## **Balanced Scorecard**

Ing.J.Skorkovský,CSc.

and various listed sources

**Department of Corporate Economy** 

### Balanced Scorecard and continuum of value (1st part)

• Balanced Scorecard is a step in the continuum describing value and how the value is created



### Balanced Scorecard and continuum of value (2nd part)

• Balanced Scorecard is a step in the continuum describing value and how the value is created



### Budget model in ERP-setup

G/L Budg	ets 🔹				١	ype to filter	(F3) Name 🔹 🚽
_						- 1	Set Work Date
Name	Description	Budget Dimension 1 Code	Budget Dimension 2 Code	Budget Dimension	<ul> <li>Budget</li> <li>Dimensio</li> </ul>	Bloc	Set Work Date
2018	2018 budget						Work Date: 24.1.2019 -
2019	2019 budget	AREA	SALESCAMPAIGN				
						-	OK Cancel

General				^		
Budget Name:	2019 👻	View by:	Week	•		
Show as Lines:	G/L Account	<ul> <li>Rounding Factor:</li> </ul>	None	•		
Show as Columns:	Period	<ul> <li>Show Column Name:</li> </ul>				
Budget Matrix (Filtered)						
😴 Balance 👻 🧥	Find 🛛 Filter 🏾 📡 Clear Filter					
Code Na	me	Budgeted 4.20 Amount	019 5.2019	6.2019 ^		
6610	Sales, Other Job Expenses					
6620	Job Sales					
6695 T	otal Sales of Jobs	1				
6710 C	Consulting Fees - Dom.	380,00 🔶 10	0,00 200,00	80,00		
6810 F	eec and Charnes Rec Dom	1				

Total budgeted amount =380

# Budget model in ERP – (sales of consulting services)

Lines			S	ales line (inv	oice) 24.1	2019		
🗲 Functions 👻	🖩 Line 🝷 🛅	New 🏙 Find 🛛 Filter	🍢 Clear Filter					
Туре	No.	Description	Location Code	Quantity	Unit of Measur	Unit Price Excl. VAT	Line Amount Excl. VAT	Line Discount %
G/L Account	6710	Consulting Fees - Dom.	BLUE	10	HOUR	• 40,00	400,00	

Lines			Sales	line (invoice) 31.1.2019		
🗲 Functions 👻	🖩 Line 🝷 🖞	🗋 New 🏙 Find 🛛 Filter	🍢 Clear Filter			
Туре	No.	Description	Location Code	Quantity Unit of Measur	Unit Price Excl. VAT	Line Amount Excl. VAT
G/L Account	6710	Consulting Fees - Dom.		12 HOUR	40,00	480,00

Lines Sale			es line (invoice)	7.2.2019			
🗲 Functions 👻 Line 👻 🎦 New 🏙 Find 🛛 Filter 🏷 Clear Filter							
Туре	No.	Description	Location Code	Quantity	Unit of Measur	Unit Price Excl. VAT	Line Amount Excl. VAT
G/L Account	6710	Consulting Fees - Dom.		4	HOUR	15,00	60,00

#### **General ledger entries**

Posti 🔺 Date	Document Type	Document No.	G/L Acco	Description	Gen. Posti	Gen. Bus. Posting	Gen. Prod	Amount	Bal. Accou	Bal. Accou	Entry No.
24.1.2019	Invoice	103037	6710	Invoice 1004	Sale	NATIONAL	SERVI	-400,00	G/L Account		2852
31.1.2019	Invoice	103038	6710	Invoice 1005	Sale	NATIONAL	SERVI	-480,00	G/L Account		2855
7.2.2019	Invoice	103039	6710	Invoice 1006	Sale	NATIONAL	SERVI	-60,00	G/L Account		2858

400+480+60=940

# **Budget- Planned-Actual**

options
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Closing Entries:	Include	-	View as:	Net Ch	ange		•	
View by:	Quarter	•						
No.	Name	Income/Bal	Debit A	mount	Credit Amount	Budgeted Debit Amount	Budgeted Credit Amount	Balance/Budget (%)
6710	Consulting Fees - Dom.	Income Stat			940,00	380,00		-247,4

# Definition

- BS developed by Robert Kaplan and David Norton
- BS examines a firm's performance in four critical areas

	Finances – how should we look to our shareholders ?
	Customers – how should we look to our customer ?
	Processes – at which business processes must we excel ?
Lea	rning and Growing – how will we sustain our ability to change and improve ?

### Basic strategy map (two lower BS levels)

### Processes

#### **Supplier Relationship**

Lower cost of ownership JIT delivery TQM – High quality supply

#### **Production and Services**

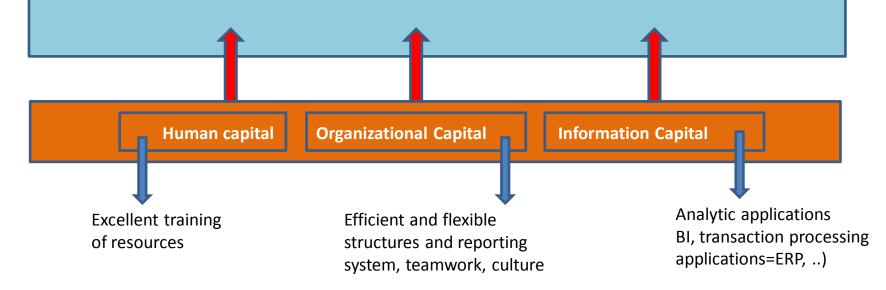
Lower cost of production Continuous improvement (Kaizen) **Reduced cycle time (see Little's law)** Shorter production lead times Working capital efficiency (fin. leverage) MRP,MRP\_II Advanced Planning and Scheduling Good Resource Planning Perfect way of cost calculation (actualexpected) Application of Theory of Constraints Linear programming- optimization

#### **SCM-Supply Chain Management**

Lower cost of transport Better way of stock replenishment Better delivery performance

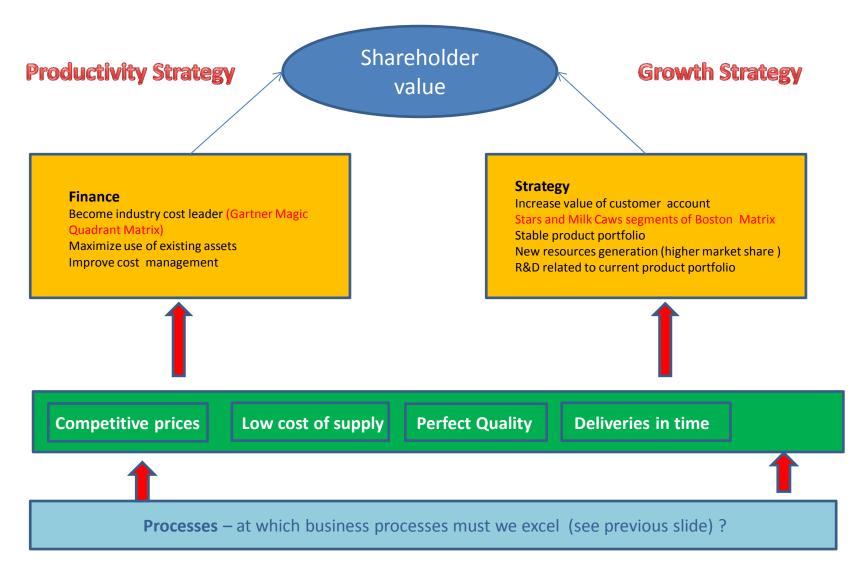
#### **Risk Management**

Financial risks Cash flow management Operational risk Technological risk



Resource : Operation Management, Quality and Competitiveness in Global Environment, Russel & Taylor (not the red ones)

### Basic strategy map (two upper BS levels)



# **Balanced Scorcard worksheet**

Dim	Dimension Objectives		Key Performance Indicator	Goal for 2008	KPI Results to Date	Score	Mean Performance	
Finances	Productivity	Become industry cost leader	% reduction in cost per unit	20%	10%	50%	65%	
	Growth	Increase market share	Market share	50%	40%	80%	(50+80)/2	
Qustomers	Quality	Zero defects	% good quality first pass	100%	80%	80%	87%	
Qusto	Timeliness	On-time delivery	% of on-time deliveries	95%	90%	95%	07.76	
	Suppliers	Integrate into production	% orders delivered to assembly	50%	40%	80%	73%	
	Suppliers	Reduce inspections	% suppliers ISO 9000 certified	90%	60%	67%	15%	
	Products	Reduce time to produce	Cycle time	10 mins.	12 mins.	83%	52%	
Ses	Troducto	Improve quality	# warranty claims	200	1000	20%	JZ 76	
Processes	Distribution	Reduce transportation costs	% FTL shipments	75%	30%	40%	40%	
-	Post-sales Service	Improve response to customer inquiries	% queries satisfied on first pass	90%	60%	67%	67%	
	Risk	Reduce Inventory obsolescence	Inventory turnover	12	6	50%	50%	
	T UOK	Reduce customer backlog	% order backlogged	10%	20%	50%	5078	
	Human	Develop quality improvement	# of six sigma Black Belts	25	2	8%	250/	
Ē	capital	skills	% trained in SPC	80%	50%	63%	35%	
Learning & Growing	Information	Provide technology to	% customers who can track orders	100%	60%	60%	61%	
ming	capital	improve processes	% suppliers who use EDI	80%	50%	63%		
Lea	Organizational	Create innovative culture	# of employee suggestions	100	60	60%	55%	
	capital		% of products new this year	20%	10%	50%	0078	

Explanations : FTL-full truck load, LTL- less than truck load, SPC=statistical process control, EDI=electronic data interchange, Cycle time=time/unit=(e.g.7 min/1 customer request)

## Some units (home study)

- Will be presented later in sections such as :
  - Little's law (WIP=Throughput \*LT
  - Theory of Constraint...
- Takt Time (TT) rhythm in which we have to produce in order to satisfy customer demand (demand is 240 toaster ovens and we can produce these in 480 minutes ->TT= 480/240=2
- Lead Time (LT) Number of minutes, hours, or days that must be allowed for the completion of an operation or process, or must elapse before a desired action takes place –see next slide

## ERP outputs and BS

#### Customer - Summary Aging CRONUS International Ltd.

### Report generated from **ERP MS Dynamics NAV**

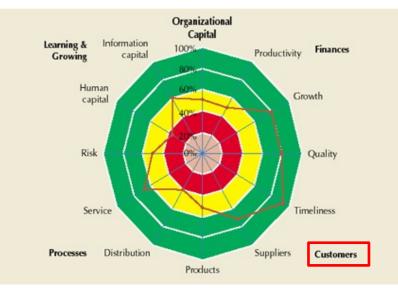
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### FINANCIAL WAY OF REPORTING

Customer: No.: 10000..50000

			03.12.12	03.01.13	03.02.13		
No.	Name	before	02.01.13	02.02.13	02.03.13	after	Balance
100	00 The Cannon Group PLC	48 860,55	0,00	0,00	0,00	286 056,12	334 916,67
200	00 Selangorian Ltd.	-3 467,38	0,00	0,00	0,00	0,00	-3 467,38
300	00 John Haddock Insurance Co.	340 865,40	0,00	0,00	0,00	0,00	340 865,40
400	00 Deerfield Graphics Company	1 328,88	0,00	0,00	0,00	0,00	1 328,88
500	00 Guildford Water Department	666,75	0,00	0,00	0,00	0,00	666,75
Total (LCY)	1	388 254,20	0,00	0,00	0,00	286 056,12	674 310,32

Balance Due



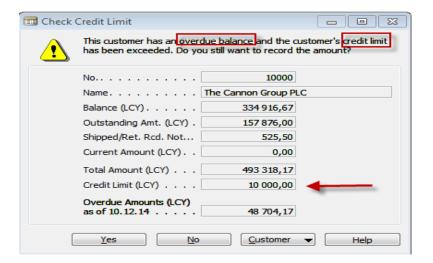
#### **BS WAY OF REPORTING** (RADAR CHART)

Based on KPI estimation in % out analysed company is excellent, but on the other hand, collecting money, credit limit and overdue management is falling behind

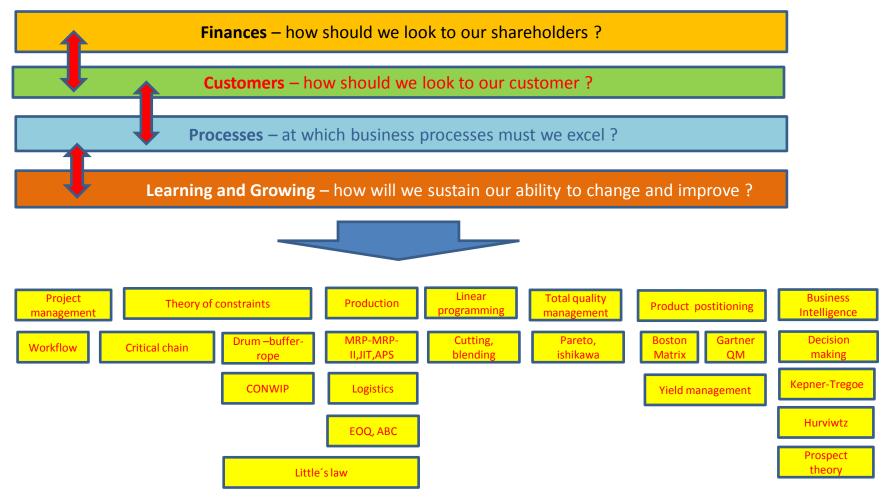
Resource : Operation Management, Quality and Competitiveness in Global Environment, Russel & Taylor (only radar chart)

### ERP forms related to customer aging report

📰 10000 The Cannon Group PLC - Customer Card						
General Communication Invoicing Payments Shipping Foreign Trade						
No 10000 📖 🥒	Search Name THE CANNON GR					
Name	Balance (LCY)					
Address 192 Market Square	Credit Limit (LCY) 10 000,00					
Address 2	Salesperson Code PS 👔					
Post Code/City B27 4KT 💼 Birmingham 💼	Responsibility Center BIRMINGHAM 👔					
Country/Region Code GB 👔	Service Zone Code M					
Phone No	Blocked					
Primary Contact No						
Contact Mr. Andy Teal	Last Date Modified 02.03.15					

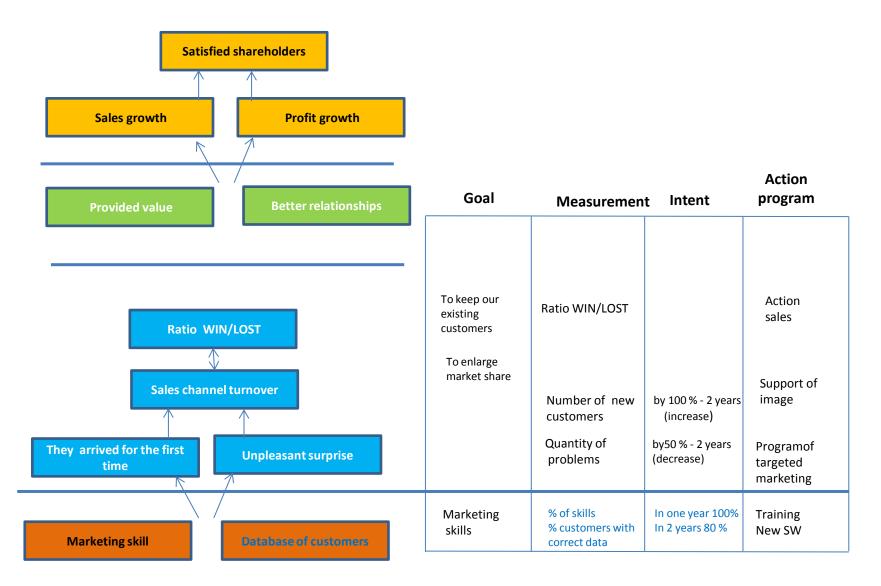


### BS and OM



# Strategic initiatives

(two lower BSC layers have defined way : Goal-Measurement-Intent-Action Program



### Tabulka jako podklad pro konstrukci grafu JSS (FRT→BSC) <sup>Czech courses only</sup> a eliminaci nepotřebných aktivit

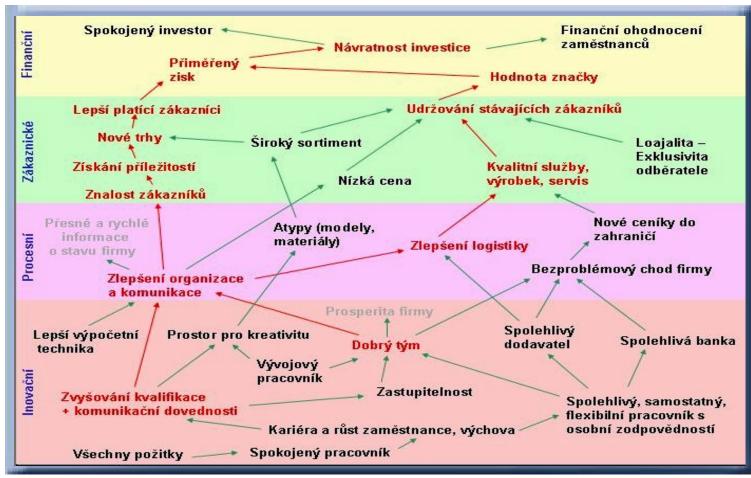
### (obdoba postupu při zavádějí štíhlé výroby)

			Zisk	Podíl na trhu	S nižování zadhůženoti	Hodnota značky	Dlouhodobá kontinuita	Hodnota firmy – distribuce	Profesní a karierový nůst a vzdě	Mzda a sociální zabezpečení	Stabilita	Klima ve firmě a pracovní prost	Benefity	<sub>N</sub> S hước - podpora prodeje	S nížení nákladů na sklad, rychlo	Marketingová podpora	Kvalita dîlû	Udržet neexkhizivní postavení	Kvalitní personál	S nížení Lost sales	Uspokojení zákaznůků a zaměstr	S trategie S WOT	Predikce	Plánování	Motivovat	Tým	Optimalizace ceny	Udržení šíře sortimentu – rozšíň	Hledání alternativních dodavatel	Udržení exkhrzivity	Analýza portfolia produktů	A nalýzy portfolia zákazmloů	.oajalita Zákazmľků
SFE.1	SFE	Exportní objednávka		<b>₽</b>		.œ	<del></del>	÷.#	<b></b>	ļ. <b>A</b>		M		1.50		. <b>.</b>	M		.¥4		<b>.</b>		·	<b>₽</b>	i. <b>m</b>		Ω	<b>P</b>	.æ.	<b>.</b>	-96	- <del>- G</del>	<b></b>
SFE.2.2.	SFE	Tvorba objednávky katalogu zboží pro odběratele		†	·	·		•	••••••	·	·	•	••••••			·	••				•	†	·	·	••••••	•			•	·		······	
SFE.2.8.	SFE	Průzkum a tvorba nabídek na spolupráci		3	·	·		••••••	·	•••••	·	•	•••••			•	••				······	÷	·	·	•	······			·····	·		·····	
SFE.2.10.	SFE	Jednání se zákazníkem	3		1	1	1	÷		·	<u> </u>	•	••••••		1	·	••				·	1	1	1	÷	÷	1	4	1	1	1	1 1	5
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PM.01	PM	Dotazy z poboček			·····	·		••••••		·	······	1	••••••	4	3	······	•••••••			·····		2				1	4					<u> </u>	
PM02	PM	Výběr dod avatele	2	4	3	2	- 5	1		÷	······	·····		·····	4	4	1			2		3		2	1		2	1	·····	2			······
PM.05	PM	Kakulace	1							÷				5		2			••••••	3		4					3		4		2	2	
PM.06	PM	Informace o novém zboží pro prodej	4			4	·····	·		÷	······			6		3				4		5		·	······		·····		·····		·	÷	······
PM.08	PM	Jednání s dodavateli		7			5	÷		÷	÷			7	5		2			5		6	2	4			5	2	2	3	4	÷	
PM.09	PM	Marketing - Přípravy a vyhodnocení akci		8		6								12			10					7	<u>↓</u>	5			6						
SF 23	SSF	Investice - smlouvy (servisy PE)		- ğ						÷	÷			8		8						ļ	÷	6				5		- 5		÷	
SF 24	ISSF	Rozvoj koncepce Partner ELIT		10		8		÷		·	······	•		9	6		•••••••					÷	5		÷			6		6		·	3
LO 01	LO	Objednávky od poboček - zpracování		+ 10	·					·		•	·		7	f.	••					÷		·····	÷	÷			<u></u>			·	
10.02	LO	Příjemzboží na CS		÷				2		·		·			8		6			8		÷			÷	÷	······					· ······	
LO.04.		Výdej zboží z CS		ł				4	<b>.</b>											9		÷			÷	÷			<b>.</b>				
LO 05.	10	Prodej zboží z CS Prodej zboží z CS (SSF,B2B)		ļ		ļ	ļ	5							9					10			ļ	ļ						ļ	ļ		
LO.06.		Provaz CS		÷	8		ļ	5									3			6		÷	ļ	ļ		2	ļ		<b></b>	ļ	ļ		
LO.08.	U	Zpracování podkladů pro mzdy		ļ		<b></b>	<b>.</b>								10								<u></u>	<b></b>	······						<b>.</b>	<b></b>	
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LO.19 LO.24	LO	Vraky Učetní převody zboží (Zb. Deník.)		ļ	10	<b>.</b>	ļ	10	ļ	ļ	į			ļ			5				ļ	ļ	<b>.</b>	ļ	ļ	ļ	ļ		ļ		ļ	<b>.</b>	ļ
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	PO	Fin anční operace		<b>.</b>		ļ															ļ		ļ	ļ							ļ		ļ
PO.4	PO	Tvorba podkladů pro mzdy Pobočky		ļ		ļ	ļ		ļ	ļ	ļ	ļ		ļ			ļļ			10	ļ	ļ	ļ	ļ	į	ļ	ļ		ļ	ļ	ļ	ļ	
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PO.9.3	PO	Transferzboží do jiné pobočky		ļ	14	į	ļ	14	ļ	Į	į			Į	14		4			13	ļ	ļ	į	ļ	ļ	ļ	ļ		ļ	ļ	ļ	<b>.</b>	į
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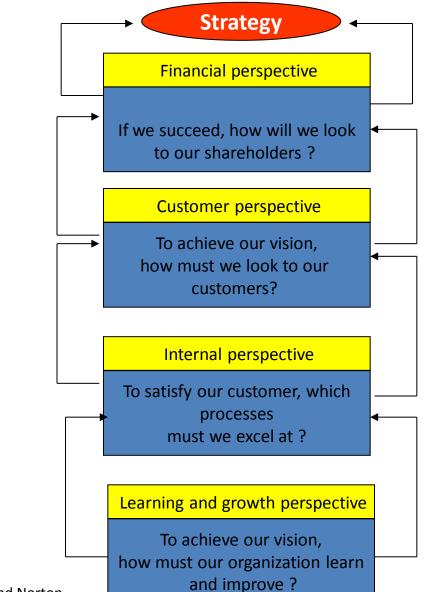
# Výsledný graf po aplikaci JSS (transpozice FRT->BSC vrstev)



**Czech courses only** 

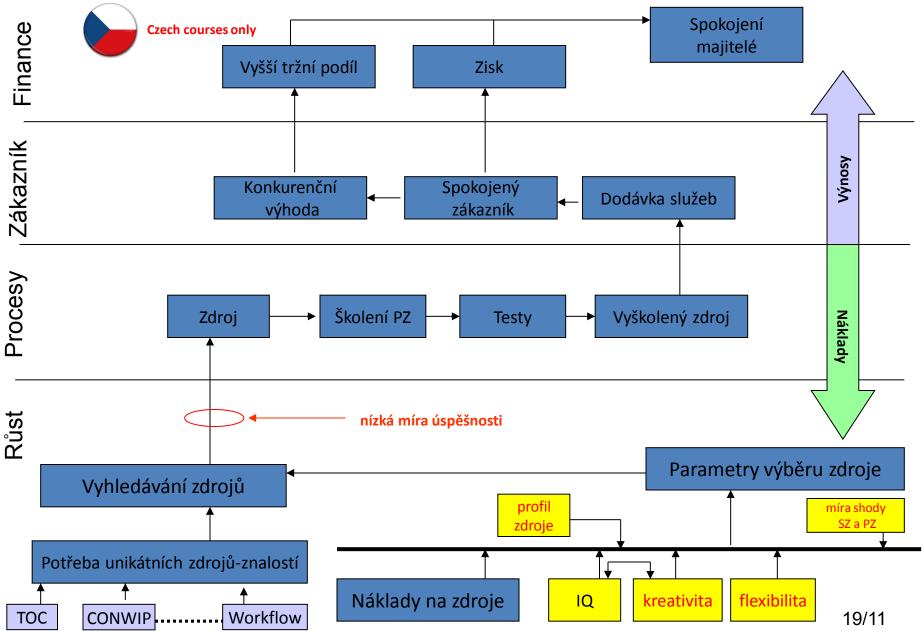


### Strategy Map-The Simple Model of Value Creation



Resource : Strategy Maps, Kaplan and Norton

### Strategická mapa (BSC)- velmi zjednodušené schéma



- What is the main goal of a company?
- A) Obtain the highest profit
- B) Find solutions that will be in the best interests of stakeholders
- C) Produce as many products as possible
- D) A and C
- E) None of the above

• Which of the following is Operations Management Technology not concerned with?

A)Product & Service Technology
B)Process Technology
C) Globalization technology
D)Information Technology
E)All of the above

- Which of the following would be considered an input when converting inputs into outputs during the transformation process?
- A) Land
- B) Capital
- C) Raw Materials
- D) Facilities
- E) All of the above

• Which of the following is not a key element of supply chain management ?

A)Purchasing

- **B)** Suppliers
- C) Location
- D) Logistics
- E) Managers decision