



ERP Project Activities

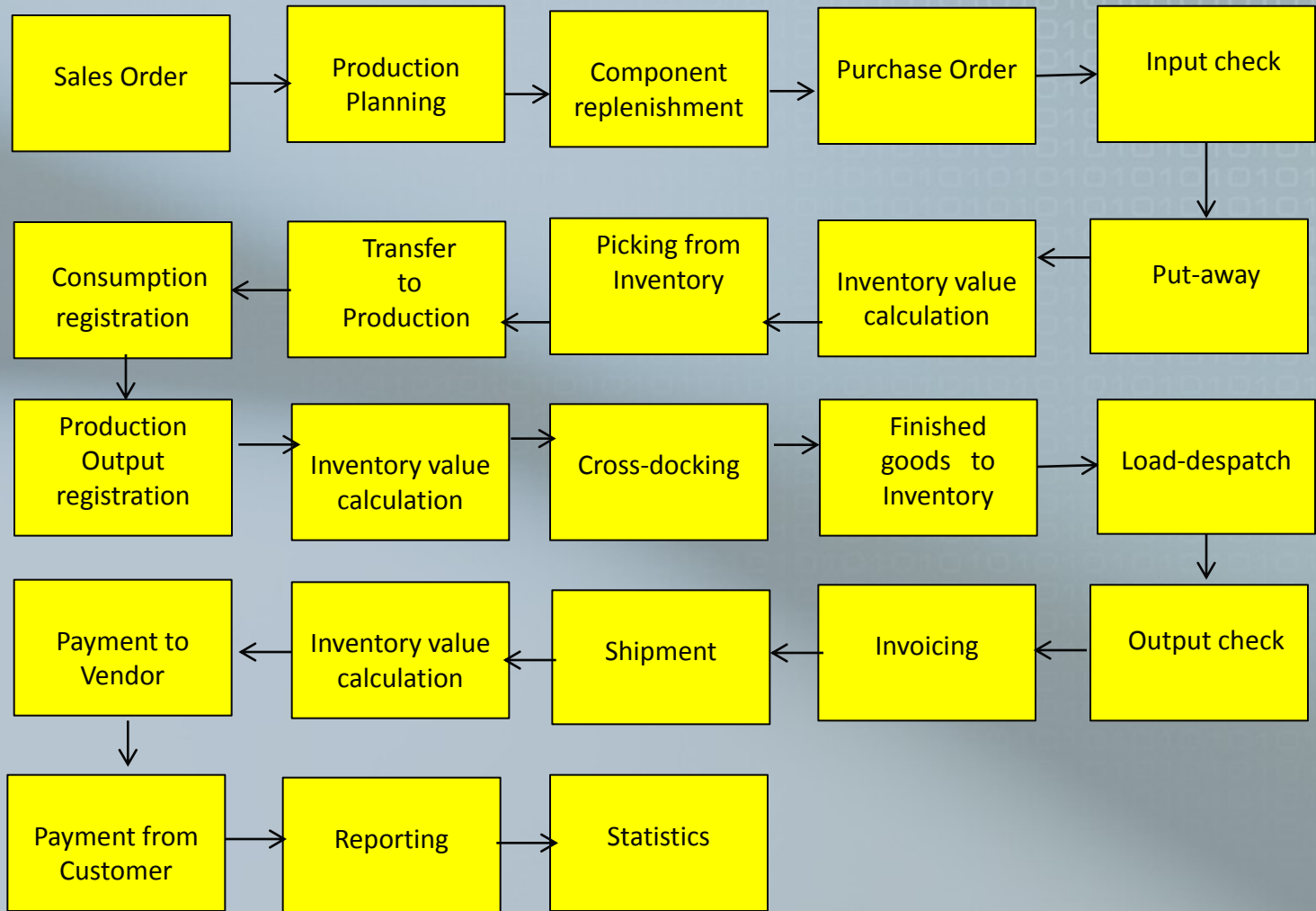
Skorkovský, ESF MU, Department of Business Economics , version 20120919

Your main task (not organised set of processes)

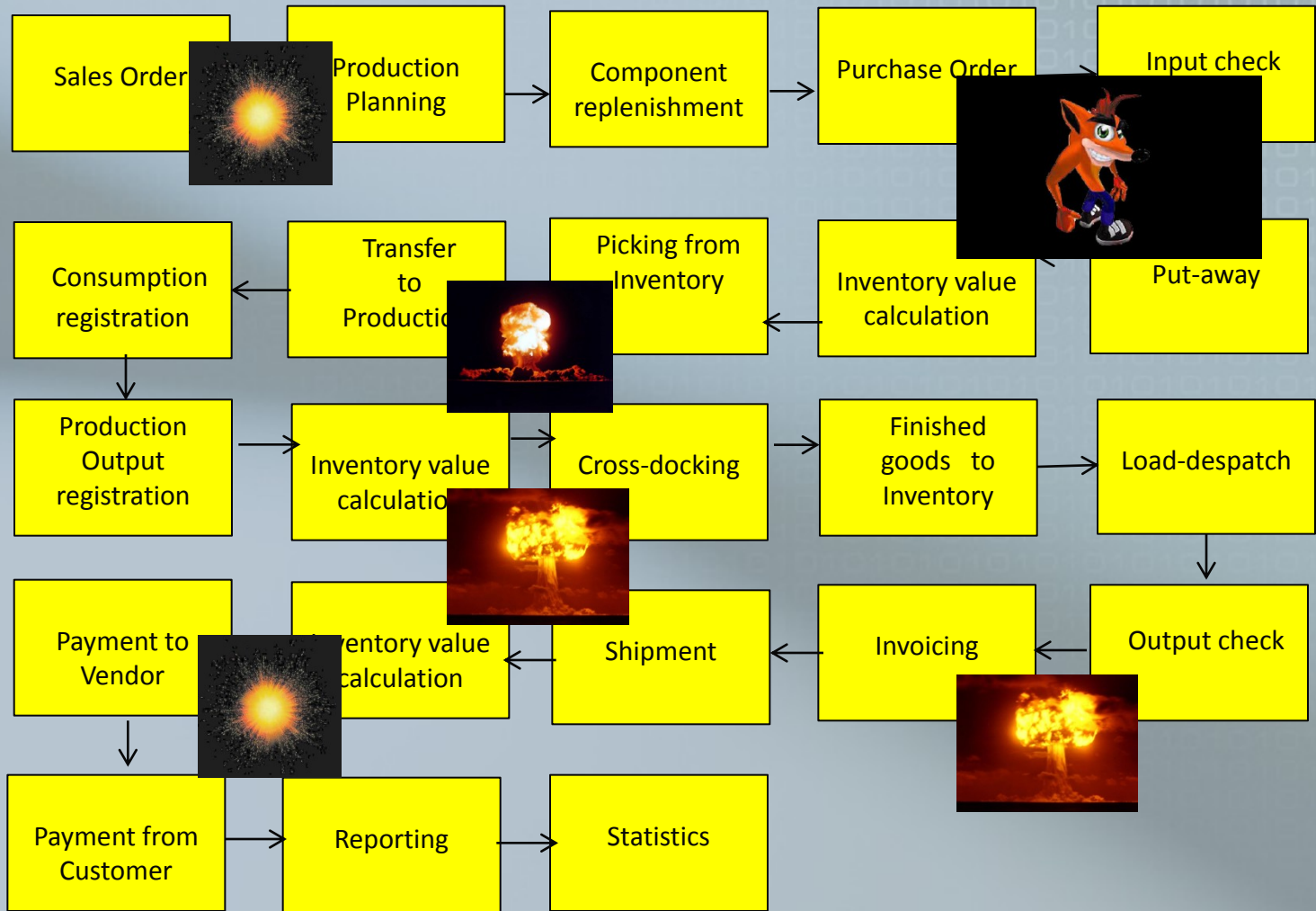
Load-despatch	Purchase Order	Reporting	Statistics
Consumption registration	Production Output registration	Inventory value calculation	Output check
Delivery	Production Planning	Sales Order	Component replenishment
Transfer to Production	Put-away	Cross-docking	Input check
Finished goods to Inventory	Picking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



Your main task (organised set of processes)

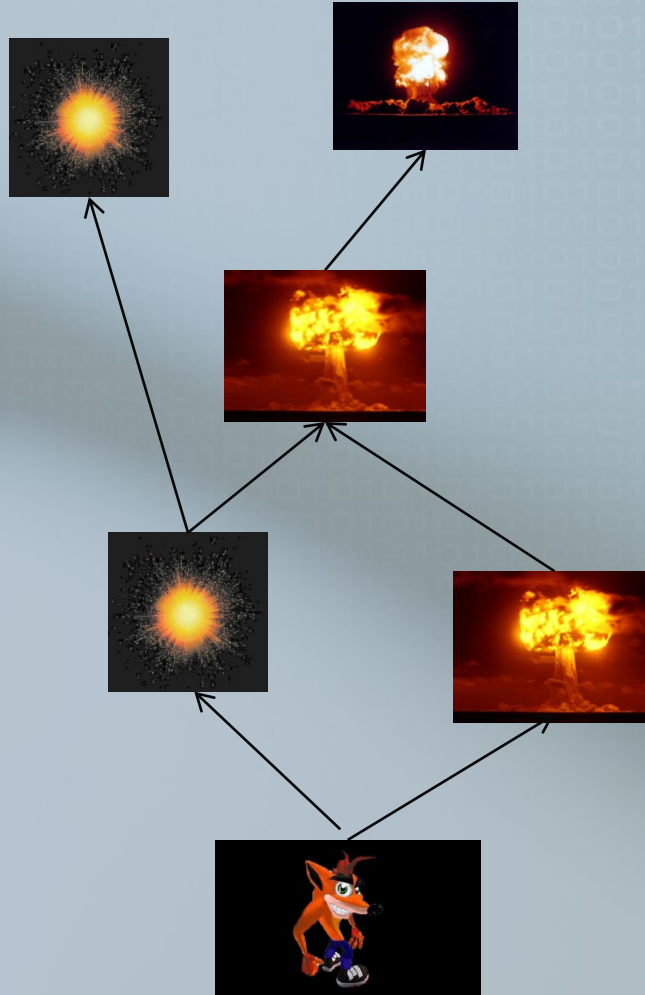


Your main task (possible problems, bottlenecks,..)

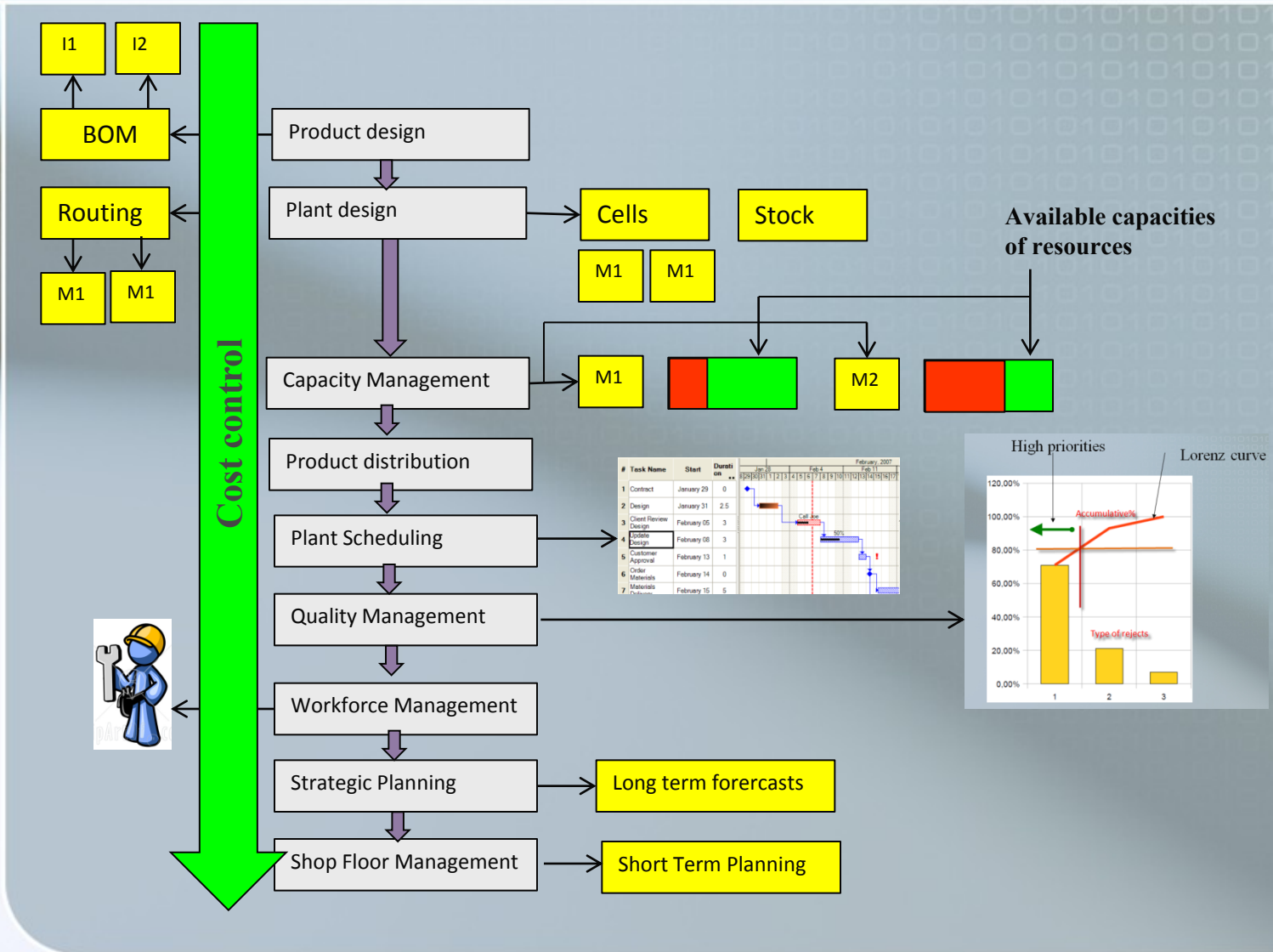


Your main task

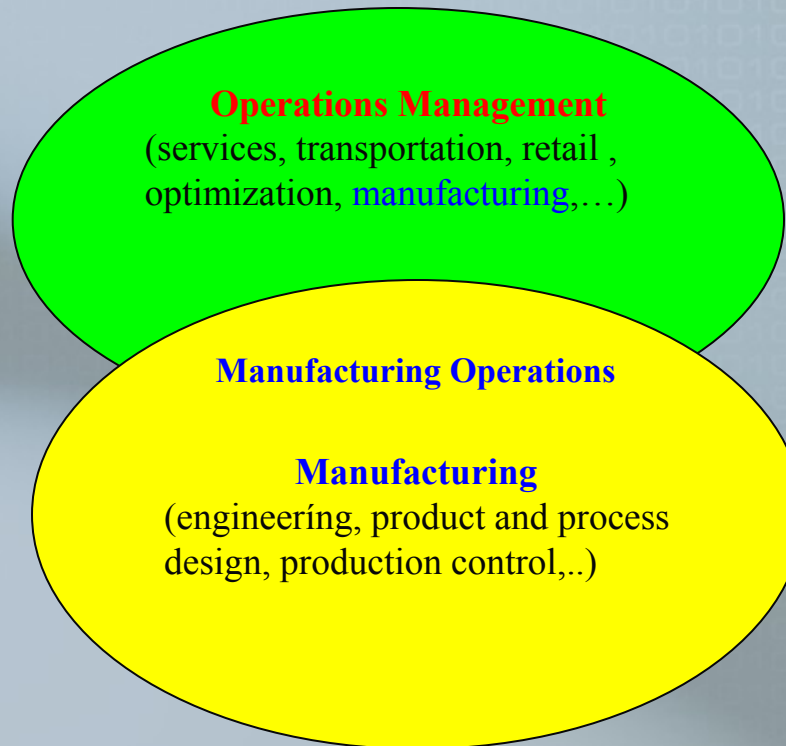
(Search - **HOW** ??? Measure impacts - **HOW** ??? and Destroy - **HOW** ???)



Connections and OM I



Connections and OM II

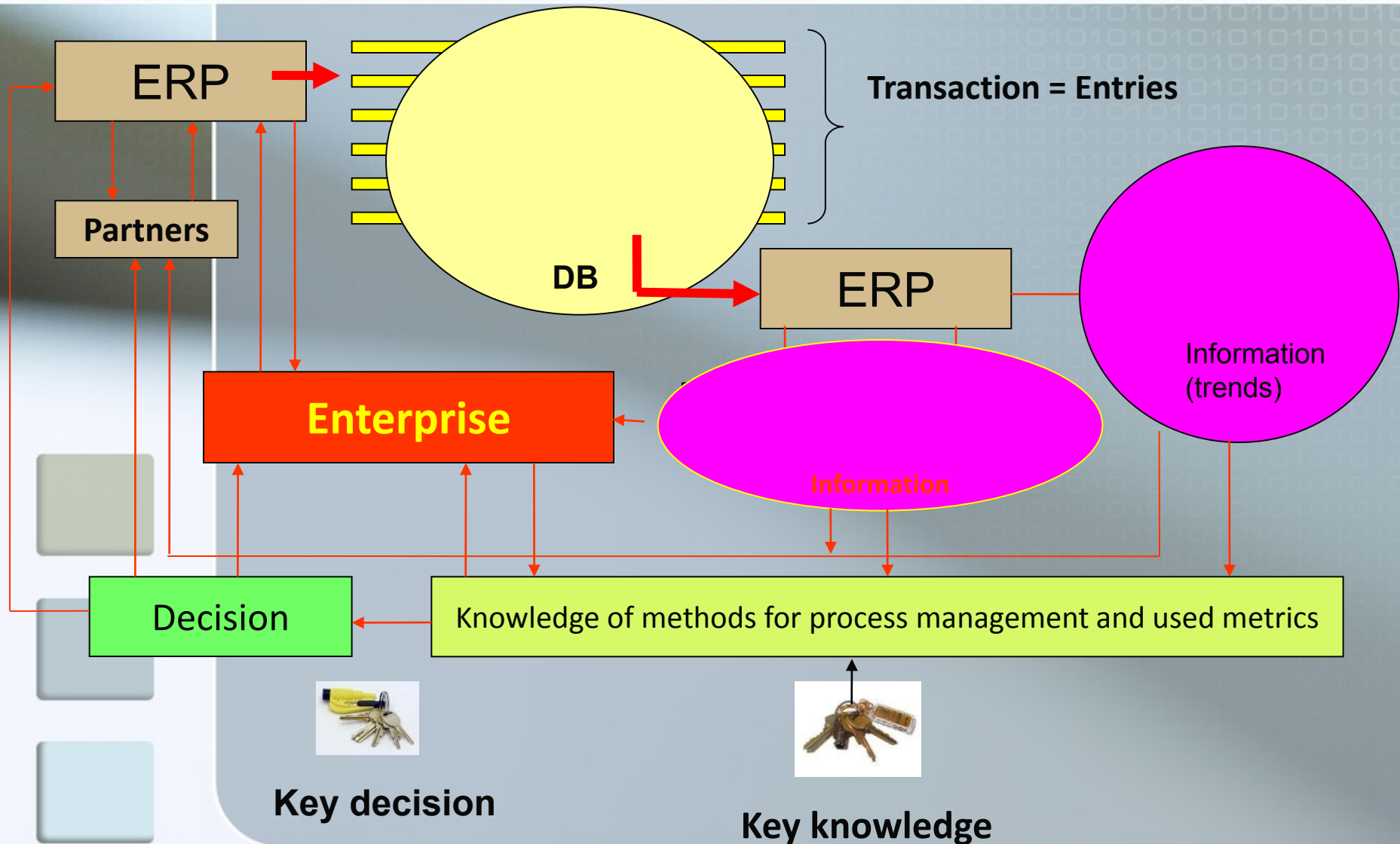


What to do <-> How to think

Methods (not sorted so far)

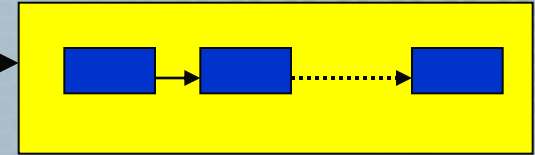
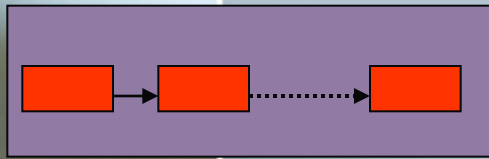
- Theory of Constraints
- Critical Chain
- Ishikawa Fishbone Diagram
- Pareto Analysis and TQM
- OLAP (On-Line Analytic Processing)
- Kepner –Tregoe method
- MaxMax and MaxMin (Hurwitz)
- SWOT
- ERP Statistics and reporting
- Balanced Scorecard
- MRP, MPRP_II, JIT, DBR, CONWIP, Lean production...
- And many, many more.....

Simplified diagram of ERP usage

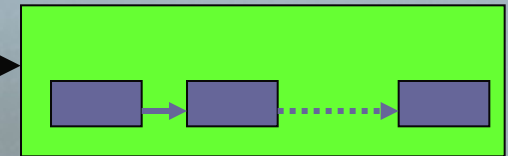
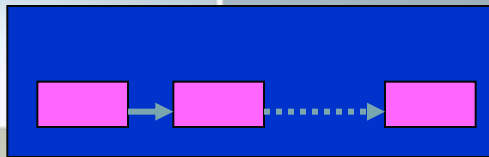


Purchase

Sales



Processes

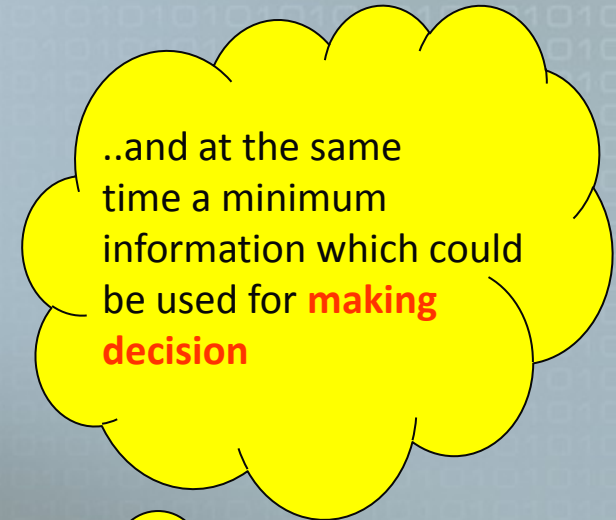


- Quotes->Net change calculation->
- >Order->Vendor batch tracking e->
- >Input Quality check->Receive, Put-away->
- >Invoicing

- Orders->Sub-Load and Load->
- >Batch tracking
- >Output Quality check->Picking ->Shipment
- > Invoicing -> Applying payments

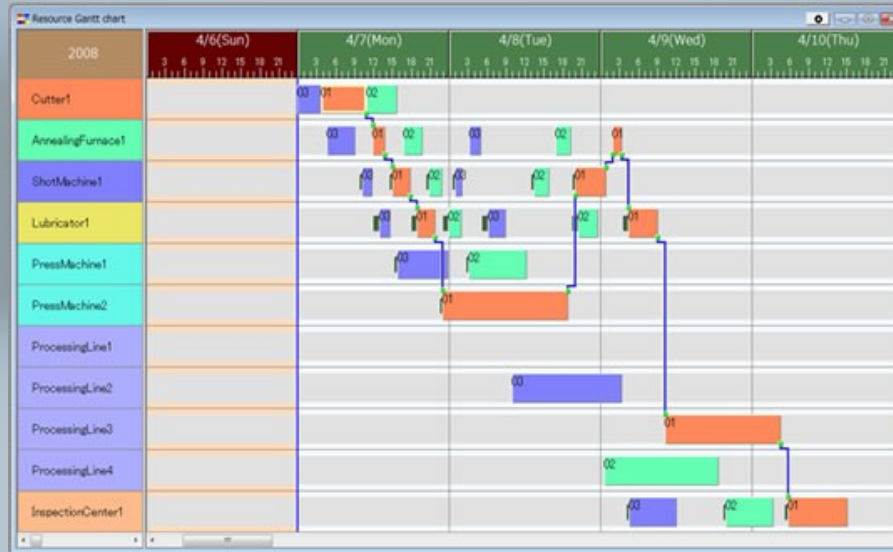
ERP

Main problem (one of many)



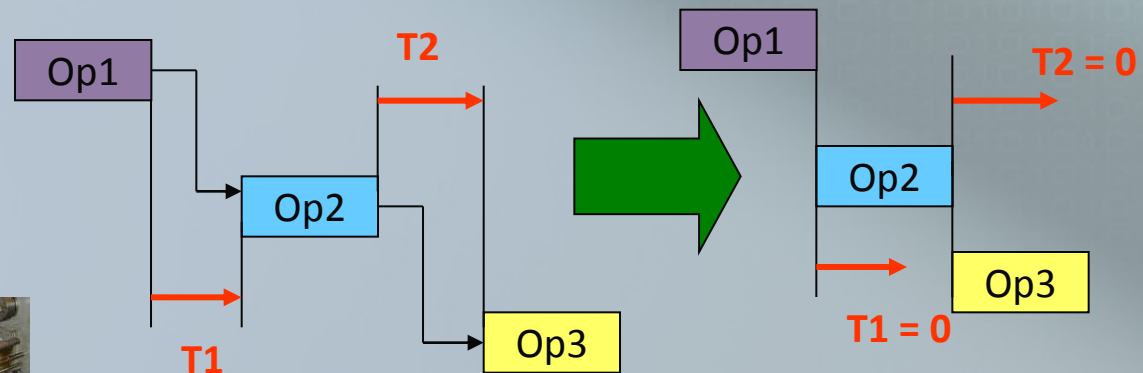
Main problem II (need of reliable data)

We need finite capacity scheduling (APS)



$$T1 + T2 = X$$

$$Opt = \text{Min}(X)$$



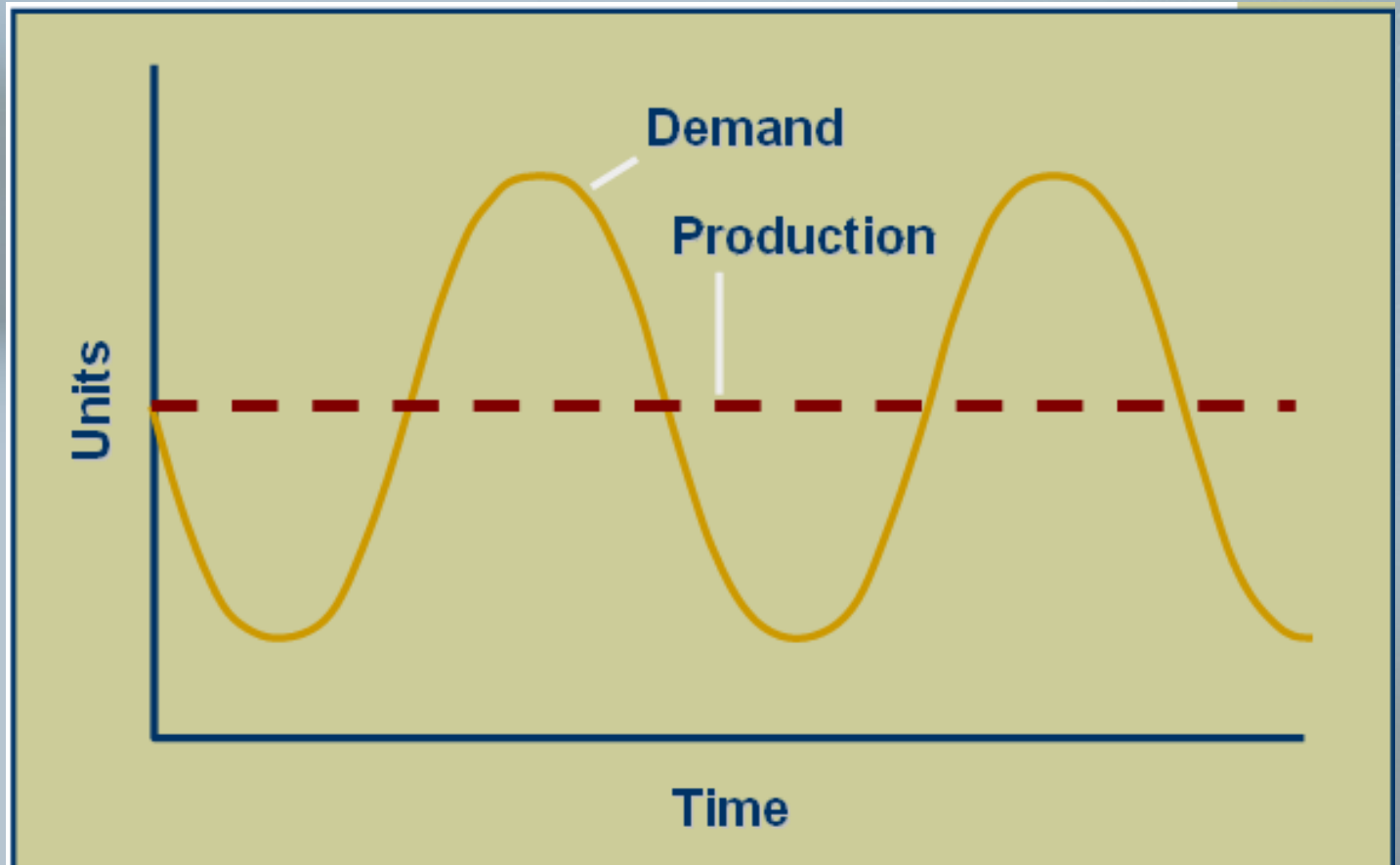
Why we cannot manage it ?



Unclear priorities, bad = **SOP** ,...

(**SOP** = Standard Operation Procedures)

Level production



Level production strategy

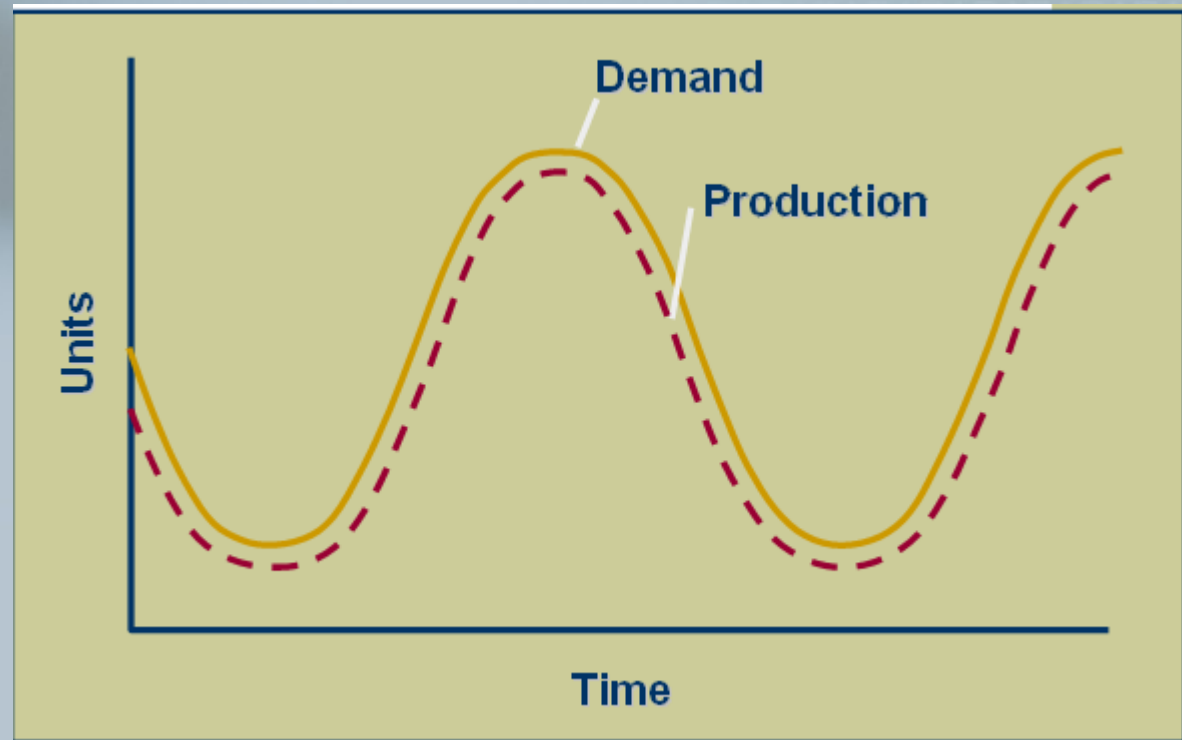
Period	Sales Forecast (kg)	Production plan (kg)	Inventory (kg)
Spring	80 000,00	100 000,00	20 000,00
Summer	50 000,00	100 000,00	70 000,00
Fall	120 000,00	100 000,00	50 000,00
Winter	150 000,00	100 000,00	0,00
		400 000,00	140 000,00

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 capacity 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
 $(400,000 \times \$2.00) + (140,000 \times \$0.50) = \$870,000$

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



$$(400,000 \times \$2.00) + (100 \times \$100) + (50 \times \$500) = \$835,000$$

Chase demand without optimization (CZ)

Chase demand				Náklad	835000
Dělníci start	100				
Výrobek/dělník/kvartál	1 000	Výrobní náklad	2,00	Firing cost	500
Sklad start	0	Náklady sklad	0,50	Hiring cost	100
Kvartál	Poptávka	Výroba	Potřeba dělníků	Hired	Fired
Jaro	80000,00	80000,00	80	0	20
Léto	50000,00	50000,00	50	0	30
Podzim	120000,00	120000,00	120	70	0
Zima	150000,00	150000,00	150	30	0
Celkem	400000,00	400000,00		100,00	50,00

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 constraints (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.

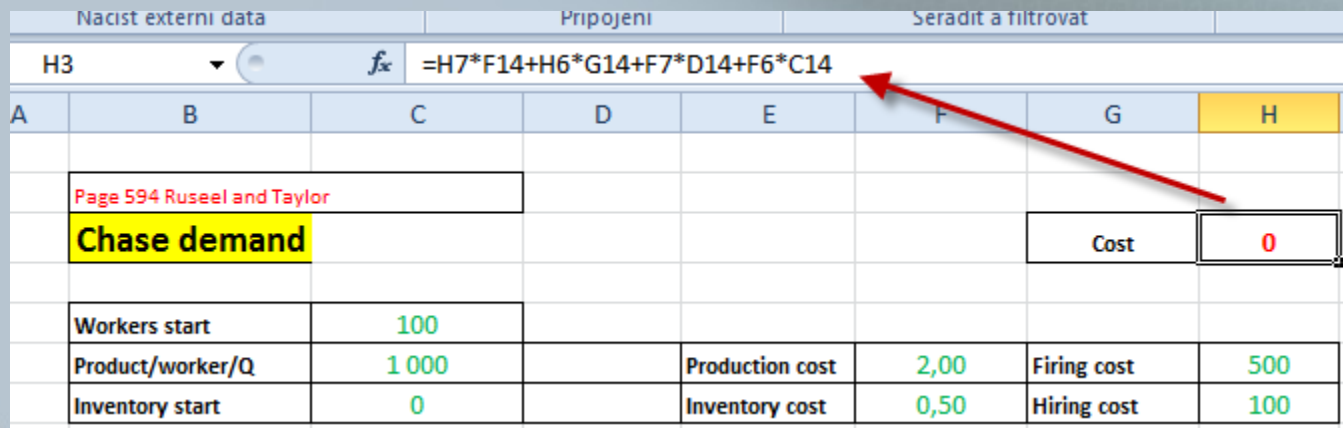
Chase demand with optimization (step two) – constraints formulas

		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

$$\begin{aligned} \text{Minimize : } & 100*(H1+H2+H3+H4) + \\ & 500 *(F1+F2+F3+F4) + \\ & 0,50* (I1+I2+I3+I4) + \\ & 2*(V1+V2+V3+V4) \end{aligned}$$

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



Nacist externi data		Pripojeni		Seradit a filtrovat			
H3		fx =H7*F14+H6*G14+F7*D14+F6*C14					
A	B	C	D	E	F	G	H
	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

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

Cost 0

Parametry Řešitele

Nastavit cíl: **\$H\$3**

Na: Max Min Hodnota: 0

Na základě změny proměnných buněk: **\$C\$10:\$G\$13**

Omezující podmínky:

- OD = PD
- OP = P
- OV = V

Nastavit proměnné bez omezujících podmínek jako nezáporné

Vybírejte metodu řešení: Simplex LP

Metoda řešení
Modul GRG Nonlinear vyberte pro hladké nelineární problémy Řešitele. Modul LP Simplex zvolte pro lineární problémy Řešitele a modul Evolutionary pro nehladké problémy Řešitele.

Nápověda **Řešit** Zavřít

Inventory(I)	Work
0,00	
0,00	
0,00	
0,00	
0,00	

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

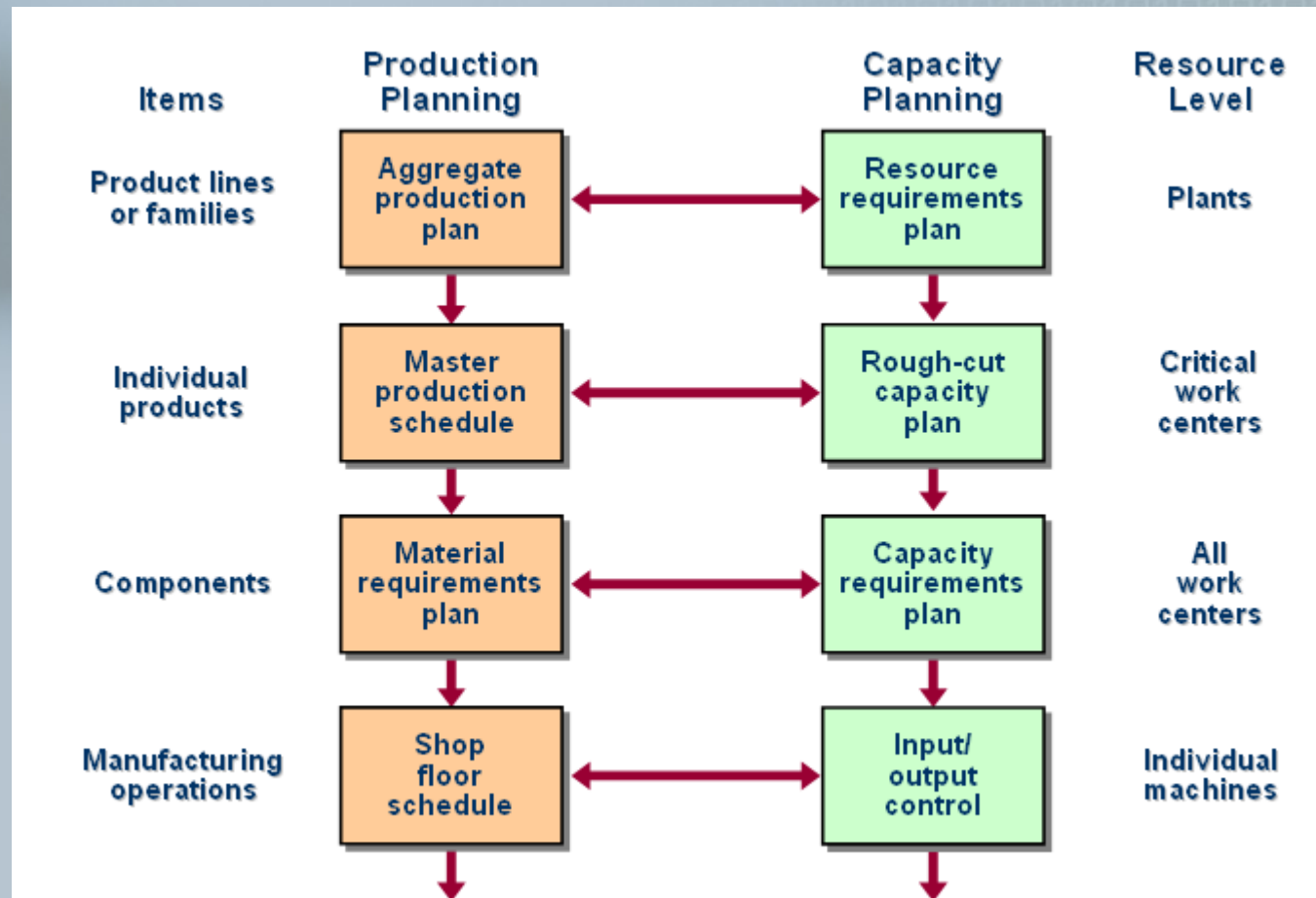
Page 594 Ruseel and Taylor									
Chase demand						Cost	832000		
Workers start		100							
Product/worker/Q		1 000		Production cost	2,00	Firing cost	500		
Inventory start		0		Inventory cost	0,50	Hiring cost	100		
Q	Demand (P)	Production (V)	Inventory(I)	Workerd needed (PD)	Hired (H)	Fired (F)	Demand constraints (OP)	Production constraints (OV)	Workforce constraints (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.

Aggregate planning

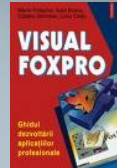
Planning involves decision hierarchy...more aggregated less accurate



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



Solution fully integrated to standard ERP package

Accounting
Controlling
Logistic
Purchase
Sales

One
database

Printvis

- +
- +
- +
- +
- +
- +
- +
- +
- +
- +
- +



Printvis

Správa financí

Prodej a marketing

Nákup

Sklad

Výroba

Plánování zdrojů

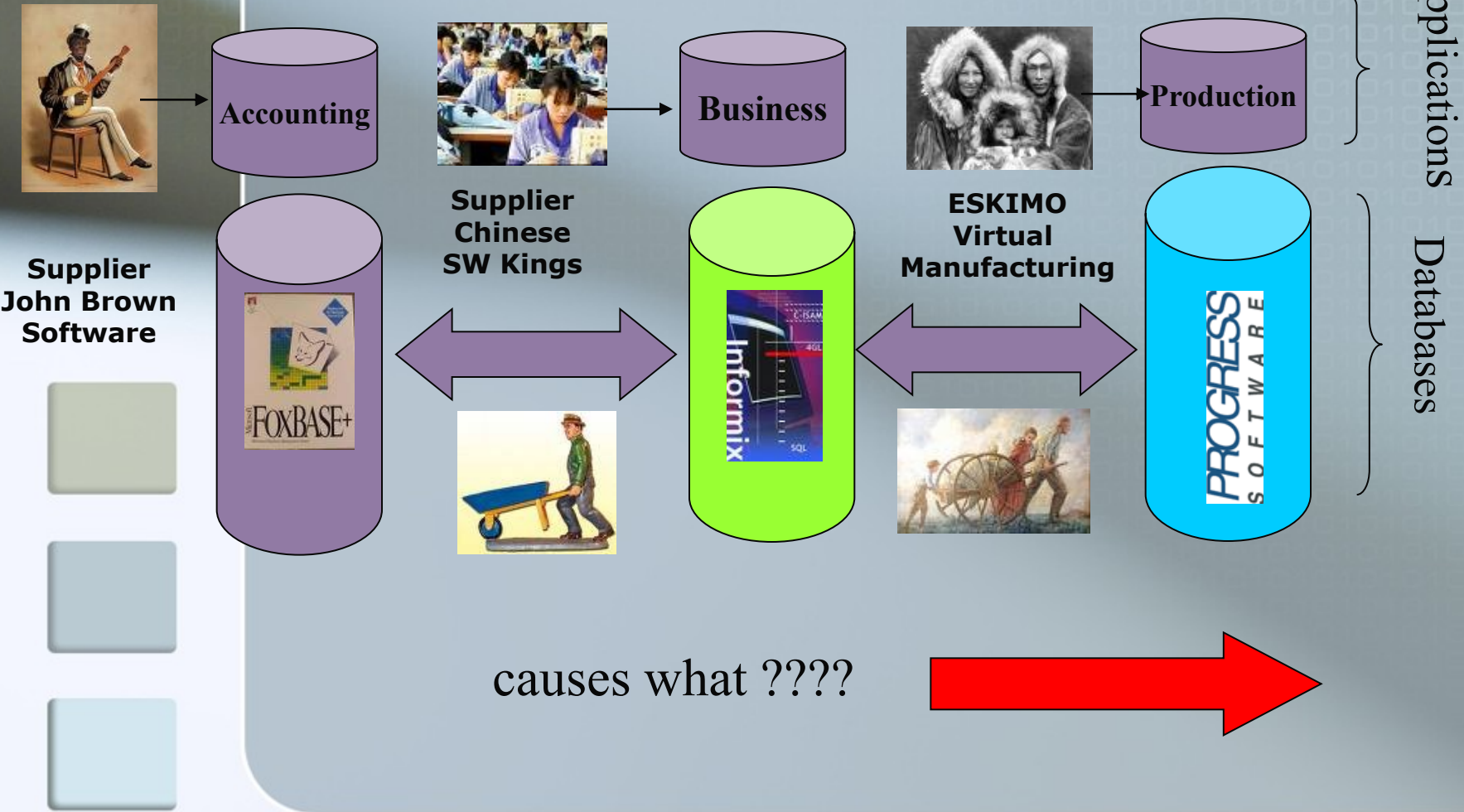
Servis

Lidské zdroje

Správa

Zástupci

Actual situation (example)



Effects

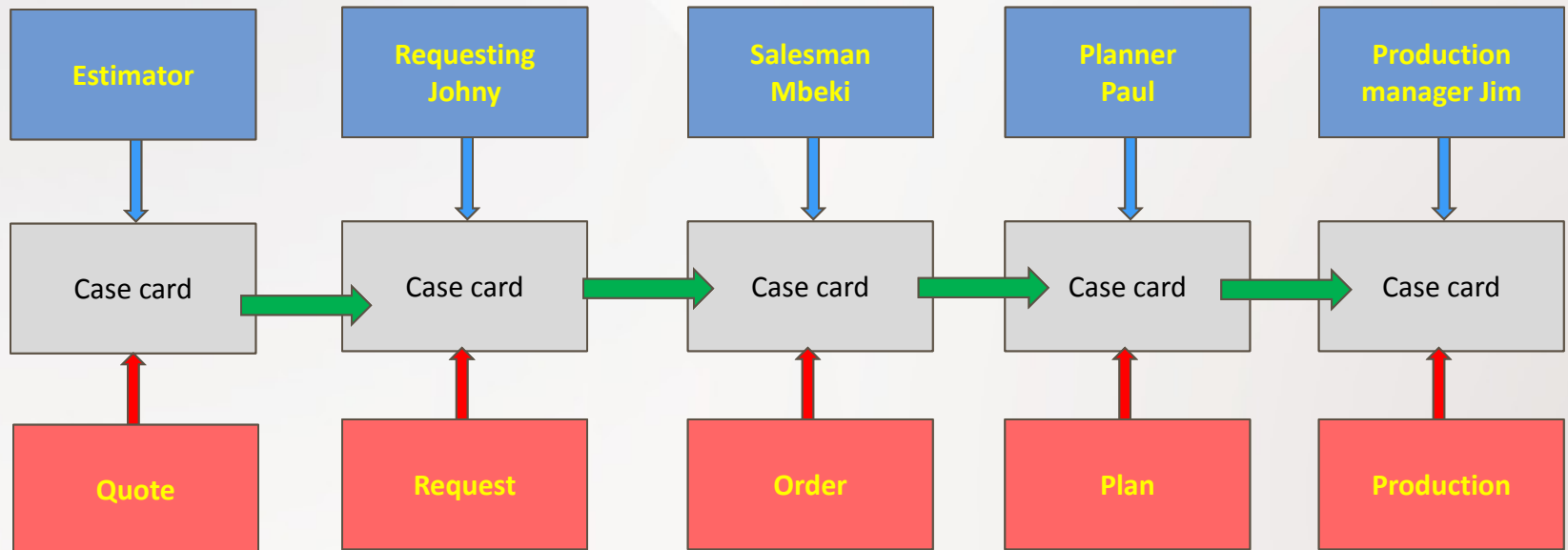
- difficult upgrades of applications
- difficult communication between different applications
- reduplicated data (redundant)
- non actual data->bad decisions
- etc.

A simple business case (printing industry)...example

Competitive market could requires for instance :

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

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



A simple business case....

- Competitive market 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
 - flexible invoicing
 - on-line accounting and so on and so on

} special printing operations

Printing machine



A simple business case....

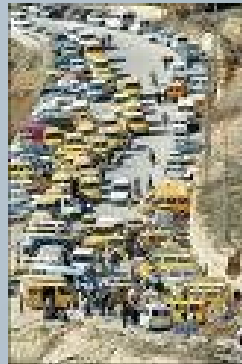
- **Bottlenecks (TOC) – Threats (SWOT) :**
 - obsolete information system, which requires all time some changes, patches,...
 - all parts of information system form an heterogeneous is IT tools heterogeneous hydra :finance management, costing, production, inventory, HR,... ,which **never provides user 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....“good news-bad news”

- 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 (generic solution)
- Arriving applicant must :
 - understand processes in printing industry (or any other base on chosen branch) - the system must be ultimately designed in-house!
 - 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 with **Print SOLUTION** ,which was implemented 100-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

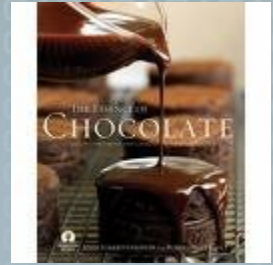
A simple business case....project management – intro (webinars)

■ Live Meeting:

- application setup
- basic functions and a „sweet points“
- business case workflow (all the stages)

■ Customer is happy and awaits consequential actions

■ Vendor signs a contract about localisation and selling in pre-determined geographical area



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

Order 20050 James Dailey Ltd. - Case Card

General Invoicing Shipment Foreign Trade Info Other All **Order**

Sell-To No. 20000 ID 80 Quote no.

Sell-to Name James Dailey Ltd. Search Order No. 20050 11.01.04

Sell-To Address 153 Thomas Drive Copy Invoice Number Show de...
Customer Salesperson SOS Sonny Salesman
Order Estimator Coordinator NWS
Responsible NWS NWS Superuser
Status Code ORDER Order confirmati...
Deadline 12.01.04 Next Status
Rejection Code PLAN
Eco-label Change Status

Sell-To Postal Code/City GB-CV6 1GY Coventry

Sell-To Phone Fax

Sell-To Contact Mr. James Dailey

Your Reference

Old order number

Order Type

Product Group 400 Brochures

Job Name test imposition

J..	V..	A..	Type	U..	Product	Te...	Quan...	Pa...	For...	C..	C..	Paper	Job Name	External Description
				R..	Group	Job			Code	F..	B..			
▶	1	1	✓	Order			400	4	1.000	32	A5	4 4	223	test impositi... 1.000 brochures in format A5 a...

Job New Ver. ▶ New Job ▶ Order ▶ Milestones Job Items Print...
Job ▼ Estimating Planning Specifications Shipments Invoice/Draft Nápořěda

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

299 - Technical specifications for: sheet / pieces / imposition

Sheet No. 1 of 2

Job Item No. 1 of 1

Paper Item No. 223

Description

Satin Princess

Quantity 1000 1000

Paper Quality PAPER

Colors Front 4 Varnish Front

Colors Back 4 Varnish Back

Grammage 115,00

Different Colors... 4 Colors

Paper Sheet For... 640

Pages with ... 32 Total/subject 32

Format Code A5

Depth 210 Conjugate ... 1

Width 147 Conjugate ... 2

Imposition ... IMP-002

Printing met... Work and Turn

Pages in Sh... 32 Reverse Pla...

Printed sheet/ful... 1

Job Items on th... 1

Qty in block. 1 Replace. 0

Automatic Resid...

Sheet Format code

Sheet Depth. 640

Sheet width 900

End Quantity 1000

Scrap 830

Sheet 1830

Quantity of She... 1

Total 1830

Jo...	Qua...	Addition...	Colors Fr.
▶ 1	1000	1000	

1 16 13 4

32 17 20 29

Sheet ▾ New Job Item Processes Procesflow Sheet Param... Pages Zavřít Nápořěda

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 Fish Bone diagram, TOC, CC....)
 - 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...

■ 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
 - 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

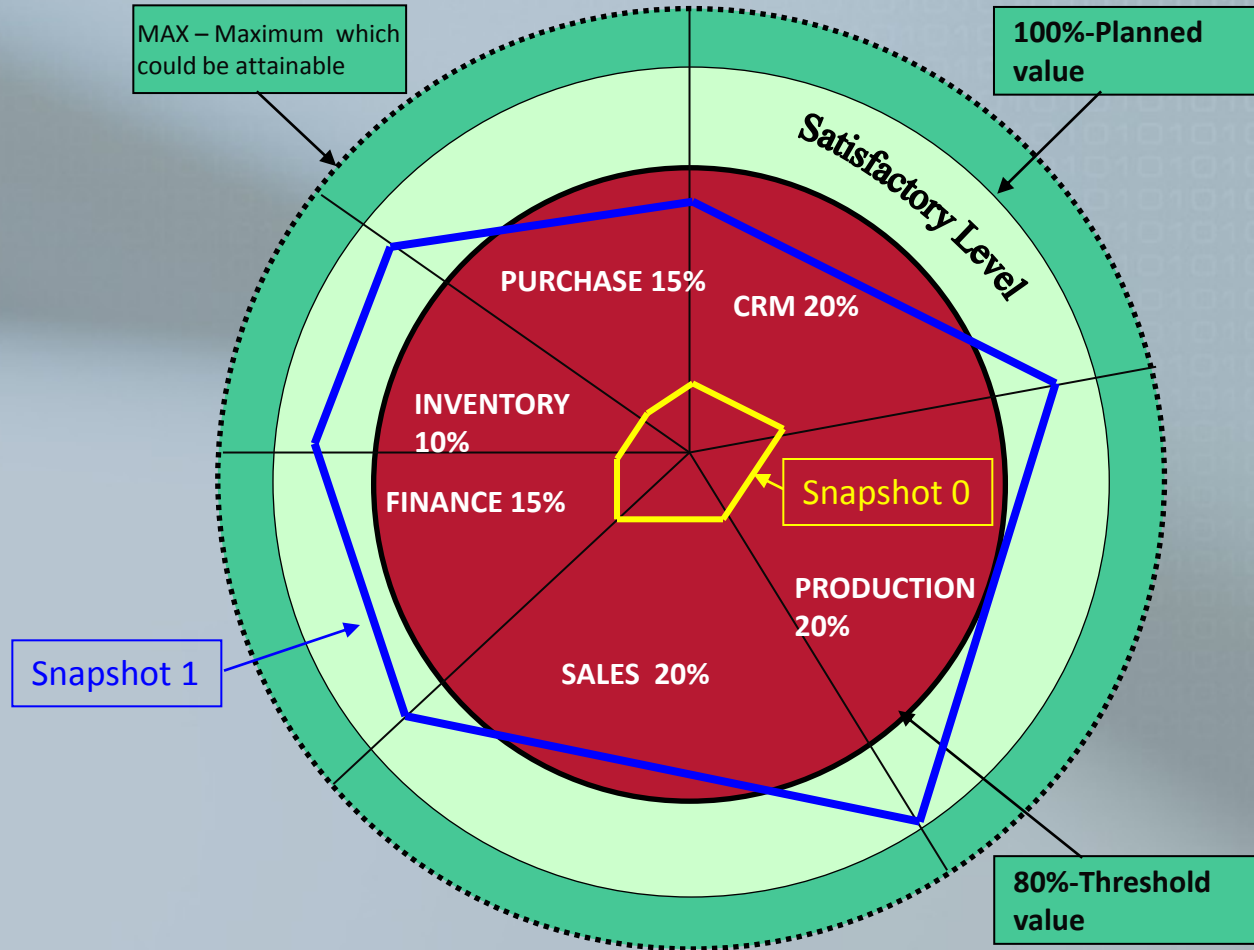
System implementation (only some important activities are mentioned here..)

- 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

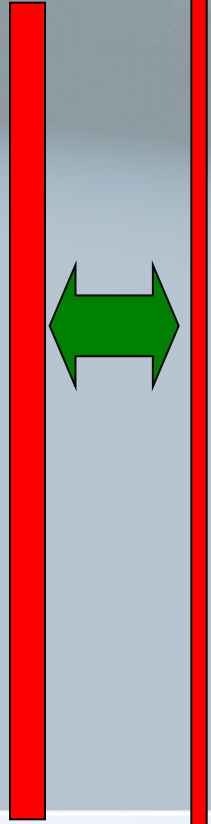
Another possible project...



Another possible project



Basic Concept (survey)



General Ledger

- Chart of Accounts
- Bank Accounts
- Budgets
- Account Schedules
- Analysis by Dimensions
- Payment Order
- Bank Statement
- Payment Journals
- General Journals
- Cash Register Documents
- Intercompany Postings
- Reports
- VAT Return
- Issued Payment order
- Issued Bank Statement

General Ledger

- Fixed Assets
- Sales & Receivables
- Relationship Management
- Service Management
- Purchases & Payables
- Inventory
- Warehouse Management
- Manufacturing
- Capacity Requirements Planning
- Resources
- Jobs
- Human Resources
- Commerce Portal

SERENISSIMA



PRÍZNANÍ VAT report
k dani z pridane hodnoty

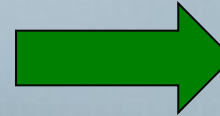
za zdaňovací období: měsíc 9, čtvrtletí, rok 2005

1. Přátel dani § 94 X 2. Osoba identifikovaná k dani § 95

3. Neplatná dani § 195, 6, § 109

B. ODDÍL - daň z pridane hodnoty

I. Prošetřete (X) nevznikla-li daňová povinnost		Základ daně	Daň na výstupu
II. Povinnost přiznat daň za			
1. sáňkové a zdanitelné plnění s místem plnění v tuzemsku			
210	se základní sazbou daně	50	10
215	se sníženou sazbou daně	10	1
2. početní zůstatky z jiných členských států (§ 19 a § 17 odst. 6 písm. c) mimo § 19)			
220	se základní sazbou daně	242	47



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 rplíšení 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

General Ledger

- Chart of Accounts
- Bank Accounts
- Budgets
- Account Schedules
- Analysis by Dimensions
- Payment Order
- Bank Statement
- Payment Journals
- General Journals
- Cash Register Documents
- Intercompany Postings
- Reports
- VAT Return
- Issued Payment order
- Issued Bank Statement

General Ledger

- Fixed Assets
- Sales & Receivables
- Relationship Management
- Service Management
- Purchases & Payables
- Inventory
- Warehouse Management
- Manufacturing
- Capacity Requirements Planning
- Resources
- Jobs
- Human Resources
- Commerce Portal

SERENISSIMA

Název ROZVAHA04 Accounting scheme

Číslo řady	Popis	Typ s...	Součet
001	AKTIVA CELKEM	Vzorec	B001+K001
002	Pohledávky za upsany základni kapitál	Vzorec	B002+K002
003	Dlouhodobý majetek	Vzorec	B003+K003
004	Dlouhodobý nehmotný majetek	Vzorec	B004+K004
005	Zřizovací výdaje	Vzorec	B005+K005
006	Nehmotné výsledky výzkumu a vývoje	Vzorec	B006+K006
007	Software	Vzorec	B007+K007
008	Ocenitelná práva	Vzorec	B008+K008
009	Goodwill (+/-)	Vzorec	B009+K009
010	Jiný dlouhodobý nehmotný majetek	Vzorec	B010+K010
011	Nedokončený dlouhodobý nehmotný majetek	Vzorec	B011+K011
012	Poskytnuté zálohy na dlouhodobý nehmotný ...	Vzorec	B012+K012
013	Dlouhodobý hmotný majetek	Vzorec	B013+K013
014	Pozemky	Vzorec	B014+K014
015	Stavby	Vzorec	B015+K015
016	Samostatné movité věci a soubory movitých ...	Vzorec	B016+K016
017	Pěstelské celky trvalých porostů	Vzorec	B017+K017
018	Základní stádo a tažná zvířata	Vzorec	B018+K018
019	Jiný dlouhodobý hmotný majetek	Vzorec	B019+K019
020	Nedokončený dlouhodobý hmotný majetek	Vzorec	B020+K020
021	Poskytnuté zálohy na dlouhodobý hmotný ma...	Vzorec	B021+K021
022	Oceňovací rozdíl k nabytému majetku (+/-)	Vzorec	B022+K022
023	Dlouhodobý finanční majetek	Vzorec	B023+K023
024	Podíly v ovládaných a řízených osobách	Vzorec	B024+K024
025	Podíly v účetních jednotkách pod podstatným...	Vzorec	B025+K025
026	Ostatní dlouhodobé cenné papíry a podíly	Vzorec	B026+K026
027	Půjčky a úvěry - ovládající a řídicí osoba, po...	Vzorec	B027+K027
028	Jiný dlouhodobý finanční majetek	Vzorec	B028+K028
029	Pořizovaný dlouhodobý finanční majetek	Vzorec	B029+K029
030	Poskytnuté zálohy na dlouhodobý finanční m...	Vzorec	B030+K030
031	Oběžná aktiva	Vzorec	B031+K031
032	Zásoby	Vzorec	B032+K032
033	Materiál	Vzorec	B033+K033
034	Nedokončená výroba a polotovary	Vzorec	B034+K034
035	Výrobky	Vzorec	B035+K035

Obchodní firma název pro název účetní jednotky
ROZVAHA
v plném rozsahu
ke dni 15. 11. 2007
(v Kč - z. des. místa)

Obchodní firma název pro název účetní jednotky
CORNUS P.E s.r.o.

Sídlo: název bydliště účetní jednotky
podoba: síla a síla bydliště

Obchodní číslo: 0
IČ: 493 01

Označení	AKTIVA	Číslo řady	Běžné účetní období			Minulý úč. období
			Brutto	Korekce	Netto	
a	b	c	1	2	3	4
	AKTIVA CELKEM	001	29 239 952,46		29 239 952,46	191 977 933,78
A.	Pohledávky za upsany základni kapitál	002				
B.	Dlouhodobý majetek	003				-7 280 944,94
B. I.	Dlouhodobý nehmotný majetek	004				
B. I. 1.	Zřizovací výdaje	005				
2.	Nehmotné výsledky výzkumu a vývoje	006				
3.	Software	007				
4.	Ocenitelná práva	008				
5.	Goodwill (+/-)	009				
6.	Jiný dlouhodobý nehmotný majetek	010				
7.	Nedokončený dlouhodobý nehmotný majetek	011				
8.	Poskytnuté zálohy na dlouhodobý nehmotný majetek	012				
B. II.	Dlouhodobý hmotný majetek	013				-7 280 944,94
B. II. 1.	Pozemky	014				
2.	Stavby	015				-4 628 154,70
3.	Samostatné movité věci a soubory movitých věc	016				-418 116,03

Seznam účtů:	Podpisový záznam statutárního orgánu účetní jednotky nebo podpisový záznam ředitele společnosti, pokud je účetní jednotkou
Název firma účetní jednotky:	Podpis ředitele

Uniform System of Accounts

No.	Name	Income/Balance	Account Type	Mapping	Account 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 - newfakturované 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... (one of many helping letters)

Ciao amico,

For Deferred Costs (In Italian “**Risconti**”) it means when You receive an Invoice for Service; Service provided partially in one Fiscal Year, and Partially for the following Fiscal Year.

Es. : 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**

The opposite is called Accrued (In Italian **Ratei**).

Es. : 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.

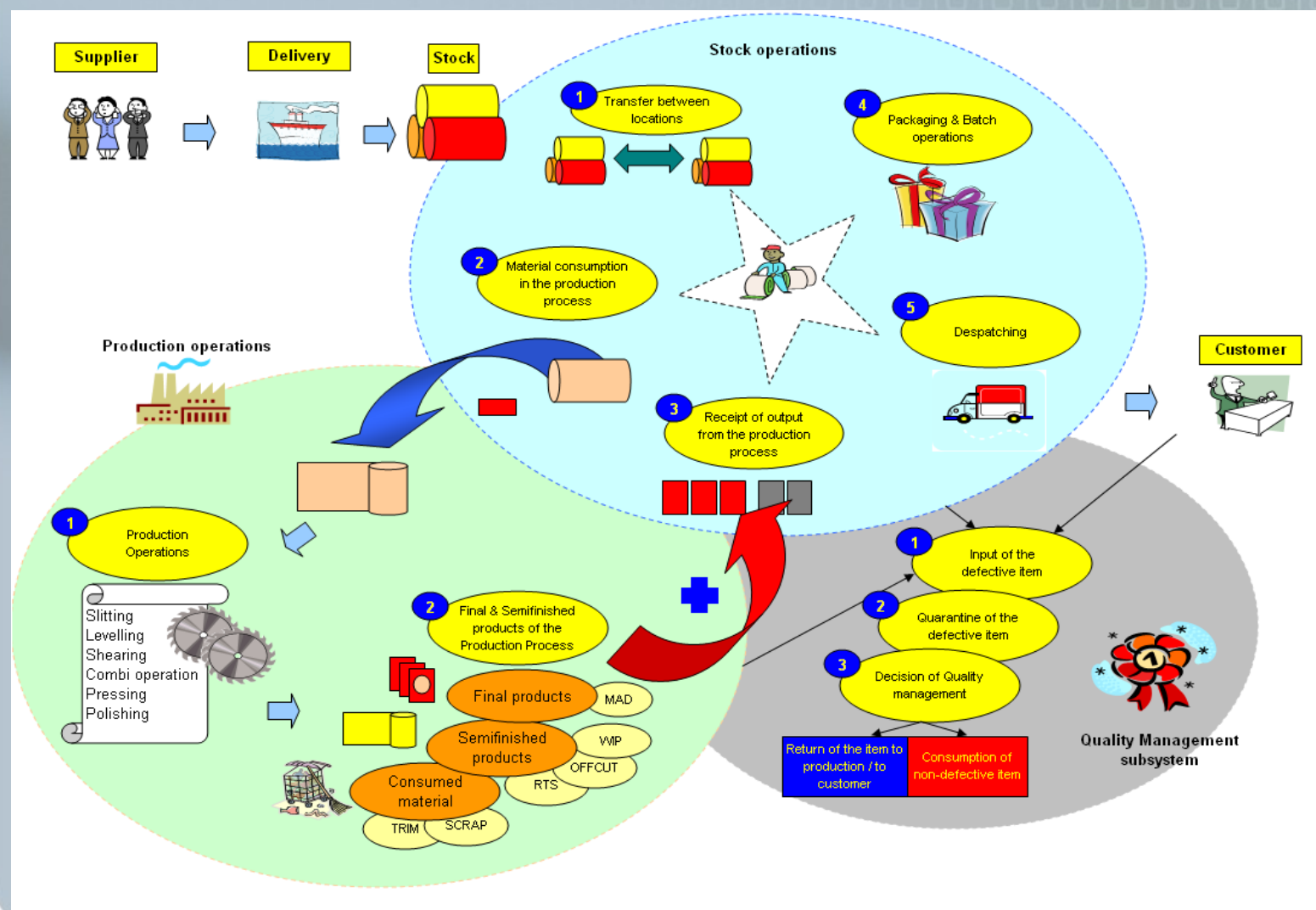
In other words **Accrued Costs** happens when You receive an Invoice for Services after the Service was provided.

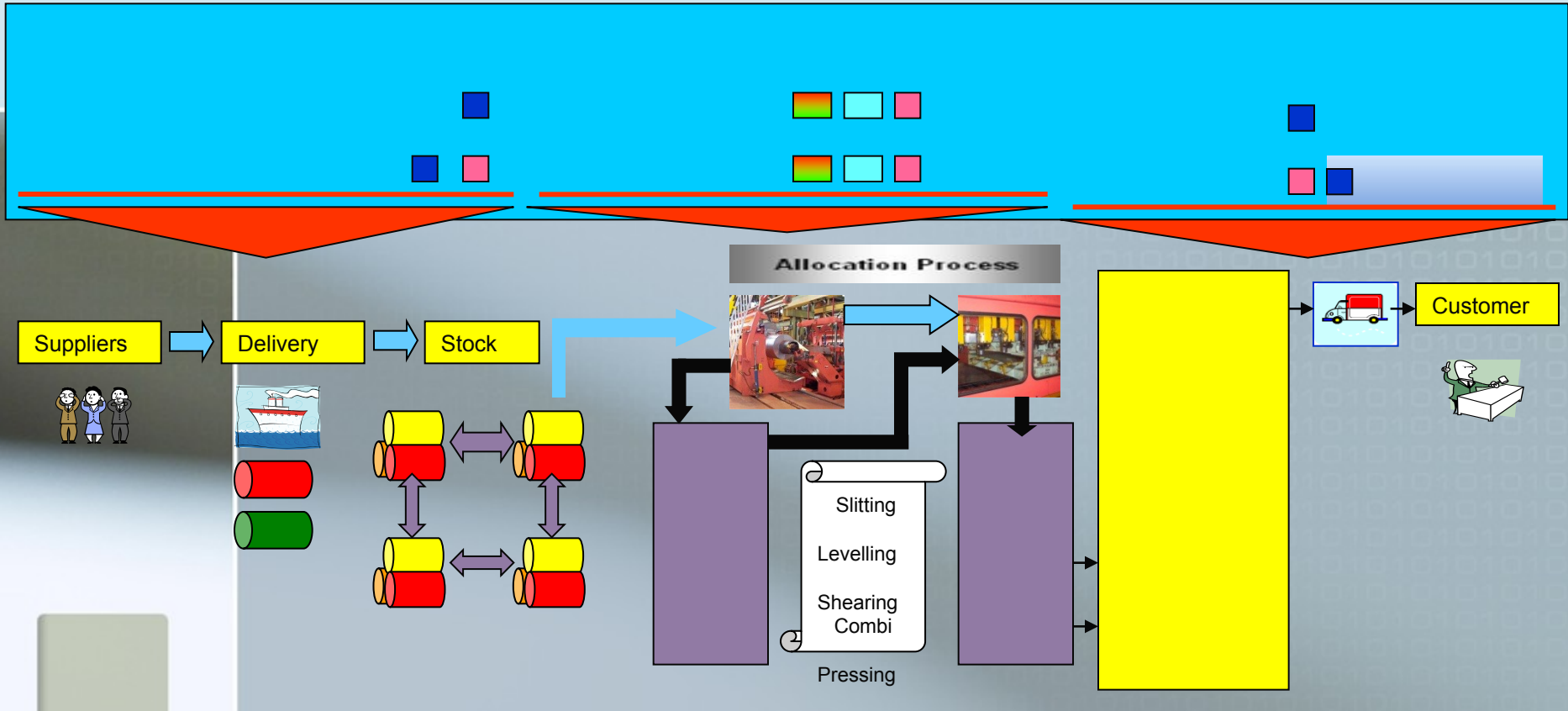
The same can happen also for revenues.

I hope this explanation can be clear enough.

Regards.

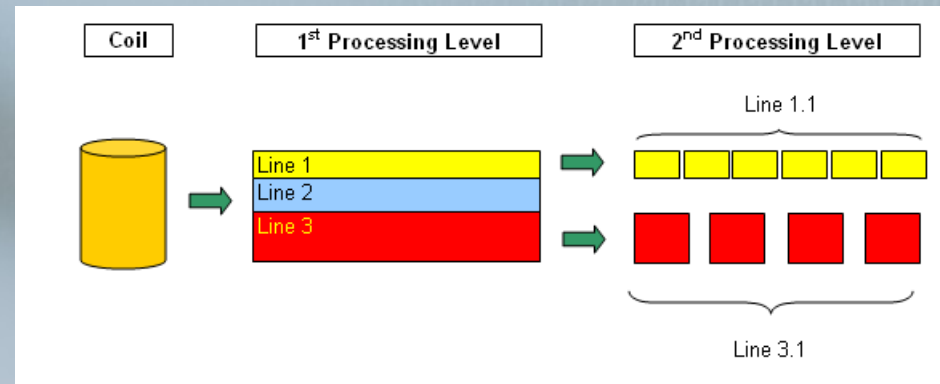
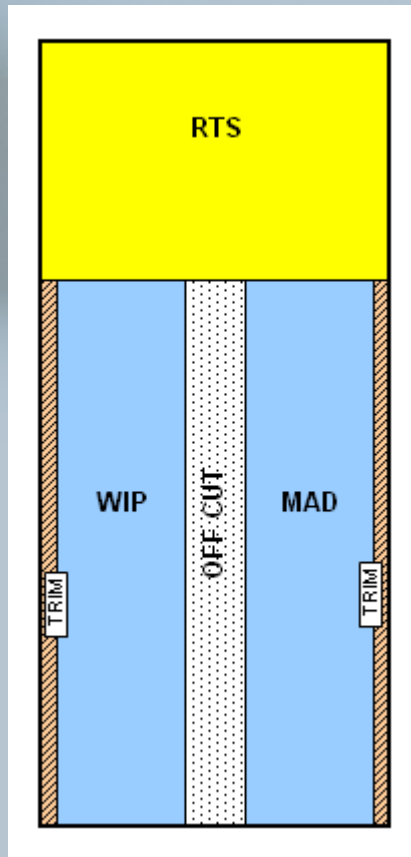
Another possible project –Automotive, Appliances, packaging industry





Bespoke Functionality

Slitting and levelling of the steel



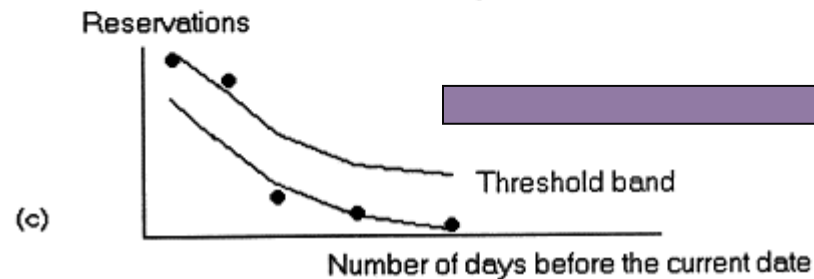
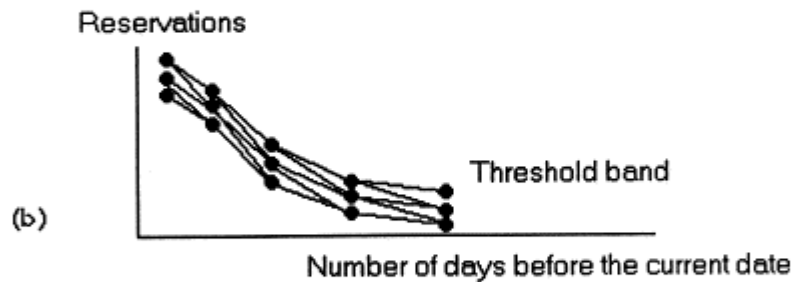
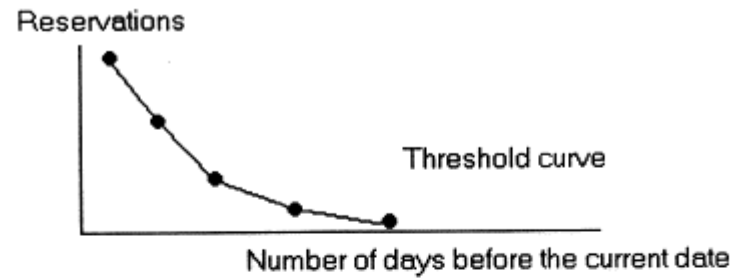
Knowledge of methods, which are necessary for project management and process management

- **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**
- **MS Office (Word, Power Point a Excel)**
- **ERP system and its logic** (will be introduced- 28 hours)
- **Logistics**
- **Finance Management and Controlling**
- **Production Management (MRP, MRP-II, JIT and DBR)**
- **Market Analysis**

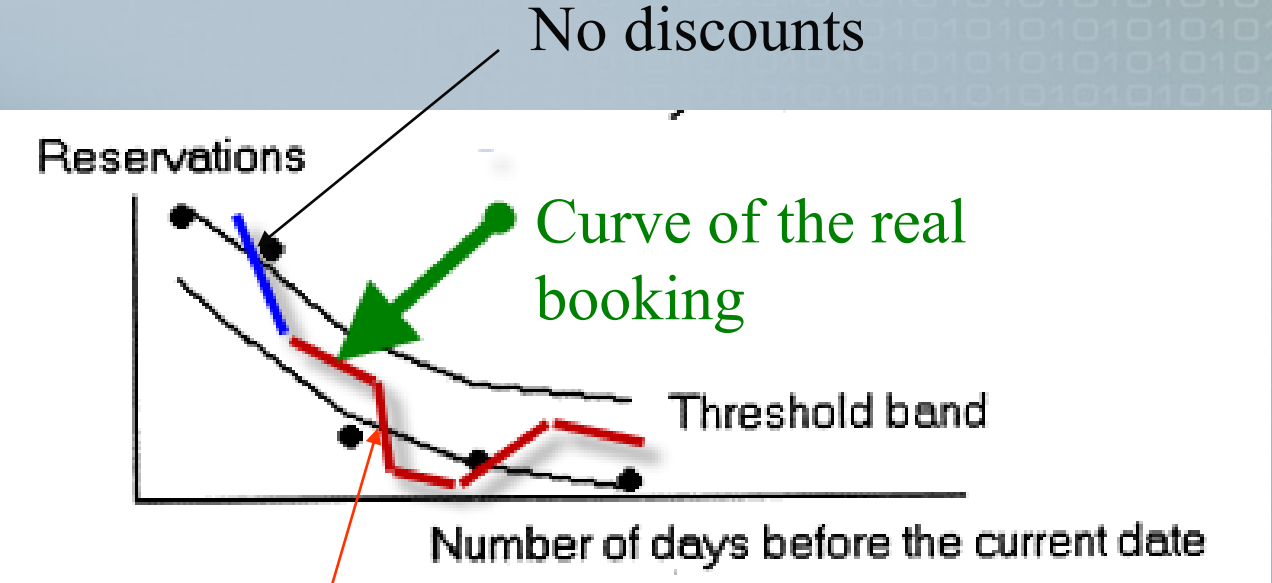
Knowledge of methods, which are necessary for project management and process management

- **Yield Management –YM** (billing different rates for same service to different customers in order to reach maximum revenue)
- Knowledge of the condition necessary for use of **YM tool** :
 - relatively high % of the fixed costs to complete company costs
 - predictable demand
 - ephemeral product (passing, fleeting,
 - selling before service is provided
- Some Yield management methods
 - e.g. Thres Hold method– see next slide

Threshold curves (booking)



Threshold curves (booking)



Discounts granted



TQM and Ishikawa FBD

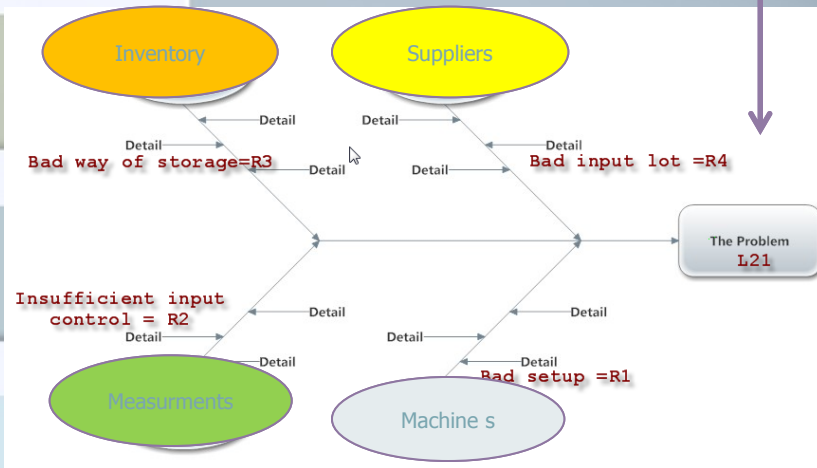
- Reject statistics
- Final product /Rejects
- MachineCenters/Rejects
- Rejects in time
- Final products/Rejects in time
- Machine centers/Rejects in time

Statistika zmetkovosti

Zmetky celkem **9 485 283** Filtr Data

Filtr čísla zboží.

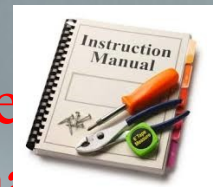
Kód	Popis	Množství zmetků	Poměr zmetkovosti
L14	Seké	116 579	1%
L15	Propadliny-polotovar	94 515	1%
L16	Deformace klipu	48 382	1%
L17	Deformace	61 782	1%
L21	Hrudky	848 556	9%
L23	fleky	195 791	2%
L24	Flek - kráter	4	0%
L30	kropenatě	21 654	0%



Reject type (effects);	R1	R2	R3	R4
L19	8	9	2	4
L20	0	1	4	6
L21	7	2	3	5

Score

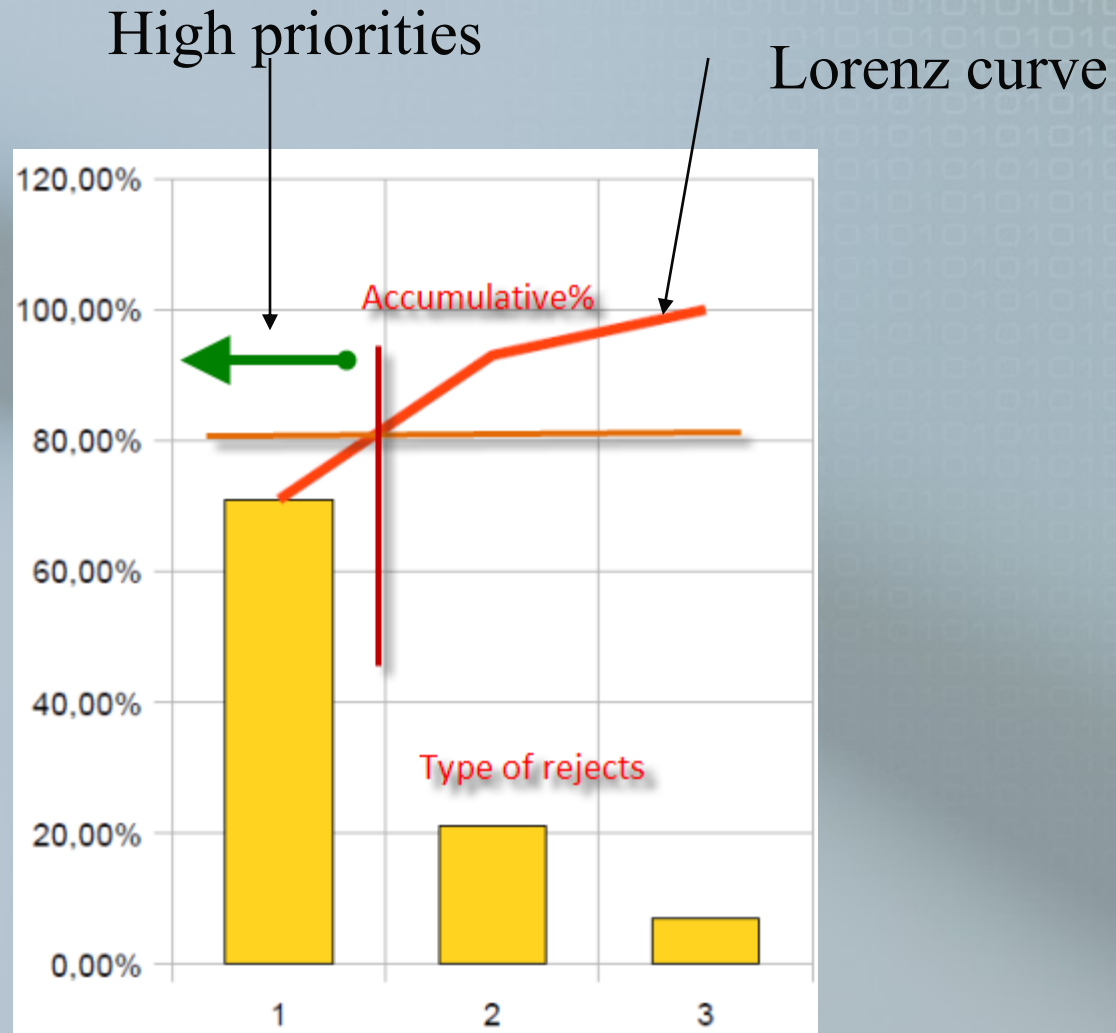
Manual for urgent reject cause elimination



Every reject type -> one Ishikawa diagram (electronic version)

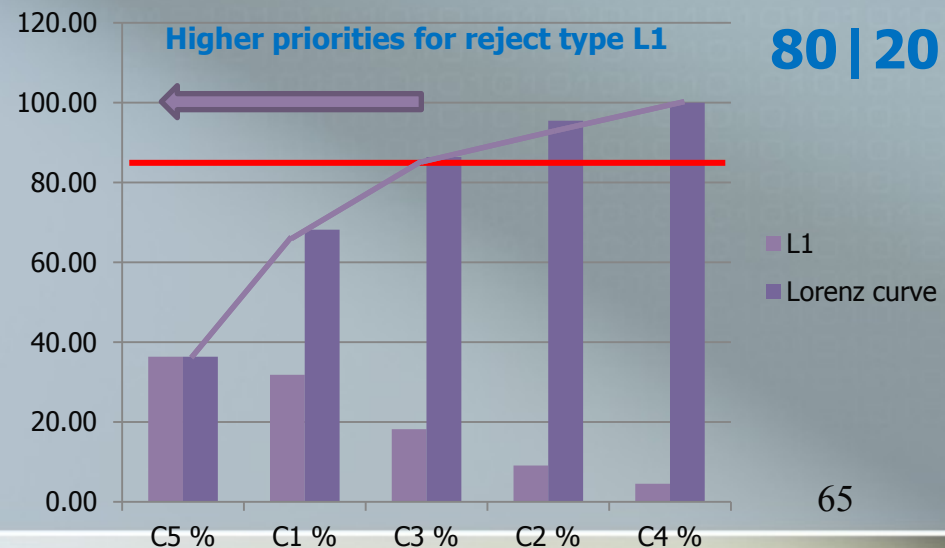
(to establish correct priority of remedy actions)

Pareto chart : a possibility to split up reject and setup priorities

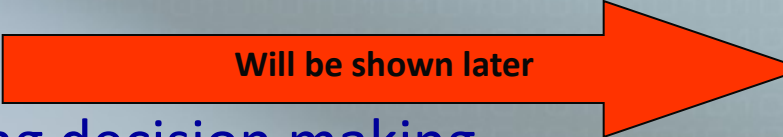


Pareto analysis per every type of reject

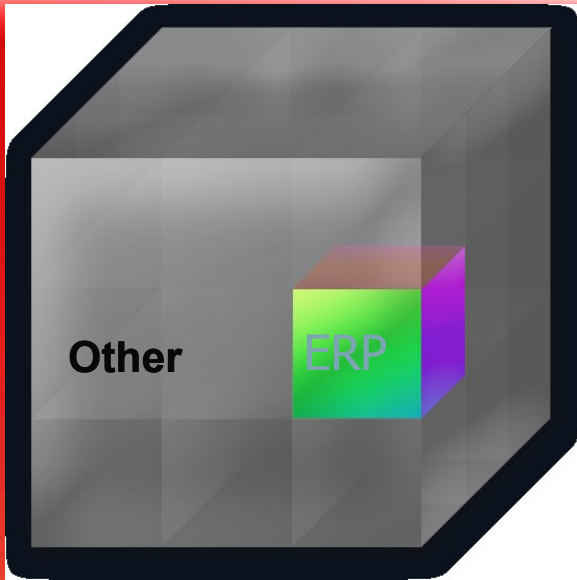
Type of reject	Cause 1	Cause 2	Cause 3	Cause 4	Cause 5	Cause 6	Total
L1	7	2	4	1	8	0	22
L2	2	4	6	8	0	9	29
L3	4	0	0	5	6	7	22
L4	5	7	2	0	1	3	18
L5	0	2	7	3	0	1	13
L6	9	7	5	2	3	6	32
L7	0	7	0	2	3	4	16
L8	1	8	6	2	4	0	21
L9	2	0	5	7	1	4	19
L10	7	2	8	9	7	5	38
C	C5 %	C1 %	C3 %	C2 %	C4 %	C6%	
L1	36,36	31,82	18,18	9,09	4,55	0,00	100
Lorenz curve	36,36	68,18	86,36	95,45	100,00		



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  **Will be shown later**
- 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

IM/c



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."



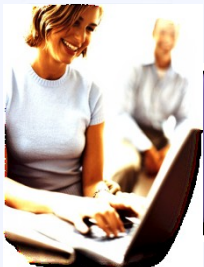
CFO

"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."



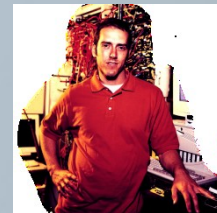
VP, Sales and Marketing

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



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."

Managing Through the profit valley

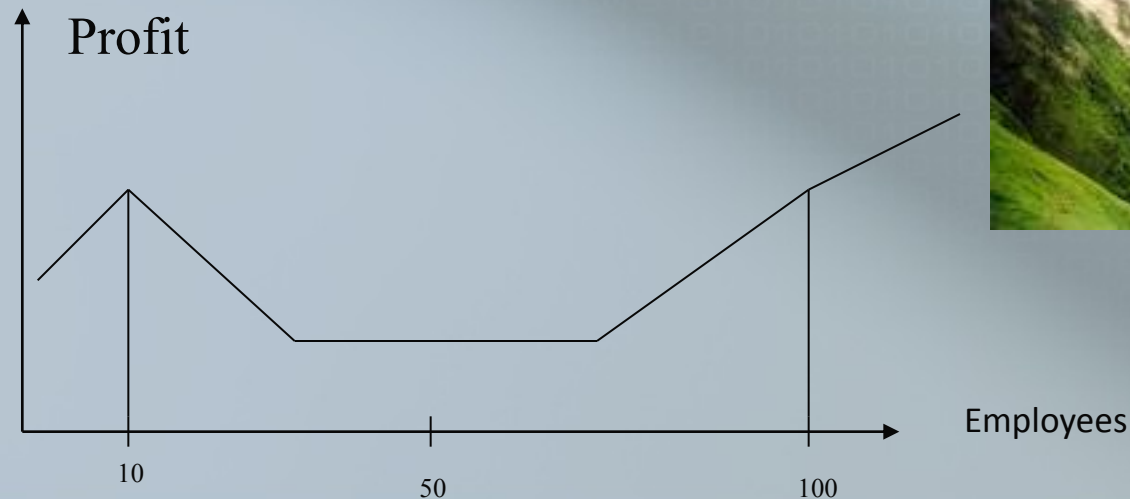
- Initially, most partners business are run by one or two founders, who manage every part of the business : sales and marketing, project management, service delivery management, accounting, sub-load and load, collection, HR and many many more....



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

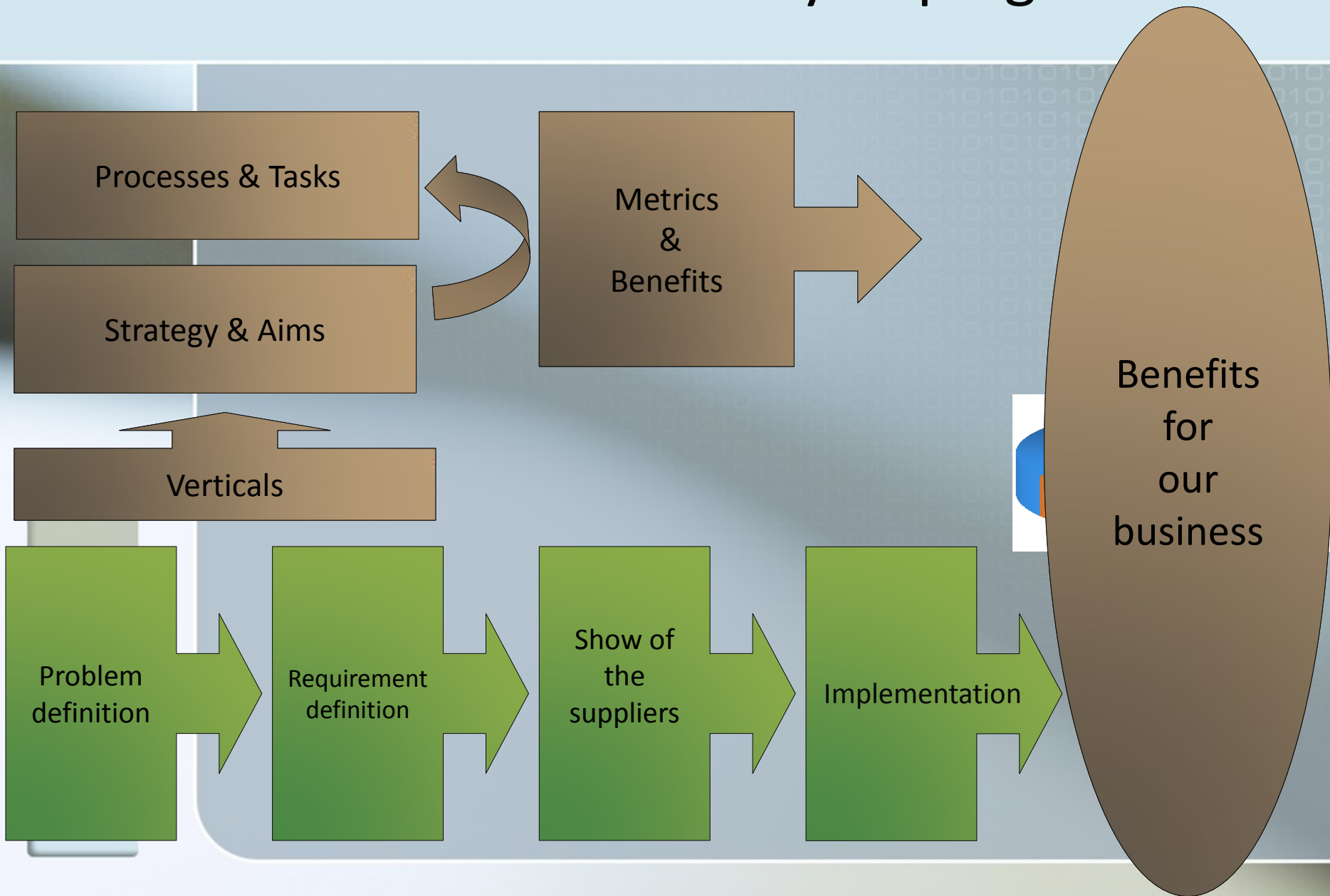
- Third key
 - Financial management control and cash flow is the king
 - Invoice quickly and pay consistently (but not early !!!)
 - To maintaining Cash- to-Cash cycle as short as possible
- Fourth key
 - Software package handling all aspects of financial customer relationship and project management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

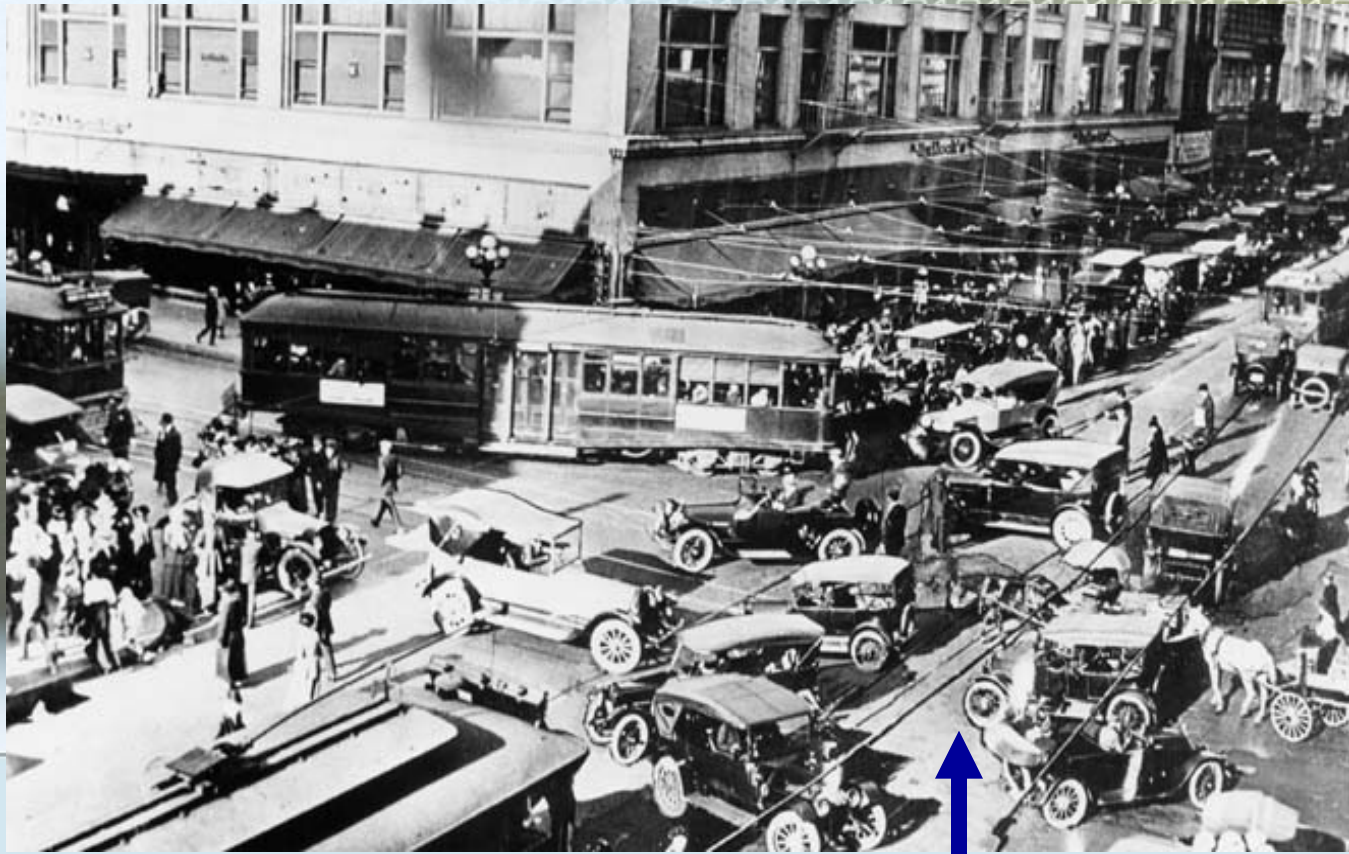


Managing Through the profit valley

Business control needs			
	Financials	General Management	Project
Driving Business Objectives	Max cash flow, Collecting early, paying not early	Maintaining revenue velocity, good Marketing machine	Reduce scope creep Efficiency factor Utilisation
Personnel required	Full time CFO with excellent knowledge	Key staff (no job hopping)	Mixed team (juniors and seniors)
Processes required	Rigorous FM driven by Key business objective above	Continuous Recruiting and training	Application of the Good project Methodology (Sure Step)
Systems required	Dynamics NAV	Dynamics CRM	Project Management Software

Do we know or we are only hoping?





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 %)