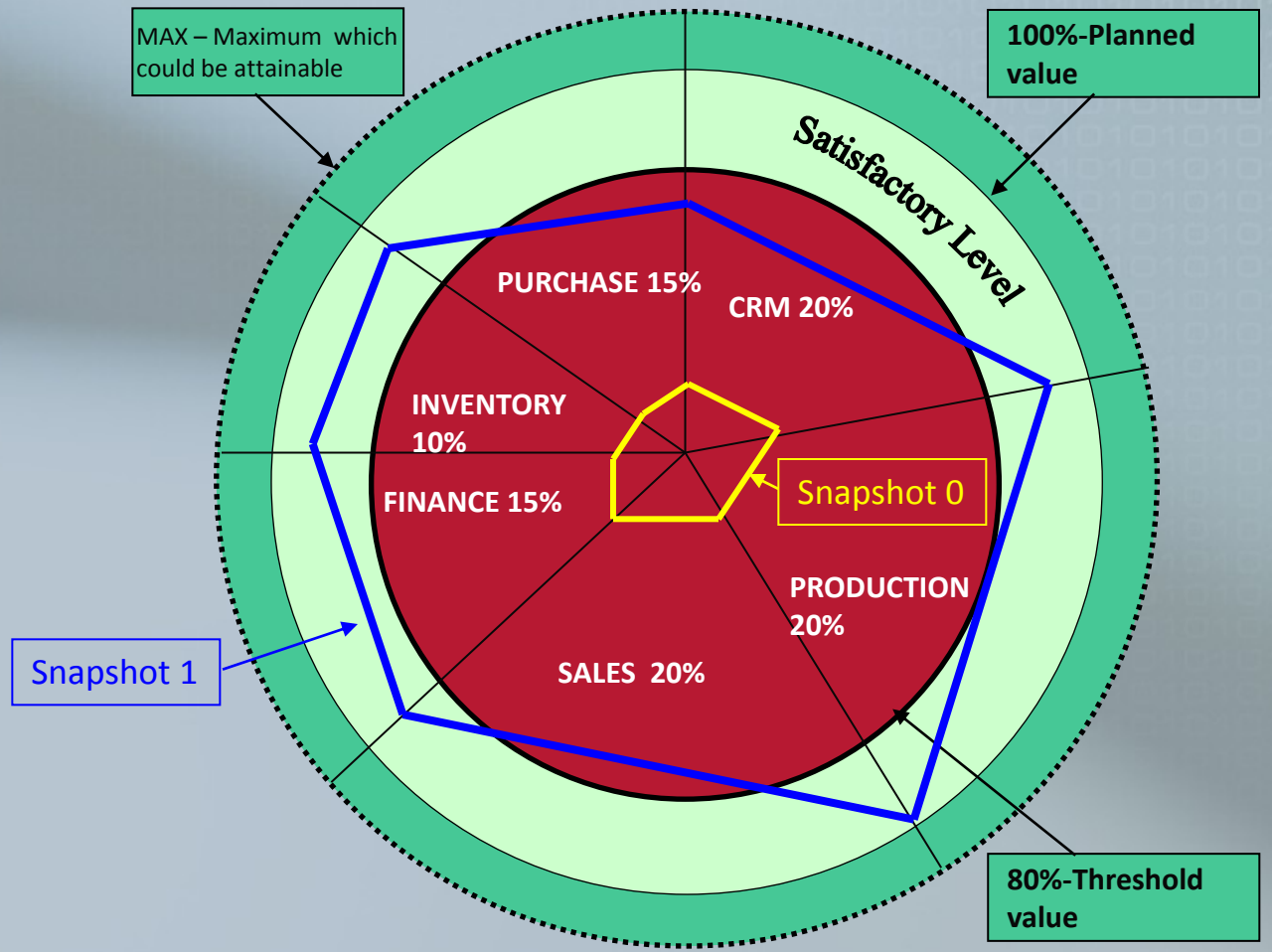
- Activities

  System implementation (only some important activities are mentioned here..)

  - training with real data in the ERP system
  - stock taking and transfer of balances on accounts
  - sharp start
  - support and surveillance

Necessary knowledge for project management

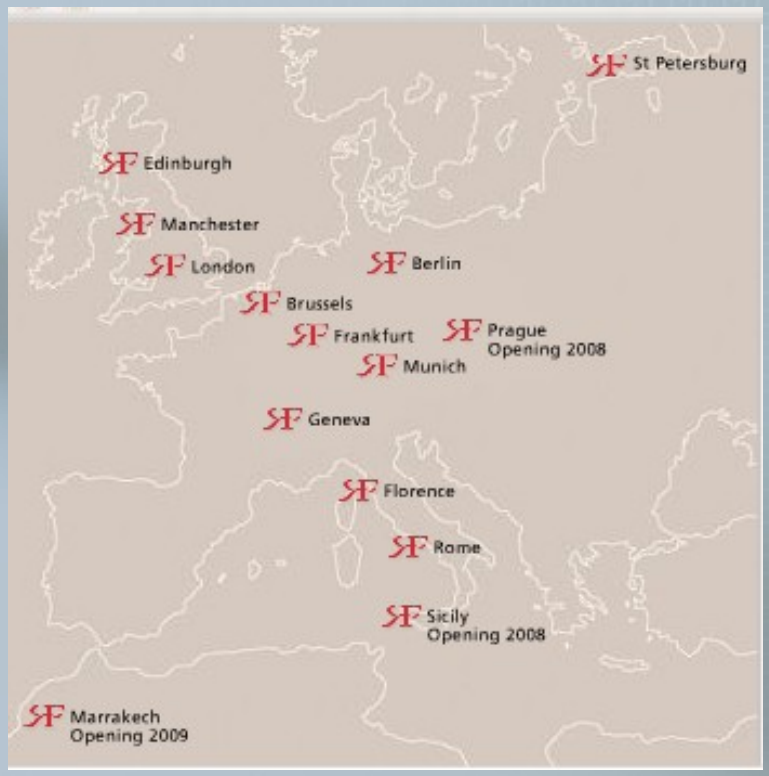
Project successful ? (from Snapshot **0** ->Snapshot **1**)



Another possible project.

- Hotel chain Rocco Forte * * * * *
- Where? (Great Britain 2x, Scotland 1x, Germany 2x, Prague 1x, Rome, Florence, CH, Russia ….)
- SW choice (chosen company for delivery standard accounting package of ERP and cooperation with author of hotel vertical solution : Serenissima Informatica, Padova)
- Choice of local partner (CZ MS Dynamics NAV partner X : requirements -> stability, knowledge of international business, languages, references- testimonial abroad, ..)
- Milano (server farm for all hotels)
- All hotels using same chart of account (USoA=Uniform System of Accounts) – simple consolidation (IFRS)
- Choice of hotel SW and accounting SW

Another possible project...

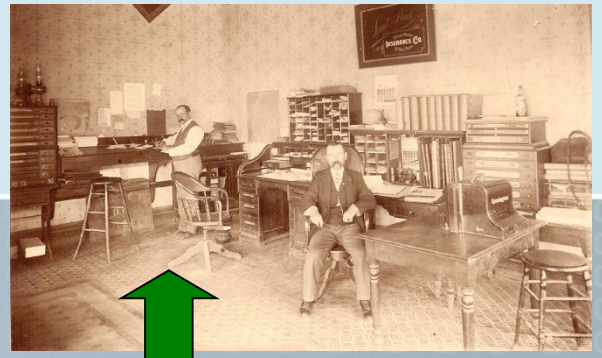


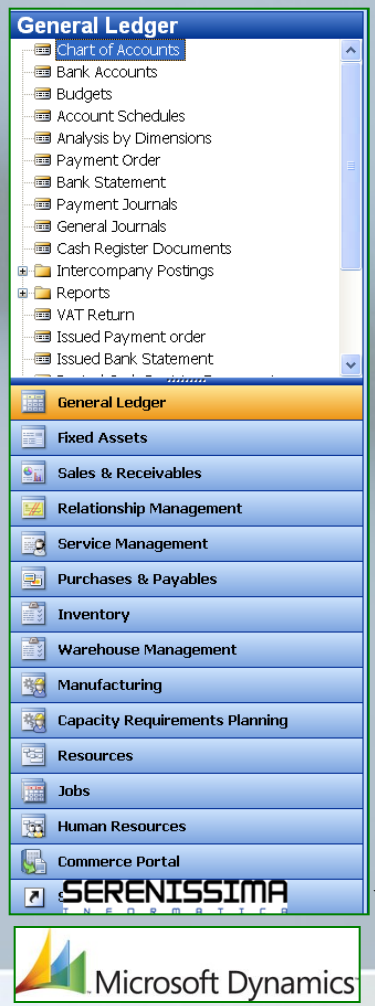
Another possible project

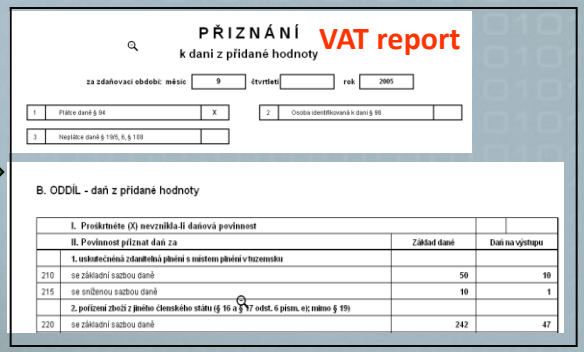
HOTEL DE ROME
BERLIN

THE AUGUSTINE
PRAGUE

Basic Concept (survey)







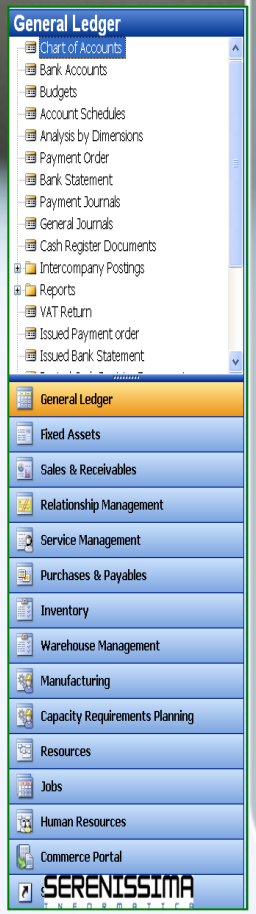
Dataport

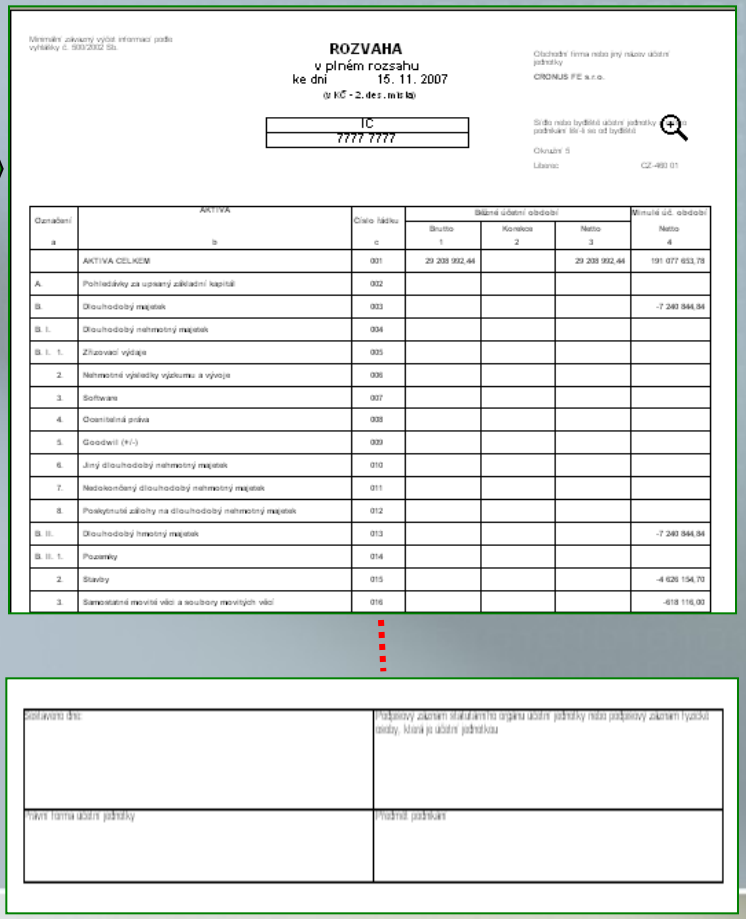
Translation of text strings used for communication Protel<->Dynamics NAV to Czech language (necessary knowledge of terminology and language)

	B	C	D	E
745	57002	Option String	Period,Fiscal Year	Období,Fiskální rok
746	57002	Field Name	Accrued/Deferred Amount Type	Typ částky na časovém rozlišení
747	57002	Option String	,Accrued Income,Accrued Charge,Deferred Charge,Deferred Revenue	,Příjmy příštích období,Výdaje příštích období,Náklady příštích období,Výnosy příštích období
748	57002	Field Name	Changed Original Data	Původní data změněna
749	57002	Field Name	Journal Template Name	Název šablony deníku
750	57002	Field Name	Document Type	Typ dokladu
751	57002	Option String	,Order,Invoice,Credit Memo	,Objednávka,Faktura,Dobropis
752	57002	Field Name	Journal Batch Name	Název listu deníku
753	57002	Field Name	Line No.	Číslo řádku
754	57002	Field Name	G/L Entry No.	Číslo věcné položky
755	57002	Field Name	Processed Flag	Číslo věcné položky
756	57002	Field Name	Deferred Posting	Odložené zaúčtování
757	57002	Field Name	To be Deferred	Zahrnout do příštích období
758	57002	Field Name	Document No.	Čís.dokladu
759	57002	Field Name	Line No.	Číslo řádku
760	57002	Field Name	Account No.	Číslo účtu
761	57002	Field Name	Account Description	Název účtu
762	57002	Field Name	Balance Account No.	Název rozvahového účtu
763	57002	Field Name	Balance Account Description	Rozvahový účet - popis
764	57002	Field Name	Amount	Částka
765	57002	Table	Accr/Def Amount Journal Header	Hlavička deníku pro částky na časovém rozlišení
766	57002	Text Constant	No journal line data found !	V řádku deníku nebyla nalezena žádná data !
767	57002	Text Constant	Date in Closed Period	Datum v uzavřeném období
768	57002	Text Constant	Initial Date not in Actual Fiscal Year	Počáteční datum nespadá do stávajícího fiskálního roku
769	57002	Text Constant	Final Data < Initial Data	Konečné datum < Počáteční datum
770	57002	Text Constant	Journal Amount Missing	V deníku chybí částka
771	57002	Text Constant	Type Not allowed with Def. Amount Delayed Posting	Tento typ není povolený pro opožděné zaúčtování Odložené částky
772	57002	Text Constant	Def.Posting not allowed with Journaling Period = Period	Zaúčtování Odložené částky na časové rpzlišení není povoleno pokud se perioda zápisu = Období
773	57002	Text Constant	Account Type %1 not valid for Deferred	Typ účtu %1 není platný účtování Odložené částky na časové rozlišení
774	57003	Field Name	Section Type	Typ sekce
775	57003	Option String	,Sale,Purchase,G/L Ledger	,Prodej,Nákup,Hlavní kniha

Balance sheet (generation using accounting schemes –

will be introduced to students)





Income Statement

Uniform System of Accounts

No.	Name	Income/Balance	Account Type	Mapping	ccount synte	Analytic	Czech description
0047500	Other Debtors - Insurance Advances Premium Payment	Balance Sheet	Posting		381	100	Náklady příštích období - pojištění zaměstnanců
0067700	Prepaid rent	Balance Sheet	Posting		381	200	Náklady příštích období - nájemné
0069000	Prepaid Insurance	Balance Sheet	Posting		381	300	Náklady příštích období - pojištění budovy a odpovědnosti
0069500	Prepaid Licences & Permits	Balance Sheet	Posting		381	310	Náklady příštích období - licence a povolení
0070000	Prepaid Maintenance Contracts	Balance Sheet	Posting		381	400	Náklady příštích období - provozní náklady
0070300	Prepaid Sales & Marketing	Balance Sheet	Posting		381	500	Náklady příštích období - Sales& Marketing
0070350	Prepaid - Property taxes	Balance Sheet	Posting		381	600	Náklady příštích období - daň z nemovitosti
0141000	Financing Costs	Balance Sheet	Posting		381	700	Náklady příštích období - náklady na financování
0141100	Brand	Balance Sheet	Posting		381	800	Náklady příštích období - rebranding
0155000	Pre Opening Cost	Balance Sheet	Posting		381	900	Náklady na zprovoznění hotelu
0250010	GRNI - Stores	Balance Sheet	Posting		383	100	Výdaje příštích období - stock
0250050	GRNI Non Stores	Balance Sheet	Posting		383	200	Výdaje příštích období - non-stock
0249000	Deferred Income	Balance Sheet	Posting		384	100	Výnosy příštích období
0249100	Deferred Income Other	Balance Sheet	Posting		384	200	Výnosy příštích období - jiné
0249500	Deferred Income - Subscription	Balance Sheet	Posting		384	300	Výnosy příštích období
0021000	Guestledger (Accrued Income)	Balance Sheet	Posting		385	100	Příjmy příštích období - nevyfakturované tržby
0048500	Accrued Income - other	Balance Sheet	Posting		385	200	Příjmy příštích období - ostatní

Accrued Revenues (revenues generated in the future periods)

Income (still not created)

General Ledger

Customer

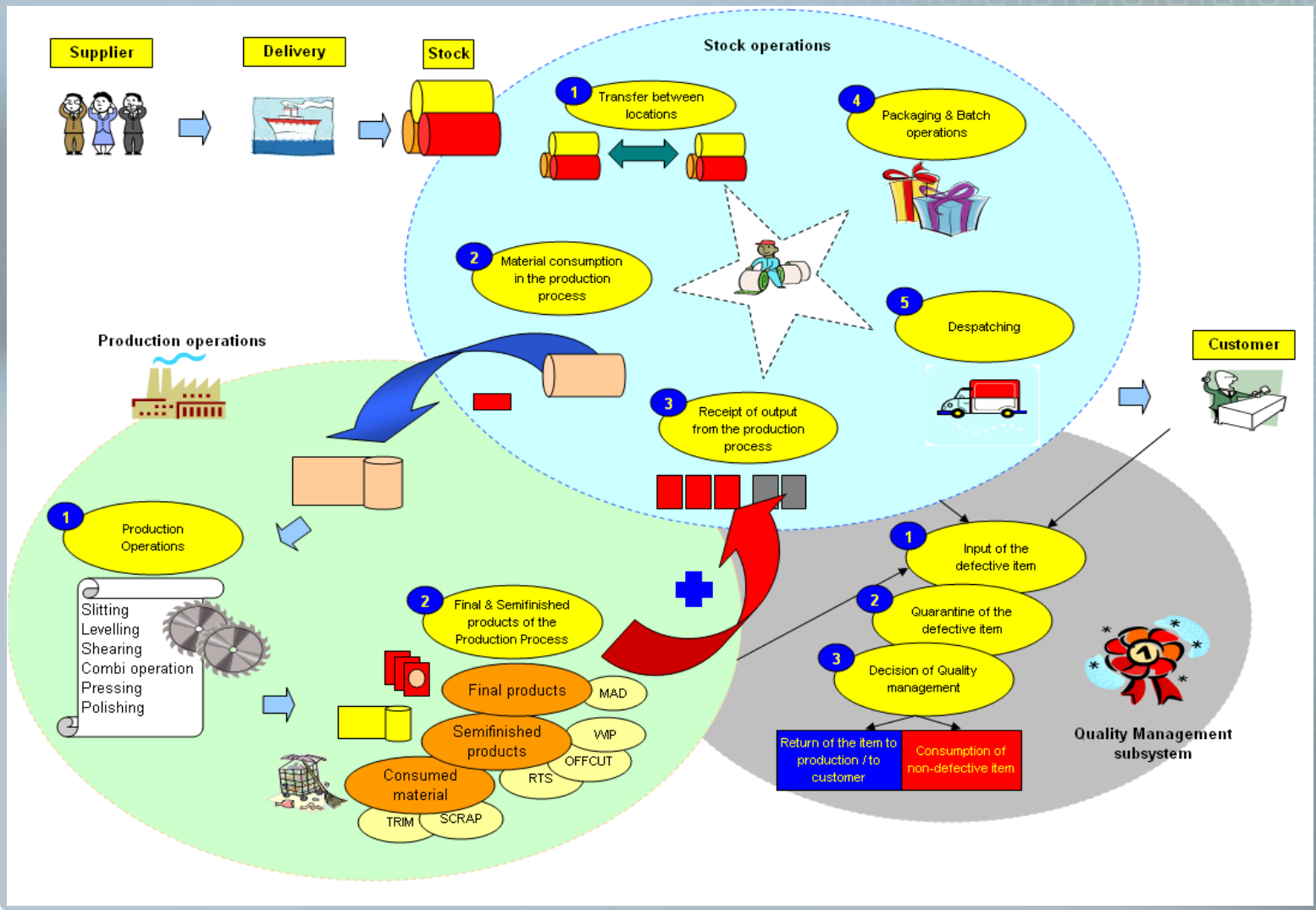
Accrued and Deferrals

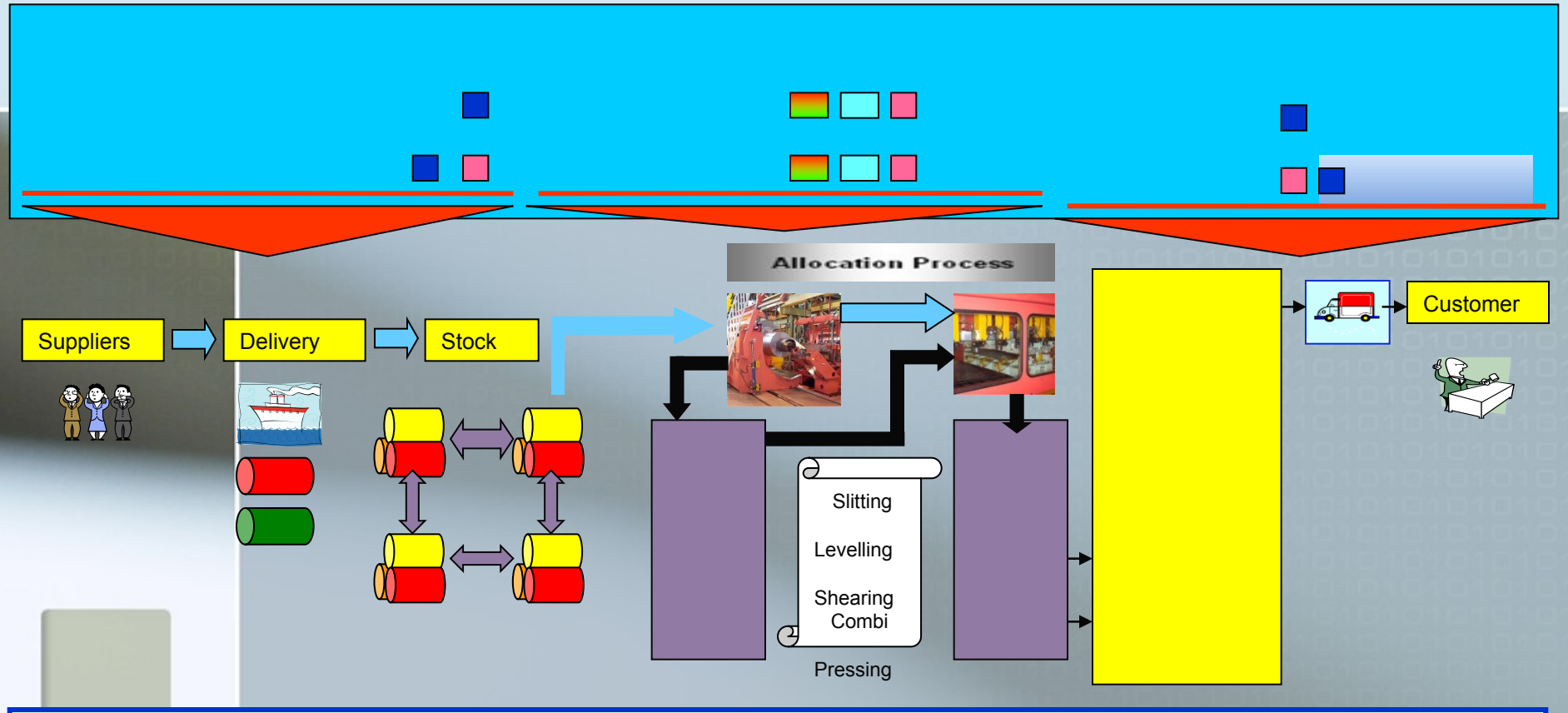
Deferrals : It means when You receive an Invoice for Service;
Service provided partially in one Fiscal Year, and Partially for the following Fiscal Year.
Ex. : In November You receive an Invoice for IT Service provided from November 2007 until June 2008.

You have to charge 2 Months for 2007 and 6 Months for 2008 Fiscal Year.
In other words Deferred Costs happens when You receive in advance an Invoice for Services provided in the future. It's possible to have the same also for **Revenues**

Accrued :
Ex. : In May 2008 You receive an invoice for Services provided from November 2007 until May 2008.
Normally You have to charge in advance, Cost for Services for November and December 2007 without any Invoice, and You balance this Cost with special Accounts.
This happens very often in Hotel management because, for management control, they have to produce every month Profit & loss report. It's more or less like a Year close done on every Month.
In other words Accrued Costs happens when You receive an Invoice for Services **after the Service was provided.** The same can happens also for revenues.

Another possible project –Automotive, Appliances, packaging industry

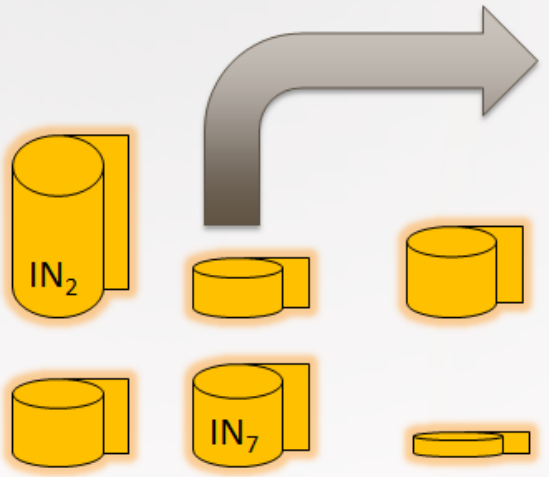




Bespoke Functionality

Mapping prinicples

Models (batch, product, part, subassembly, requirement, driven by sets of parameters)



Uncoiler (Aida)= $F(x_1;x_2;..\ x_7;...\ x_Q)$

Automotive client

Mapping

REQ

$IN_i = F(x_1;x_2;..\ x_7;..\ x_N)$

Material awaiting despatch → $MAD_1= F(x_1;x_2;..\ x_7..;\ x_Q)$

X2=Material	X7=Weight
ALU . . Stainless steel	Value

Parameter values

Mapping = we can produced MAD_1 from e.g. IN_2 and IN_7

MAD=Material Awaiting Dispatch

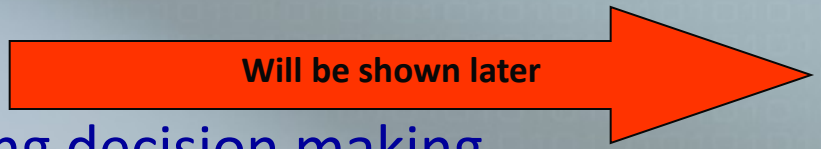
Parameter driven batch	
X2=Material ID, OD X7= Weight Profil	ALU 400 mm <10 tones Coil

Knowledge of methods, which are necessary for project management and process management

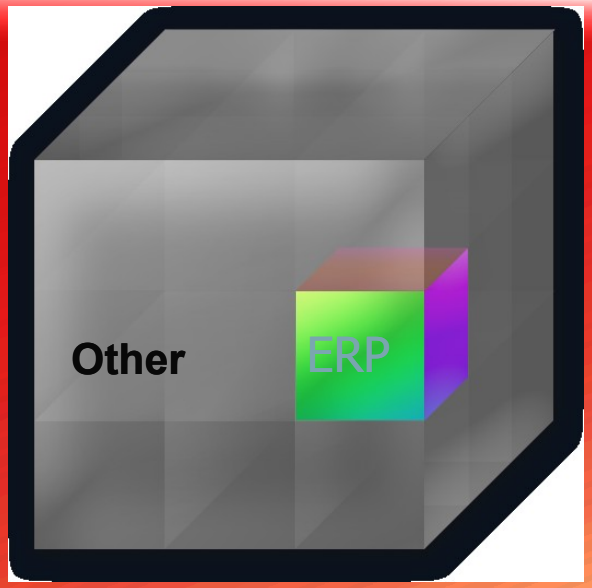
- **Theory of Constraint** (will be introduced-72 slides)-**seminar work!!!!**
  - Critical chain methodology
  - Thinking tools
  - Throughput Accounting ->go to wikipedia
- Balanced Scorecard (will be introduced)
- SWOT a Gap Analysis (You should know it,I guess..)
- Quality management (Ishikawa and Pareto- will be introduced)
- ERP system and its logic (will be introduced- 28 hours)
- Logistics (warerhouse management)
- Finance Management and Controlling
- Production Management (MRP, MRP-II, JIT and DBR)
- Decision making tools (Kepner Tregoe-will be introduced)

Knowledge of methods, which are necessary for project management and process management

- Legal aspects of contracts
- Cost management
- Foreign languages
- Basic knowledge of IT architecture will be introduced
- Methods used for project management
- Business Analytics
- Methods supporting decision making
- Risk management
- Basics of marketing



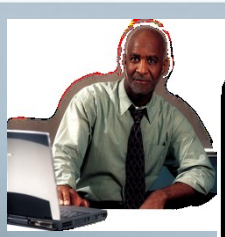
Business Analytics – some reason why to discuss



- The data is not all in the ERP
- The tools are rigid and hard to learn
- The tools don’t reflect how we work today
- They don’t span the continuum of needs

Information Overload

What Users Need

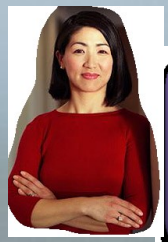


CEO

"I need to know that the people in my organization have the right goals in place to understand and execute on the strategic initiatives of the company."

VP, Operations

"I need better visibility into my cost of operations so I can target specific cost reduction opportunities that won't have a negative impact."



VP, Sales and Marketing

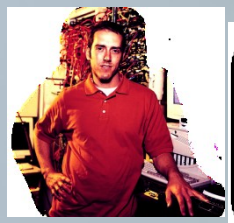
"I need better visibility into our pipeline performance so I can focus on deals that help me grow business with my most profitable customers."

CFO

"I need to improve our analytics capabilities so we can understand our current business performance and do a better job of planning for the future."

Sales Rep

"I need to have the right demographic information so I can better target my opportunity prospecting."



Customer Support Rep

"I need better access to information to make better decisions on cross-sell and up-sell opportunities."

Source: "Creating the Office of Strategy Management" by Robert Kaplan and David P. Norton, Harvard Business School, April 2005

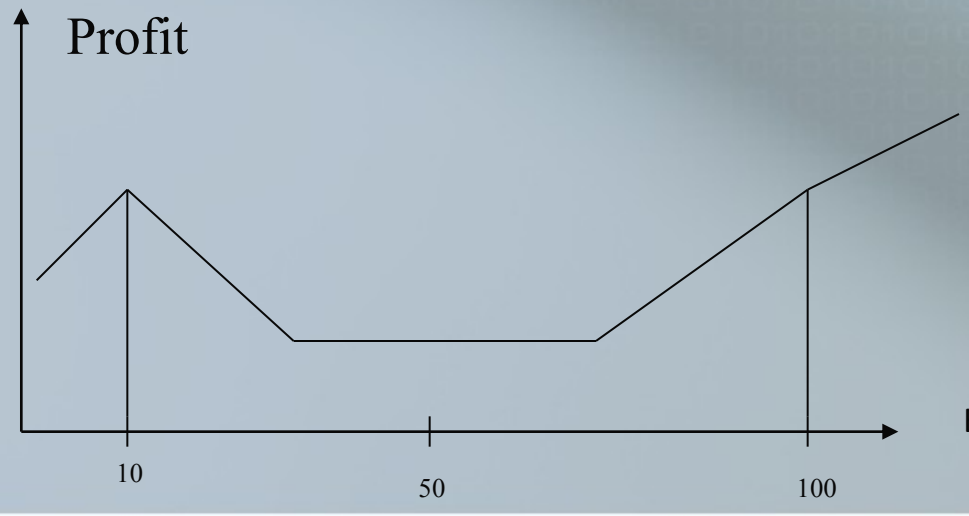
Managing Through the profit valley

- Initially, most partners business are run by one or two founders, who manage every part of the business : sales and marketing, project management, service delivery management, accounting, sub-load and load, collection, HR and many many more….

Those guys are responsible for performing all day-to-day functions of their business

Managing Through the profit valley

- As their business grows over 10 employees, it is impossible to perform all their role properly.
  - Cash flow becomes erratic (chaos)
  - Projects go offside,
  - Filling pipeline is a struggle
  - Revenue stays still strong but profitability drops
- Company is trapped in the „Profit Valley“



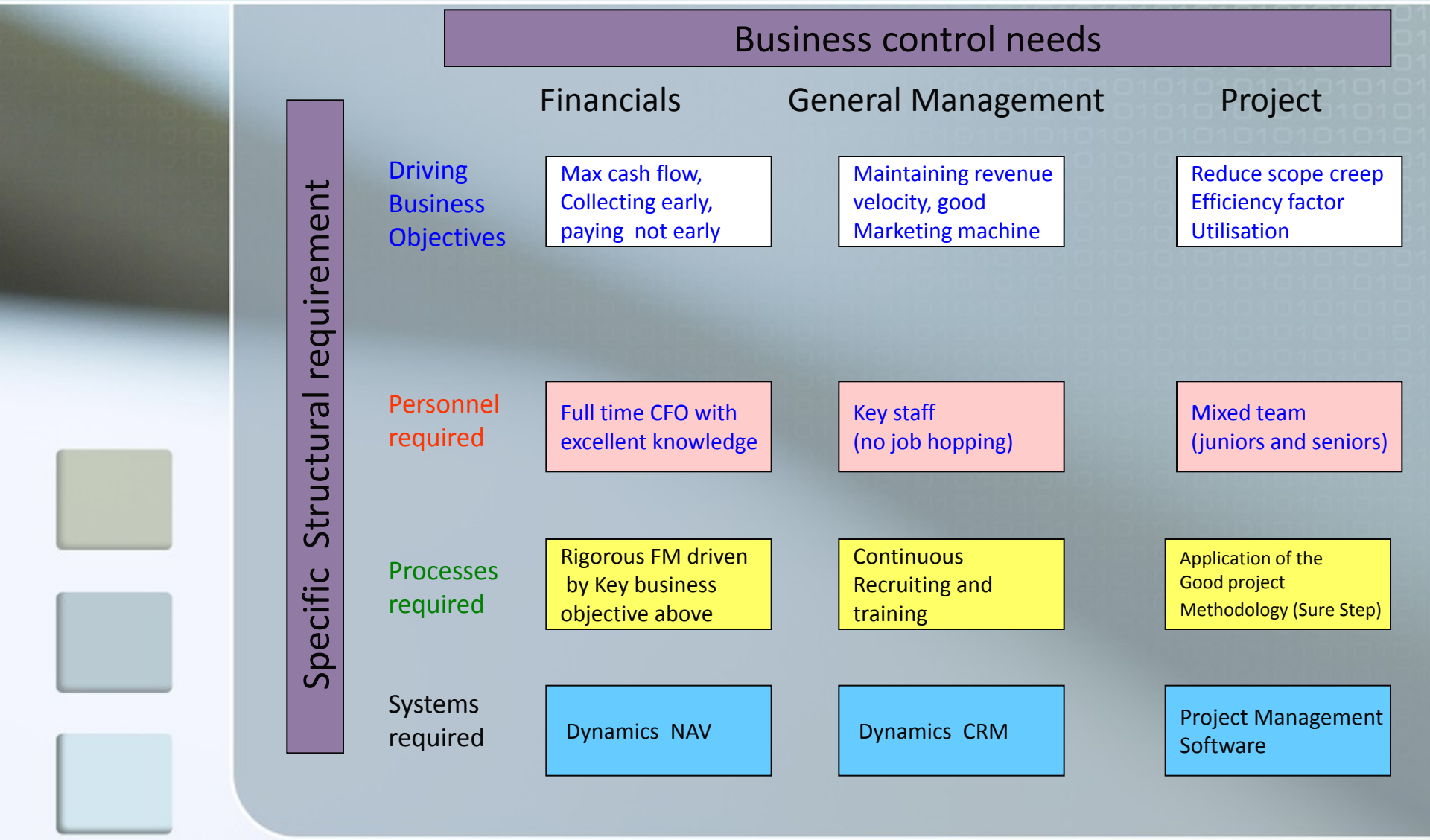
Managing Through the profit valley

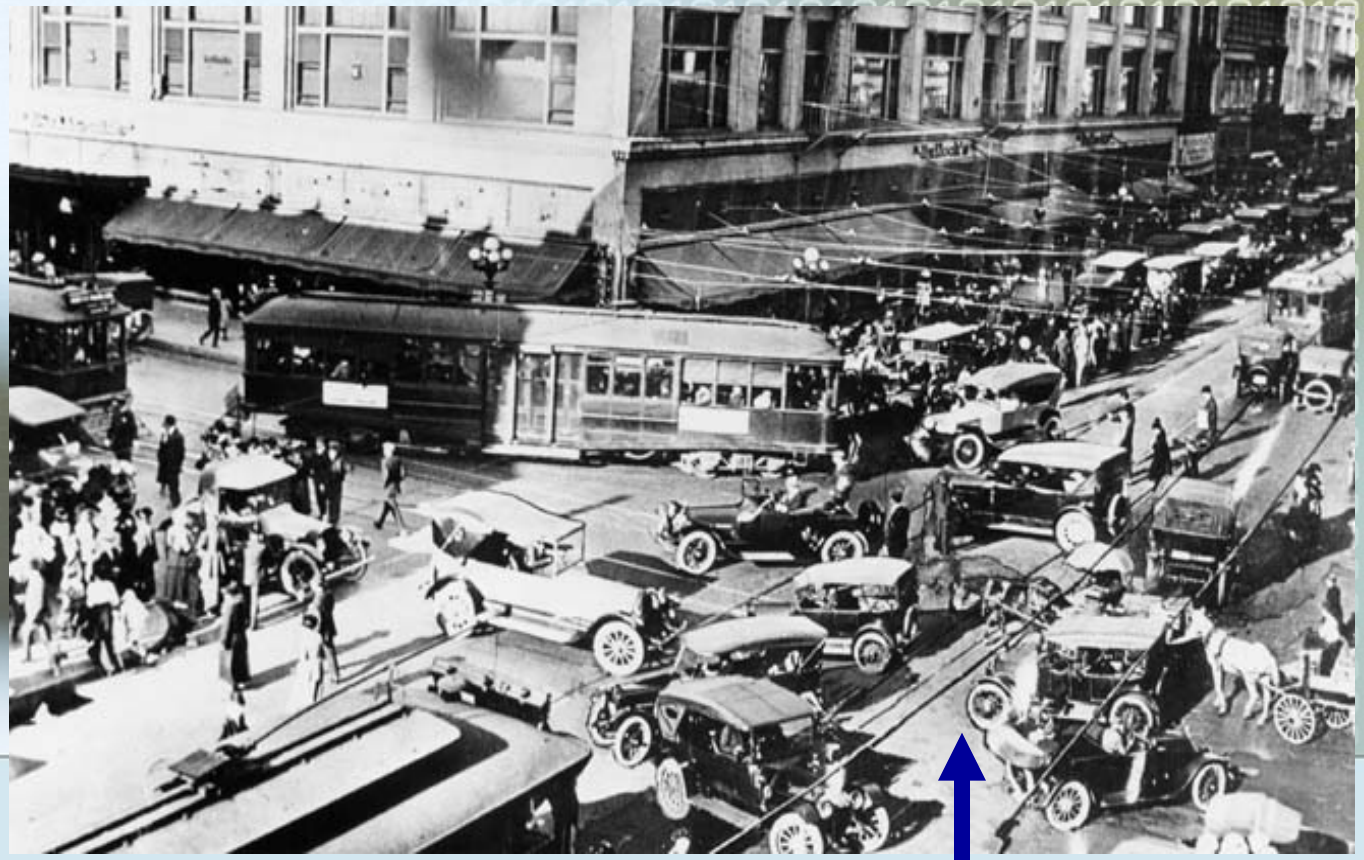
- How to escape the profit valley?
- How to avoid it ?
- First key
  - Maintain revenue velocity and the momentum of the new customer adds. You cannot afford to take the foot of the gas if you want to climb out of the valley
  - The portfolio of the customers must be some smaller and some larger
- Second key
  - Maintain high level of service quality to avoid discounting and efficiency factor
  - Sure Step methodology of project Management
  - Help desk
  - Right tools and right people

Managing Through the profit valley

- Third key
  - Financial management control and cash flow is the king
  - Invoice quickly and pay consistently (but not early !!!)
  - To maintaining Cash- to-Cash cycle as short as possible
- Fourth key
  - Software package handling all aspects of financial customer relationship and project management
- Cash-to-Cash Cycle will be shown during TOC and Critical chain chapters

Managing Through the profit valley





Thanks for Your Attention

Will be placed on IS.MUNI.CZ in the study materials

If everyone pulls at
the different end of the rope,
than your project results
will be a mess…
(see rule 99 %)