

# **bengin**

**Increase performance  
through measuring, mapping and managing values.**



**You can** manage what you can't measure.

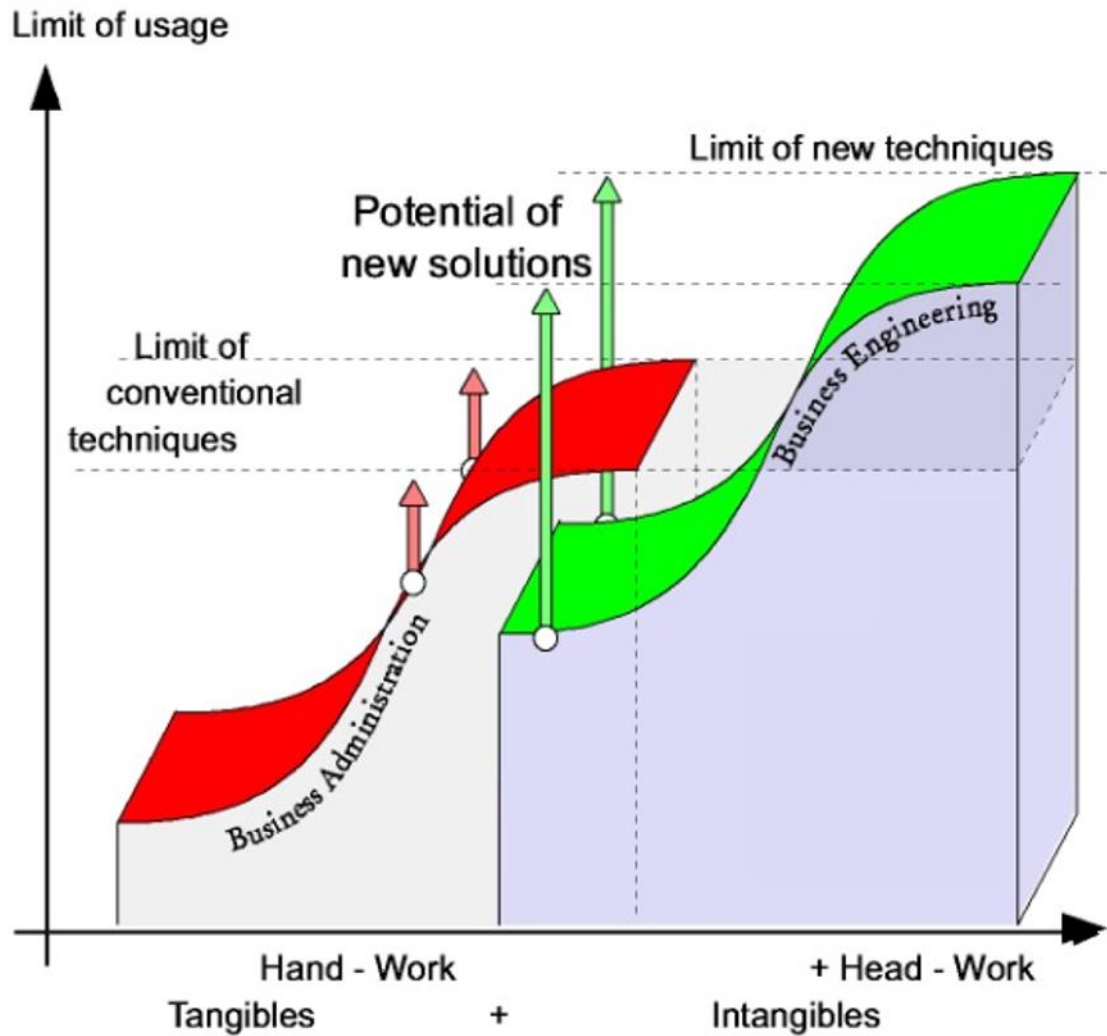
(No one can administrate what's not measurable.)

May be your employees can't just yet.

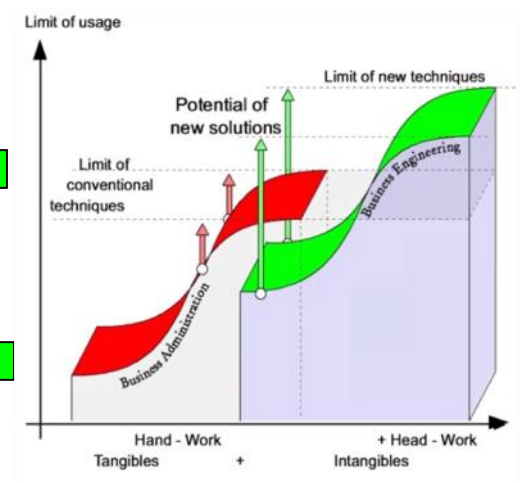
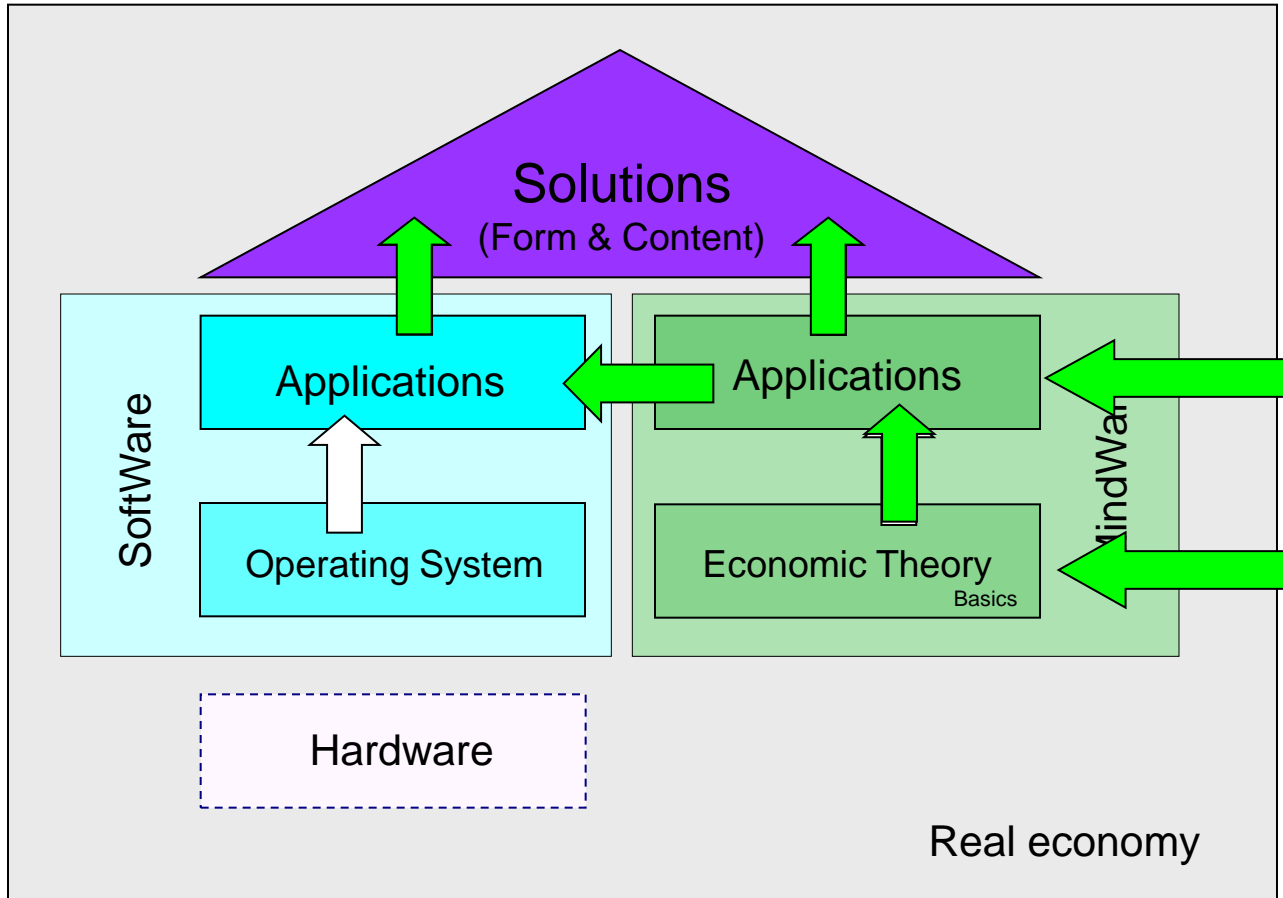
That's one of the reasons why you should introduce measures for the unmeasurable.

Peter Bretscher  
Andreas Bürgi  
23. August 2003

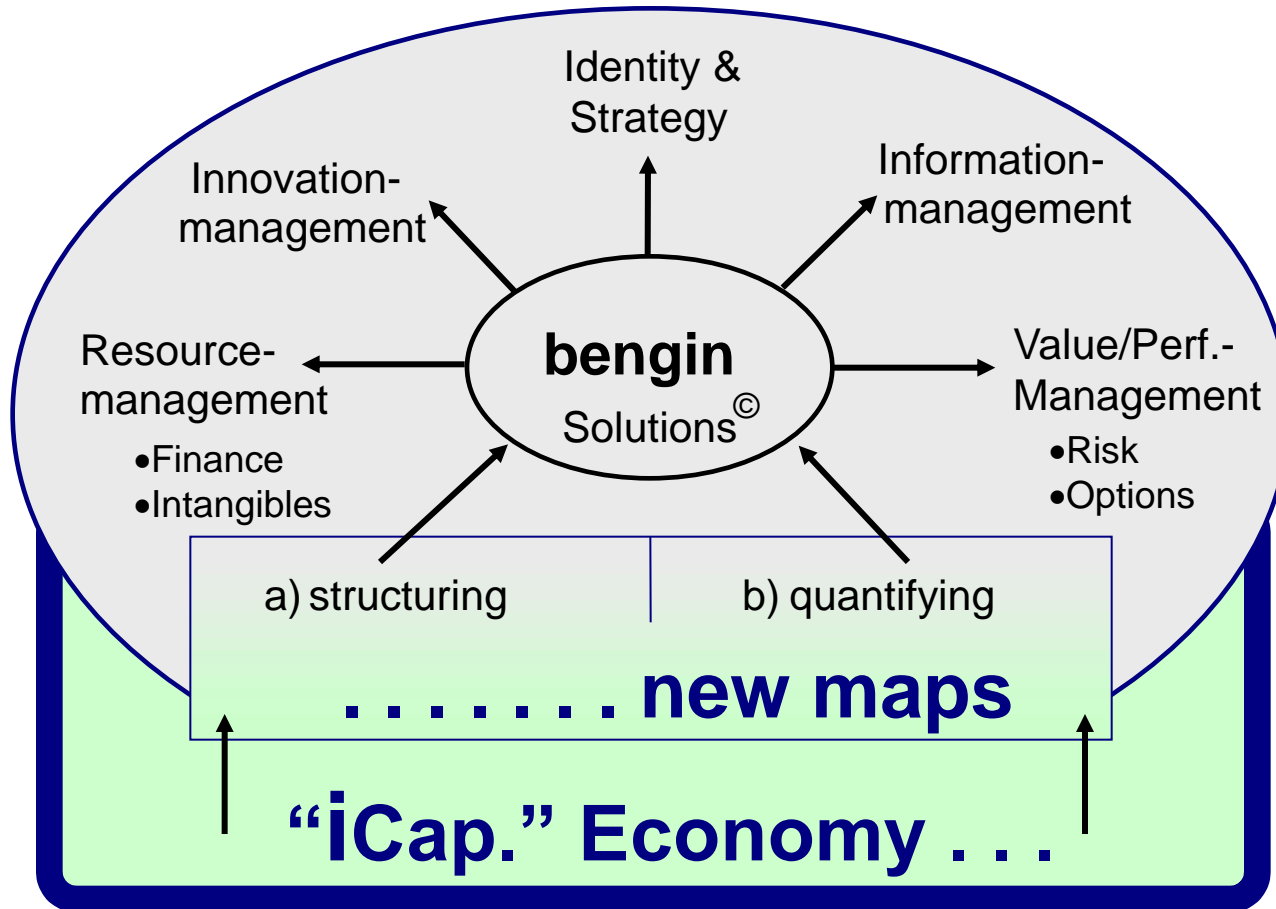
# Next step, focus on economic MindSetting / Paradigms



New MindWare & SoftWare → quantum leap in the simulation and planning of today's economy.



# Reality of business has changed – models have to follow



# Agenda

**1.**

**Structuring  
the elements  
of an  
enterprise.**

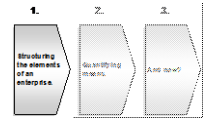
**2.**

**Quantifying  
means.**

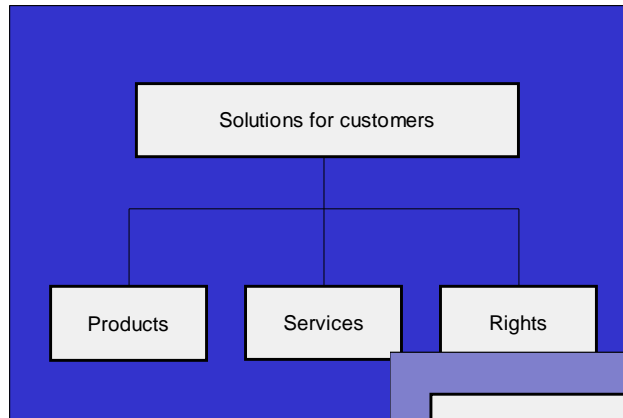
**3.**

**And now?**

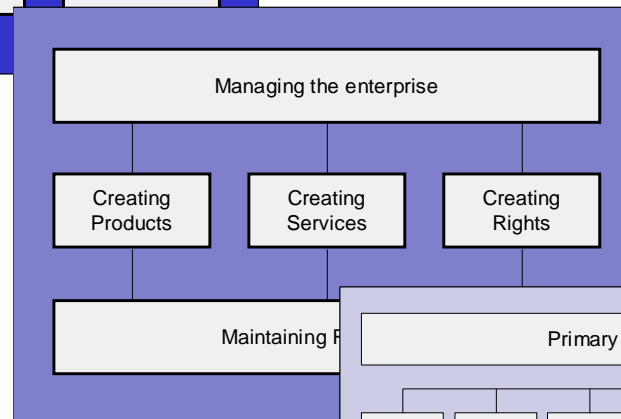
# Structuring the elements of an enterprise



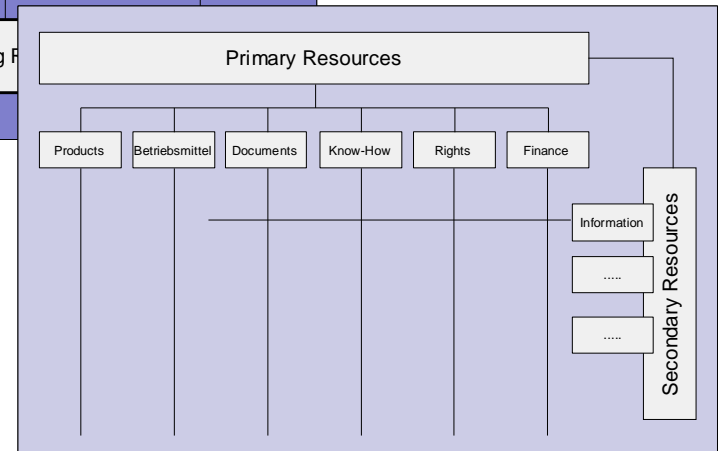
## 1. Offerings



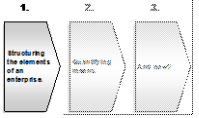
## 2. Processes



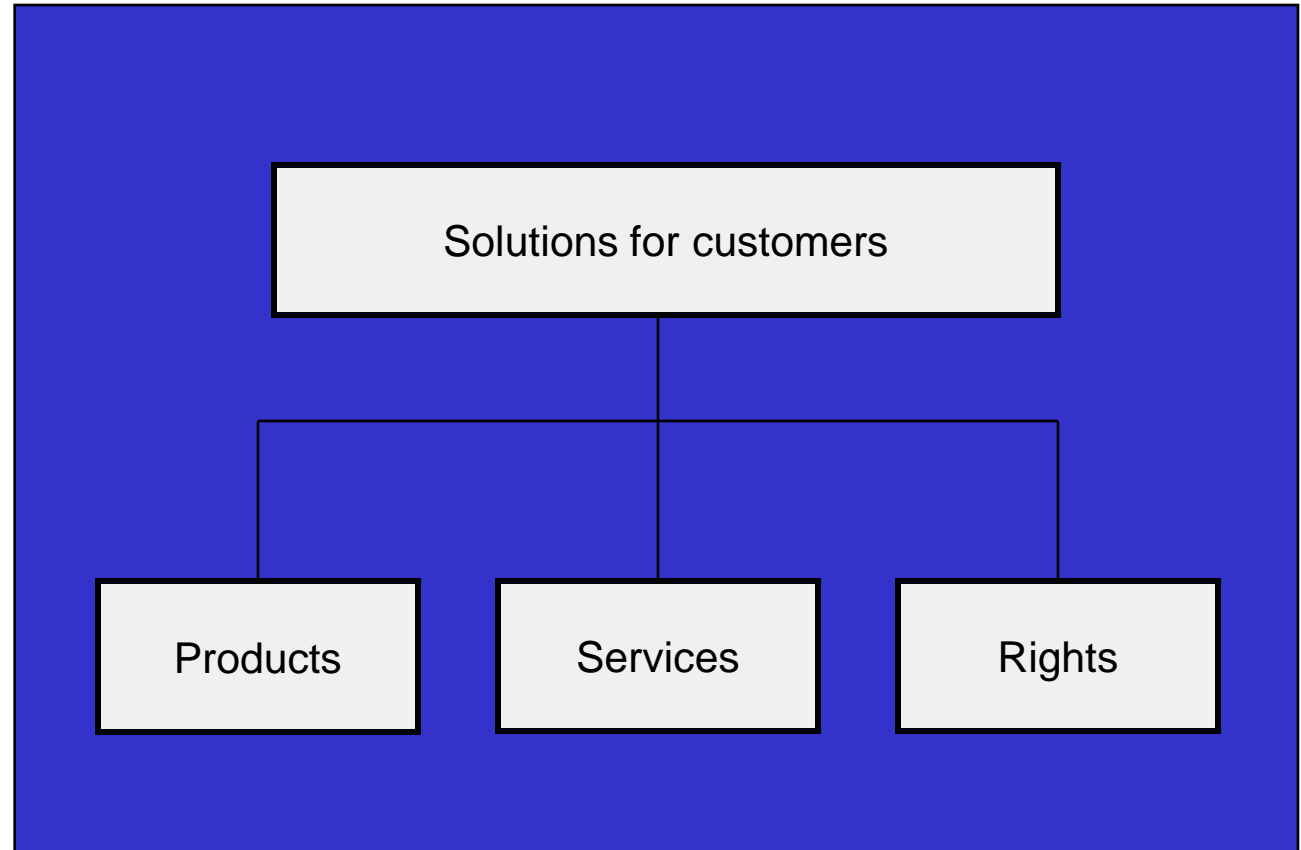
## 3. Resources



# Structuring the elements of an enterprise

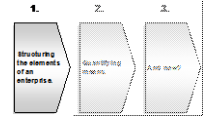


## 1. Offerings

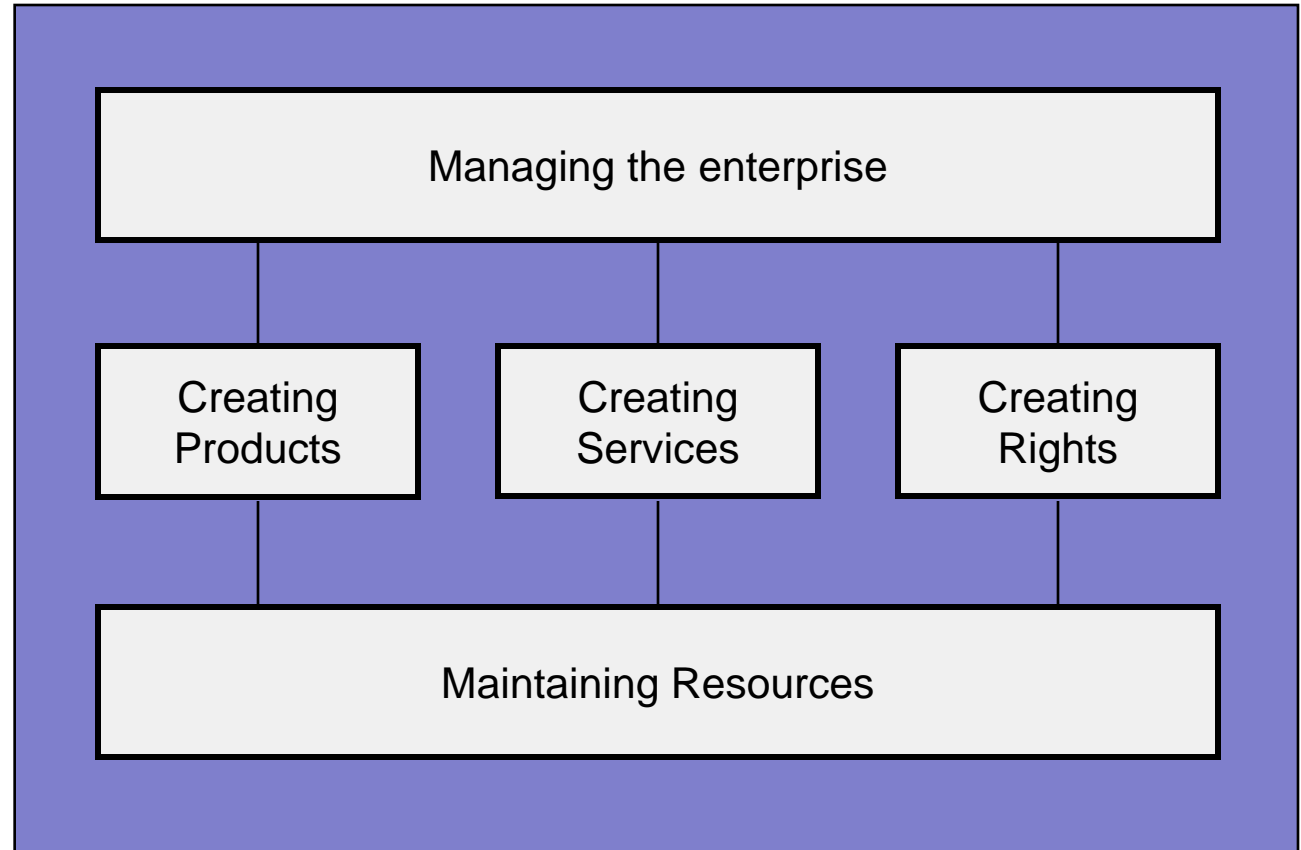




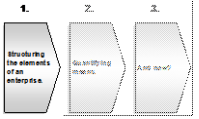
# Structuring the elements of an enterprise



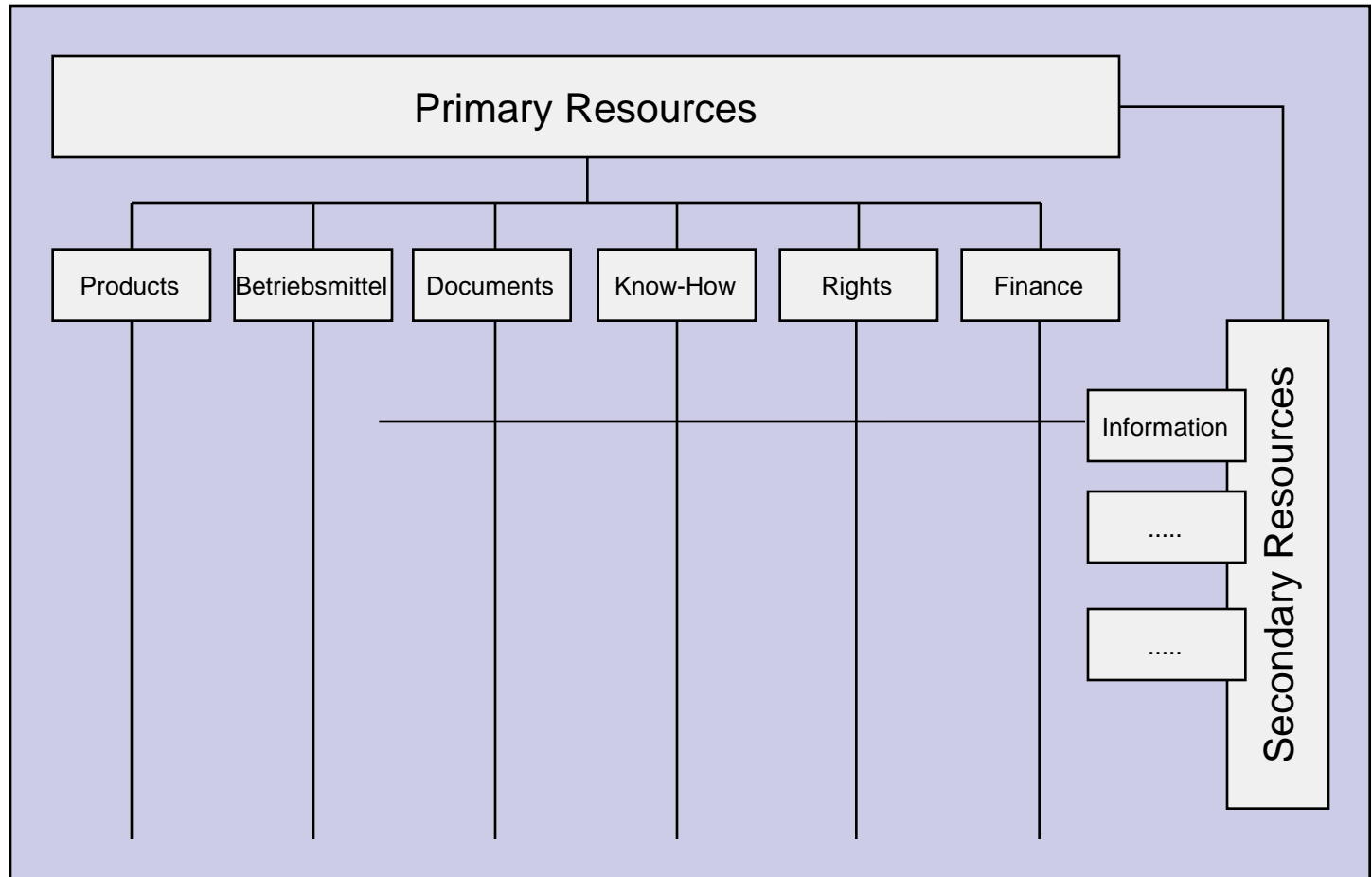
## 2. Processes



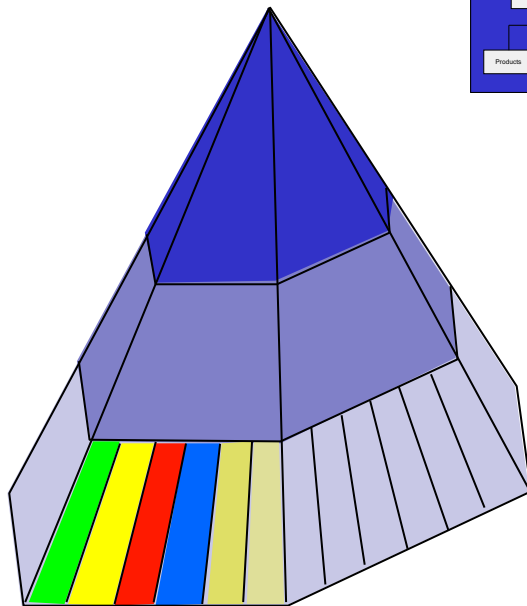
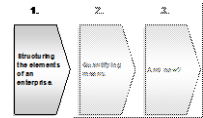
# Structuring the elements of an enterprise



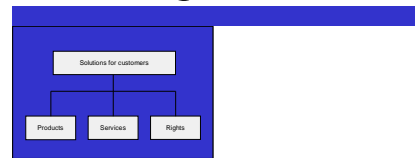
## 3. Resources



# The enterprise model

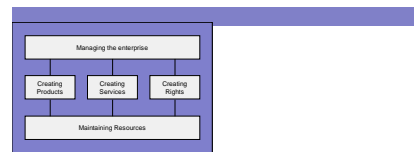


## Offerings:



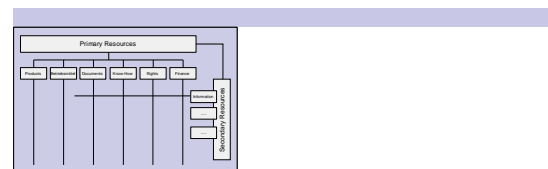
- Products
- Services
- Rights

## Processes:



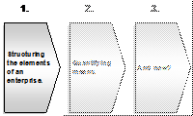
- Management
- Creating solutions (Products, Services, Rights)
- Maintaining, developing resources

## Pre-Requisites:



- Resources
- Resorts (Marketing, R&D, Prod., QS, HR..)
- Customer/Dispatch
- Supplier
- R&D - projects
- .....

What for?



Classic  
Outside-in

Customer

Offerings:

Complementary  
Strategy

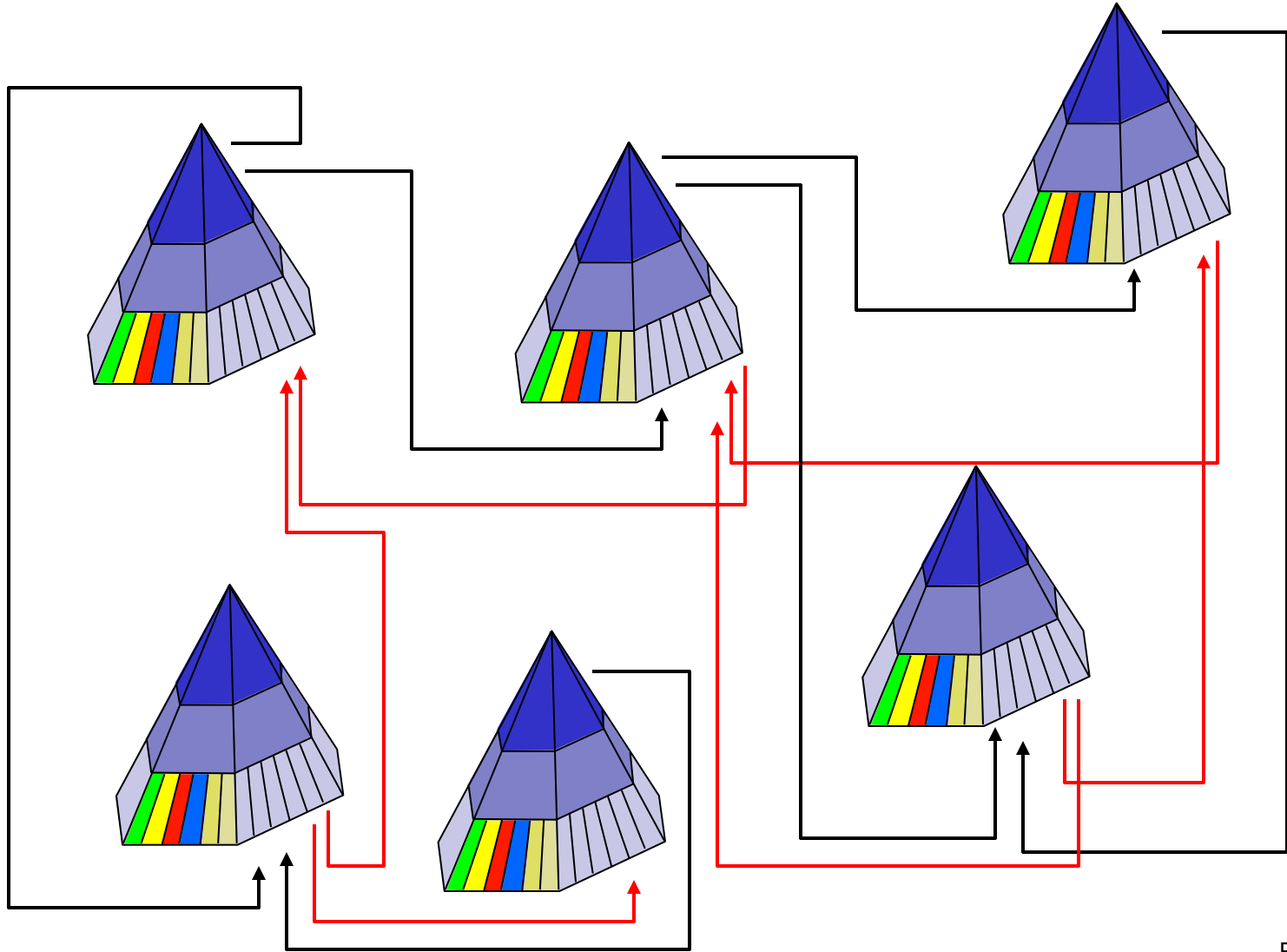
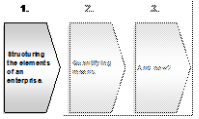
Processes:

Pre-Requisites:

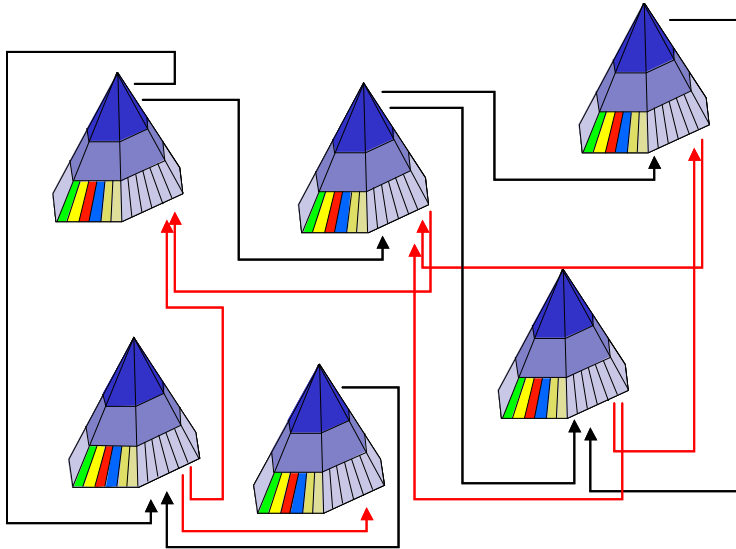
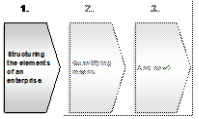
+ Inside-out

Knowing and using assets in a more holistic and effective manner.

# Loop-relations of enterprises



# What for?



→ Money      → other types of business objects

## Optimizing flow of:

- Offerings
- Processes
- Resources (tangible and intangible)

Increasing / reducing / redirecting the flow on the map.  
Leads to new options for doing business.

# Applications

**1.**

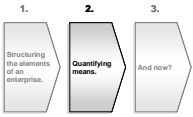
**Structuring  
the elements  
of an  
enterprise.**

**2.**

**Quantifying  
means.**

**3.**

**And now?**



# Quantifying means

Types of objects:

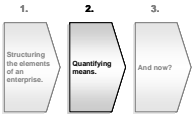
- a) Tangible objects.
- b) Intangible objects.

Types of metrics:

- a) Subjective metrics  
References to subjective impressions.
- b) Relative metrics  
References to a nonagreed numerical base.
- c) Absolute metrics  
Relation to an agreed numerical standard.

Absolute metrics are metrics with an agreed/normed standard from a Standardization Organization. Before they became "agreed absolute metrics" they were nonagreed relative metrics.





# Quantifying means

If you want to count and map multidimensional attributes (such as the value) of an object, you have to use a multidimensional metric system which shows and visualizes the chosen attributes in an understandable context.

Just compiling a lot of linear, unrelated metrics does not help.

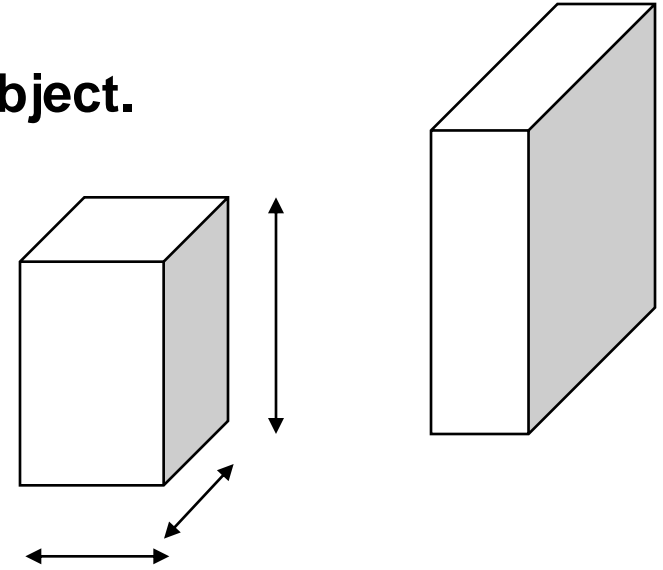
Objects, metrics, numbers and units					
			linear	2-Dimensions	3-Dimensions
Generic, geometric	Scalar, points		#	#, #	#, #, #
	Relations, division		%, a/b		
	Square		c	a x b	
	Volume		d		a x b x c
	Vector			a, b	a, b, c
Physical items, objects	Temperature	■	°C		
	Lengths	■	m		
	Area	■	m <sup>2</sup>	a x b	
	Work	■	mkp	m x kp	
	Energy	■	cal		
	Volume	■	m <sup>3</sup>		a x b x c
	Velocity	■	m/s	m/s, direction	
	Force	■	kp	kp, direction	
	Mass	■	kg		
	Electricity	■	A		
	Radioactivity	■	curie		
	Colour	■			r, g, b
Business items, objects	Money	■	\$		
	Turnover	■	\$		
	Employees	■	#		
	Earnings	■	\$		
	Cost	■	\$		
	Knowledge	■	?	?	?
	Rights	■	?	?	?
	Information	■	?	?	?
	Brand	■	?	?	?
	Reputation	■	?	?	?
	see, feel, smell	■			
	artificial metric	■			

# Quantifying means

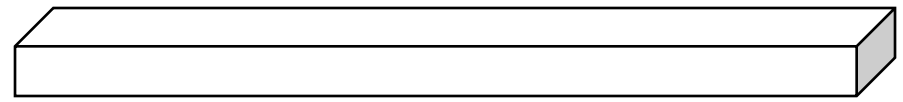
**Content of information. The cube as an object.**

$$a \times b \times c = d$$

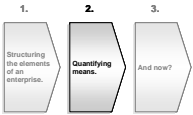
a	b	c	d
3	4	5	60
15	4	1	60
60	1	1	60
5	6	2	60



**Reduction of measures to linear metric "d" reduces the content of information significantly.**



**Reduction of value-measures to a linear monetary metric system limits the usage of this system for mapping reality.**



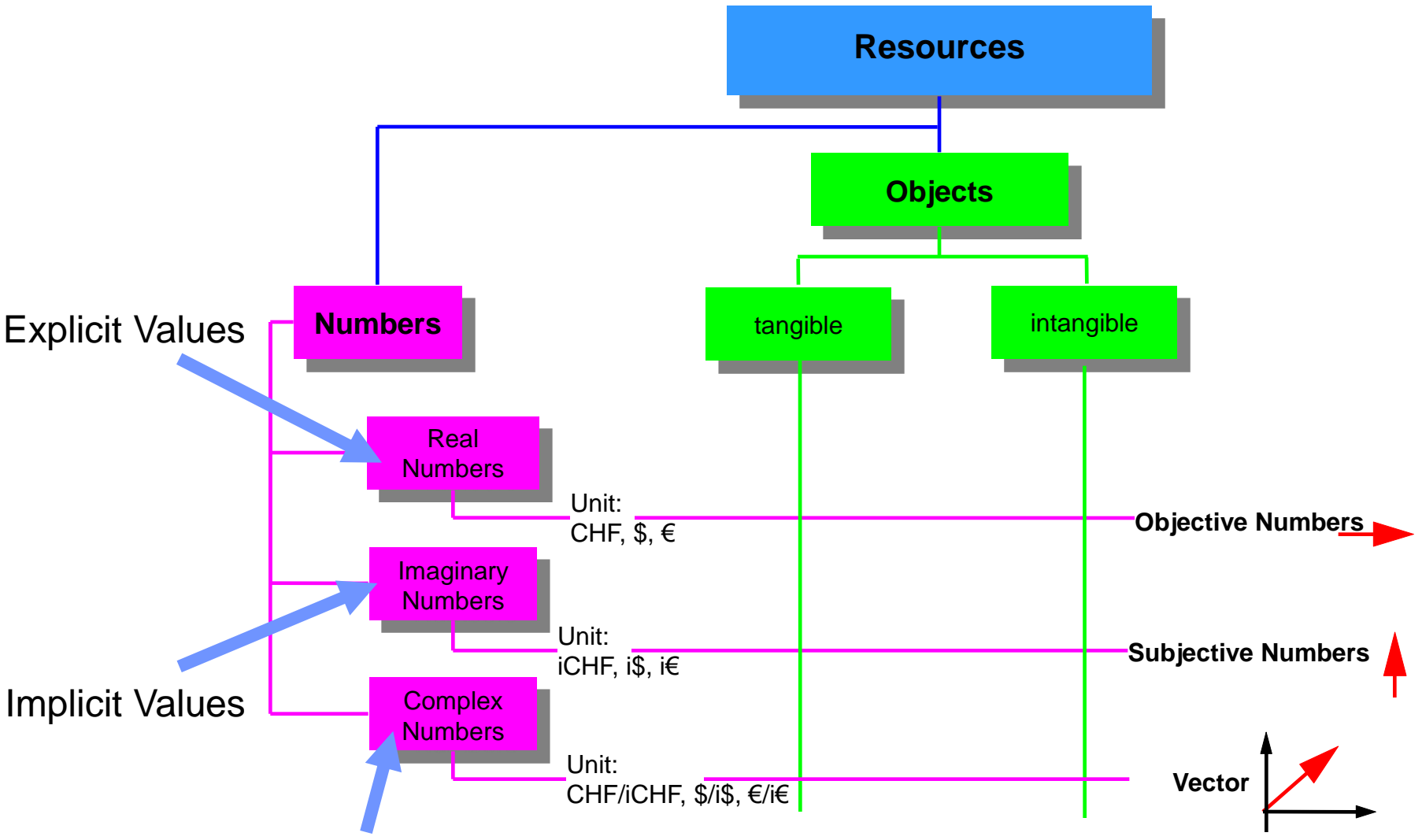
# Quantifying means

## The work of physicists:

- a) Look at (some problems of) the real world.
- b) Invent a numerical solution to explain (some problems of) the real world.
  - either by using the paradigms of classic physicists, or by
  - expanding classic paradigms ..... (Heisenberg, Einstein....),
  - inventing new numbers, metrics .... (Gauss, Curie...),
  - enabling unexpected additional inventions.
- c) Test, verify, correct solution, implement restrictions and patches.

Measuring multidimensional attributes with a linear and singular ruler leads to a mental dead end.

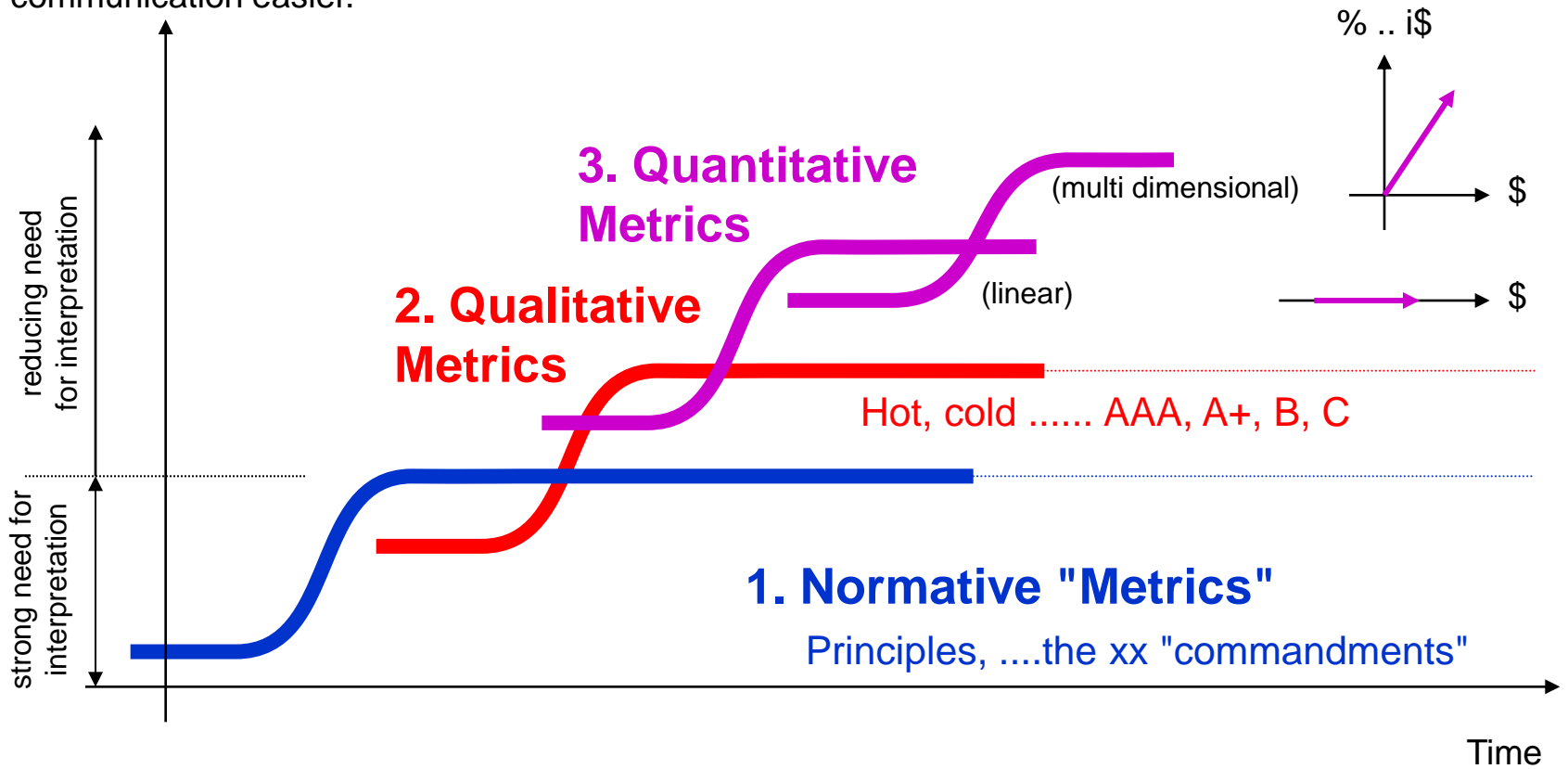
# Objects, Attributes, Value-Measures



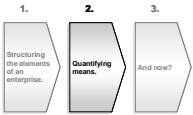
# Development of Metrics

Why Metrics?

Making rational (and indirect) communication easier.

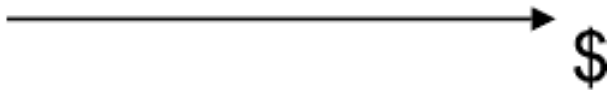


# Measuring performance



Creating Values

Counting Values



## Next steps

**1.**

**Structuring  
the elements  
of an  
enterprise.**

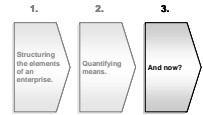
**2.**

**Quantifying  
means.**

**3.**

**And now?**

## 5 steps to increase the performance



1. (re)cognise your assets
2. perform the (2D)valuation
3. draw/show the valueprofile
- 4a. set the targets and priorities
- 4b. Repeat steps 1. to 4.  
as often as necessary
5. Launch projects





bengin – the value architects and engineers

**We build individual value systems.**

**We build individual value enabling systems.**

This document is a component of the business engineering system  
(Registered copyright TXu 512 154, 20. March 1992).

We own the complete intellectual propriety to the systems and parts of it.  
Commercial use, teaching and publications require one of a license.  
An unlawful use is a punishable offence in the commercial area.  
Ask your consultant (or us) for his individual license number.

# INSEDE (Institute for Sustainable Economic Development)

## INSEDE

Planned to be the legal entity for the practice oriented further development and distribution of economic knowledge, views and perspectives. It was founded by businessmen, convinced that in classic economic theory, among other things, the intangible objects were neglected in a distorting manner.

One of the tasks is not only to show this kind of lack, but to develop instruments with which some weaknesses of the classic business economic paradigms are weeded out quite pragmatically.

A growing community supports **INSEDE** in the development, distribution and application of the new generation of economic models.

Contact for inquiries:

Ingenieurbüro für Wirtschaftsentwicklung

Peter Bretscher, Alpsteinstrasse 4, CH-9034 Eggersriet, Switzerland

Tel: +41 71 877 14 11      email: [pb@bengin.com](mailto:pb@bengin.com)

We look forward hearing from you.

«We have to introduce a quantitative logic for values, wherein the whole kind of business resources and valuation perspectives will be taken into consideration.»

Aurelius von Damos

We care about that – and more.

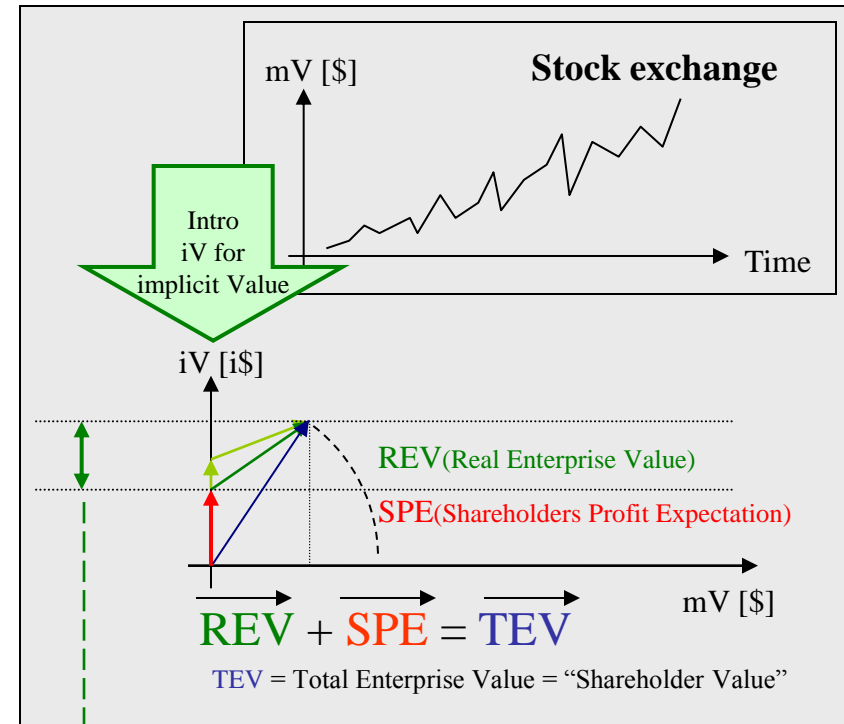
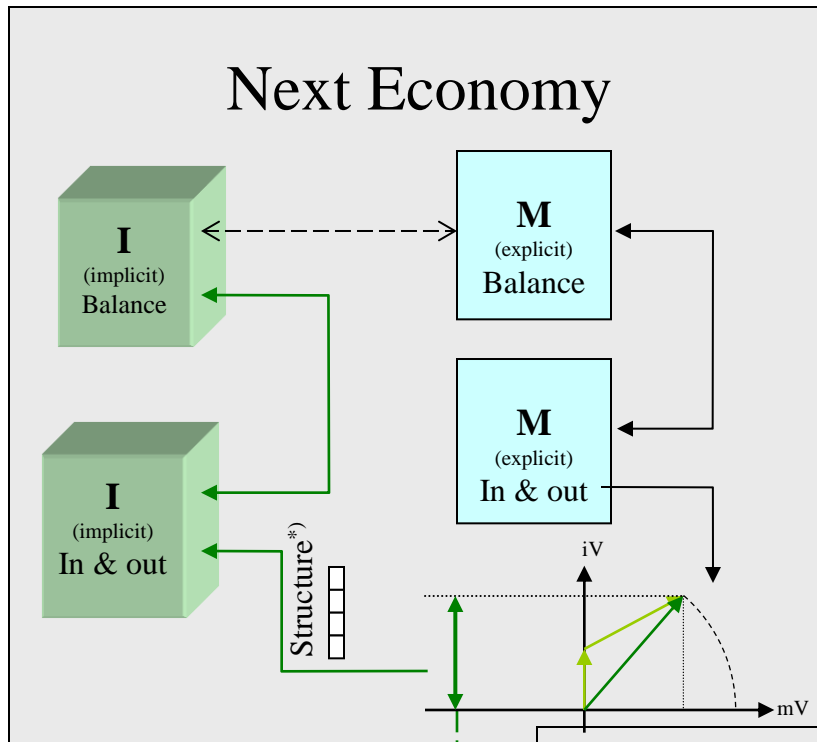
bengin

# Thank you

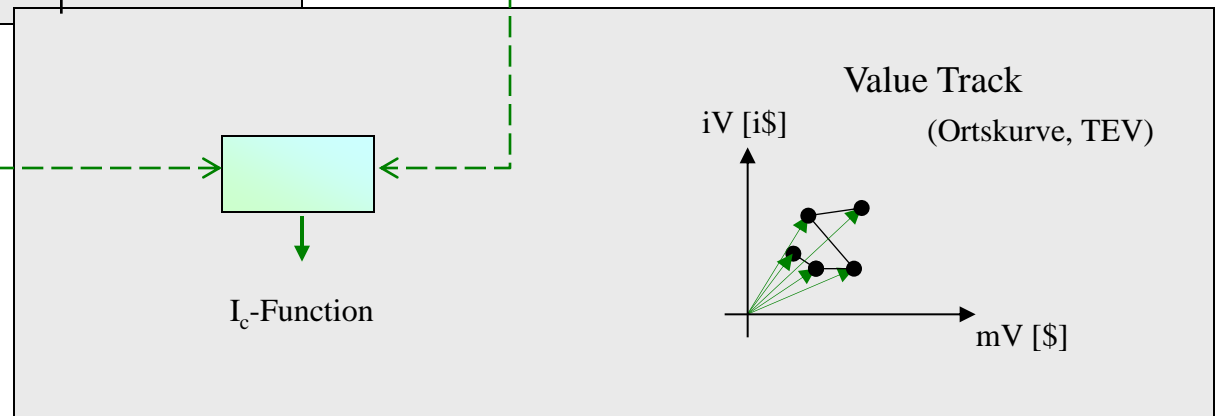
**[bengin.com](http://bengin.com)**

(Re)cognising Values, developing, using

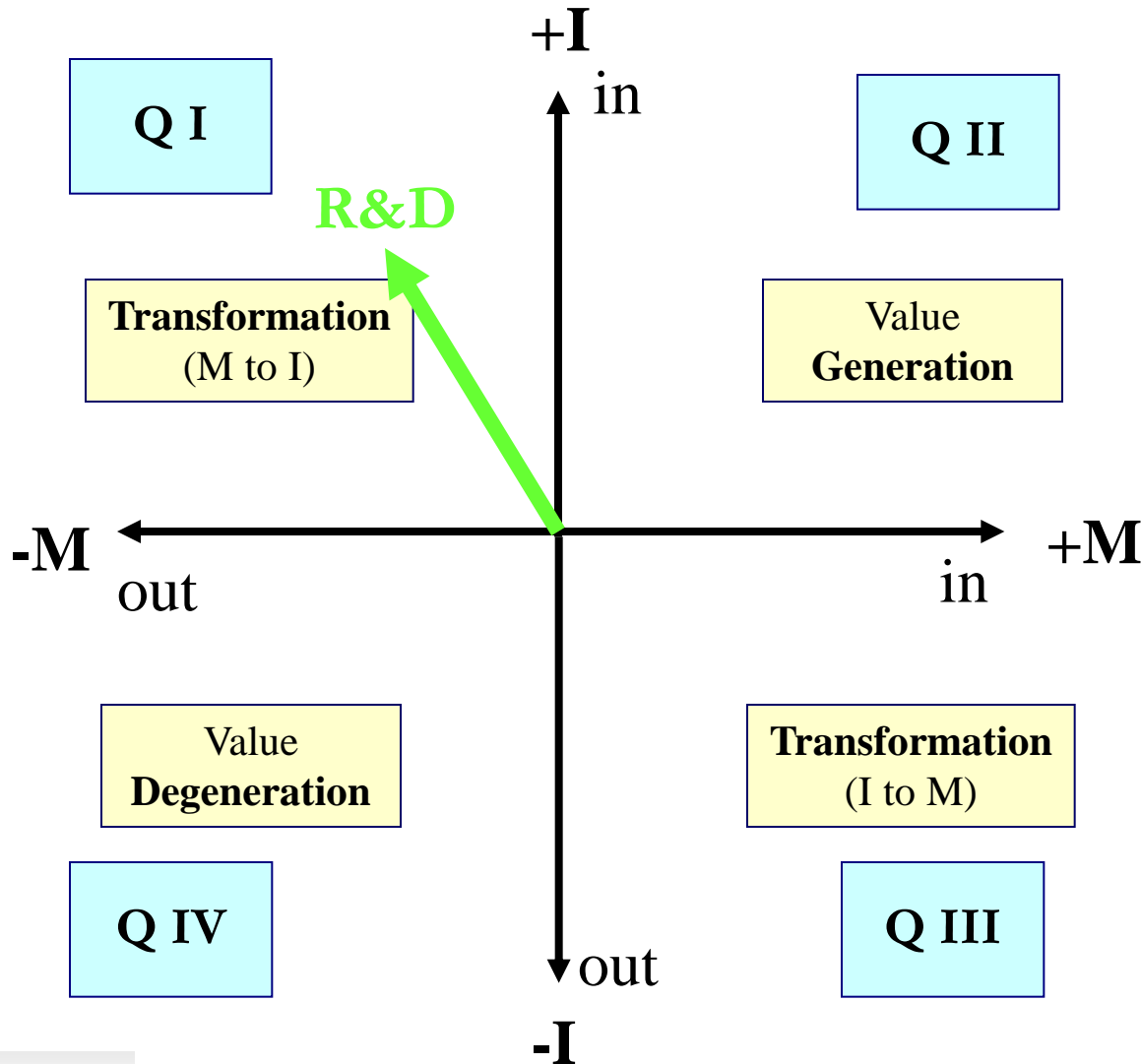
# Economic Value Architecture & Engineering



\*) Structure as proposed by:  
Balanced Scorecard and other  
existing solutions for structuring  
(intangible) assets.  
We recommend BE-Systems.



# The four Quadrants of Value generation



## Q I: Transform $-M / +I$

- New projects
- Revisions of offerings
- Insourcing/merging
- 

## Q II: Generation $+M / +I$

- Daily business
- Selling, dispatch
- (Re)Production
- 

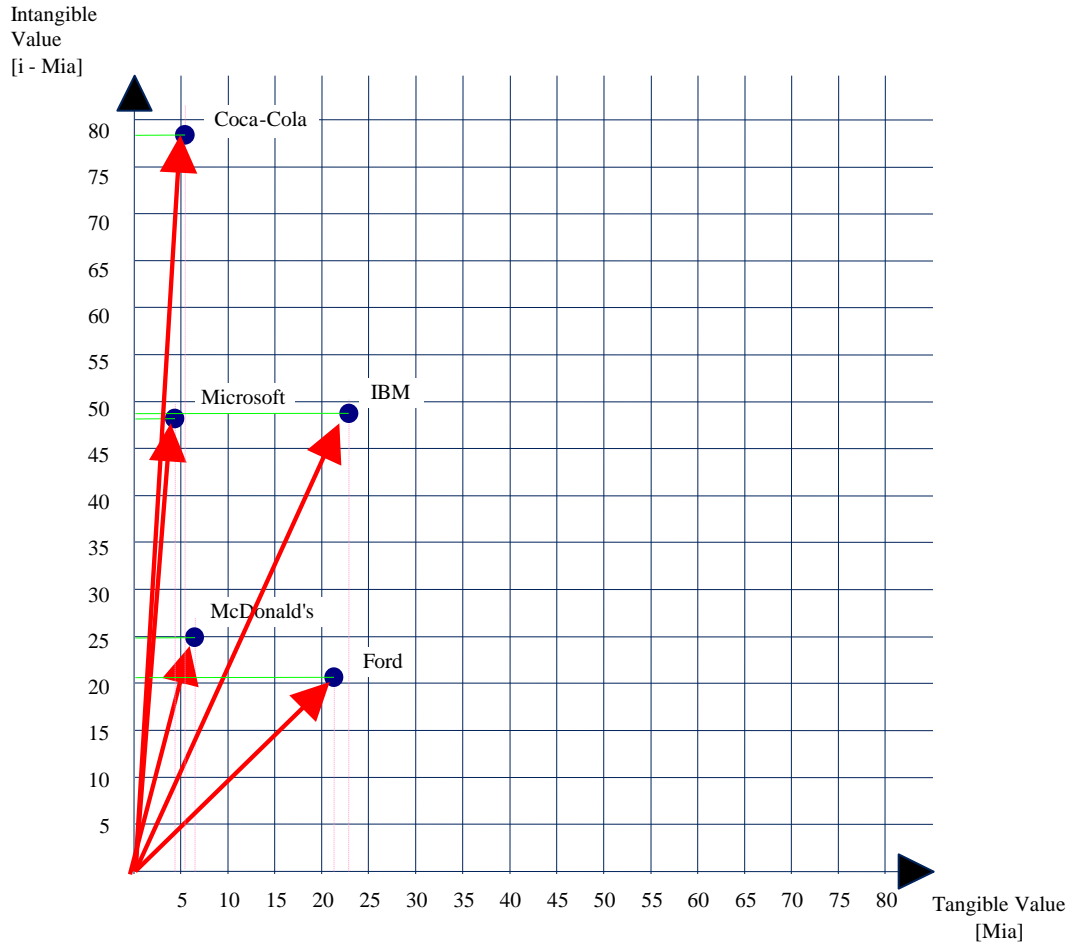
## Q III: Transform $-I / +M$

- Outsourcing
- Leaner production
- 

## Q IV: Degeneration $-I / -M$

- Graveyard
-

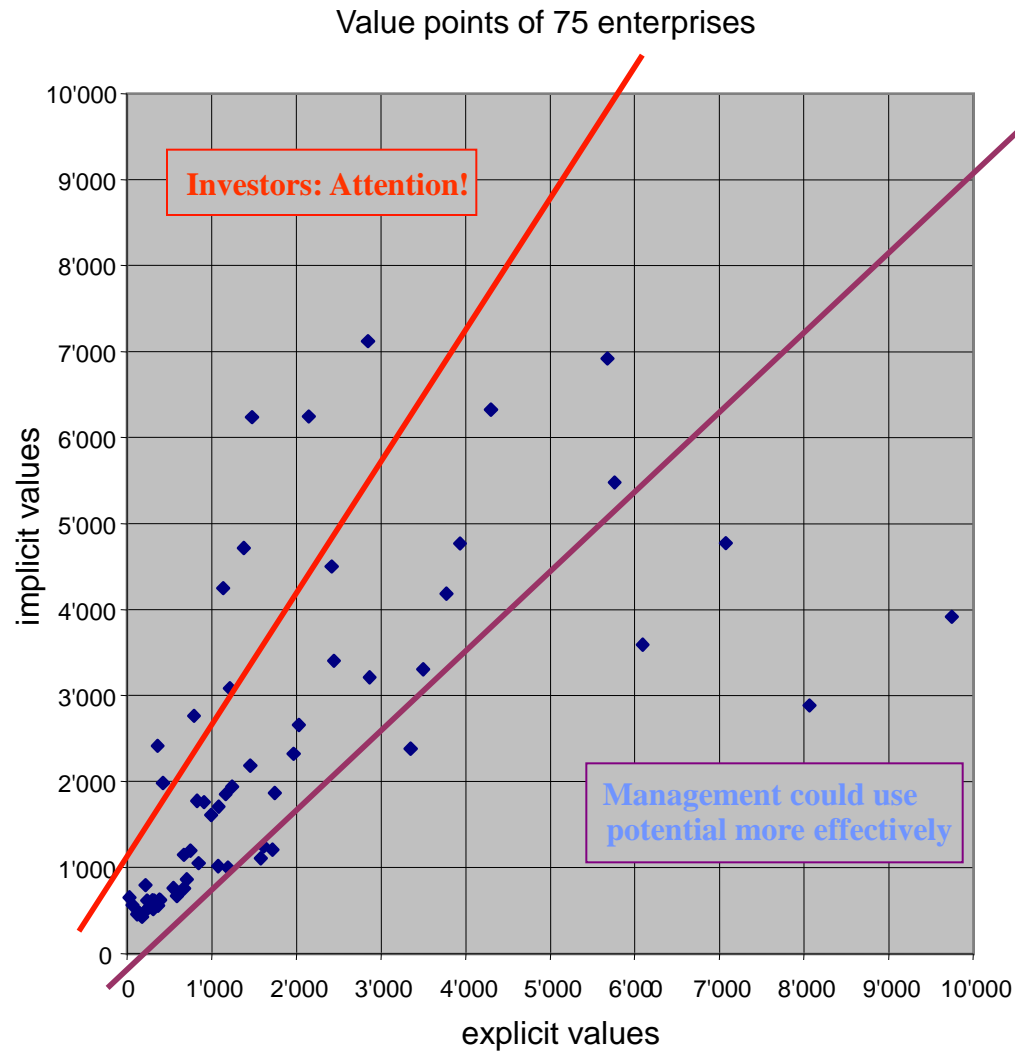
# Intangible Assets or Shareholder Value Expectation?



The explicit value and the implicit value together draw a complete picture of the company's value and its development.

The question remains:  
Is the implicit value given by the value of the company?  
Is it attributed by some marketing tricks?  
Which part of it is created under the influence of the Shareholders Value Expectation?

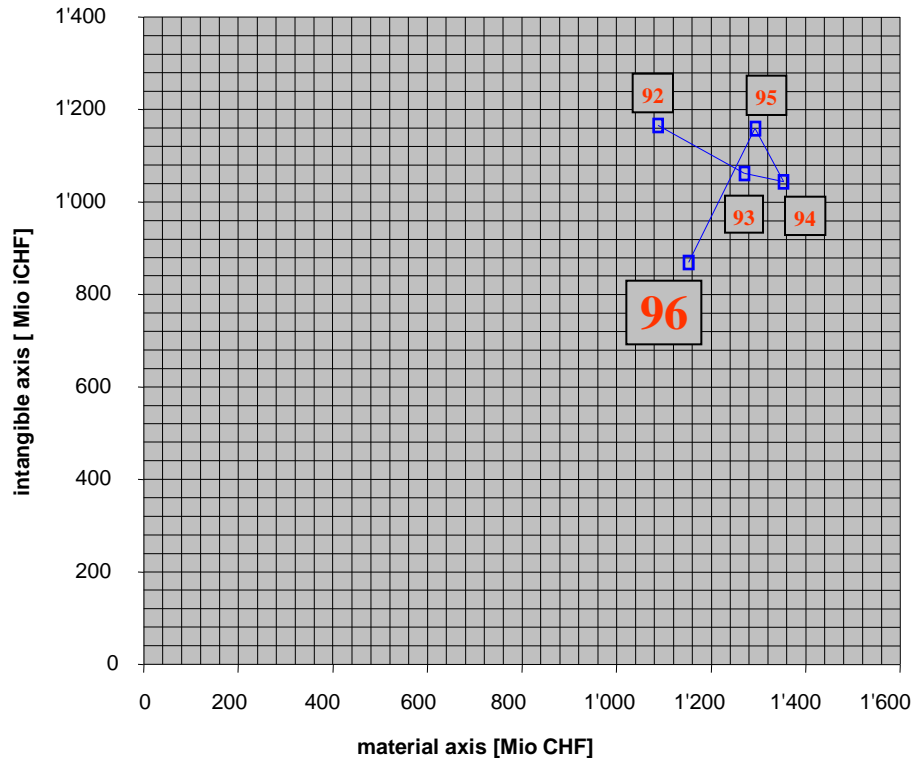
# A better model for new decisions





# Track the development of an enterprise

Pointer of vector for five years



Question:

"What happened in the year 1996?"

Answer:

Part of the enterprise was sold.

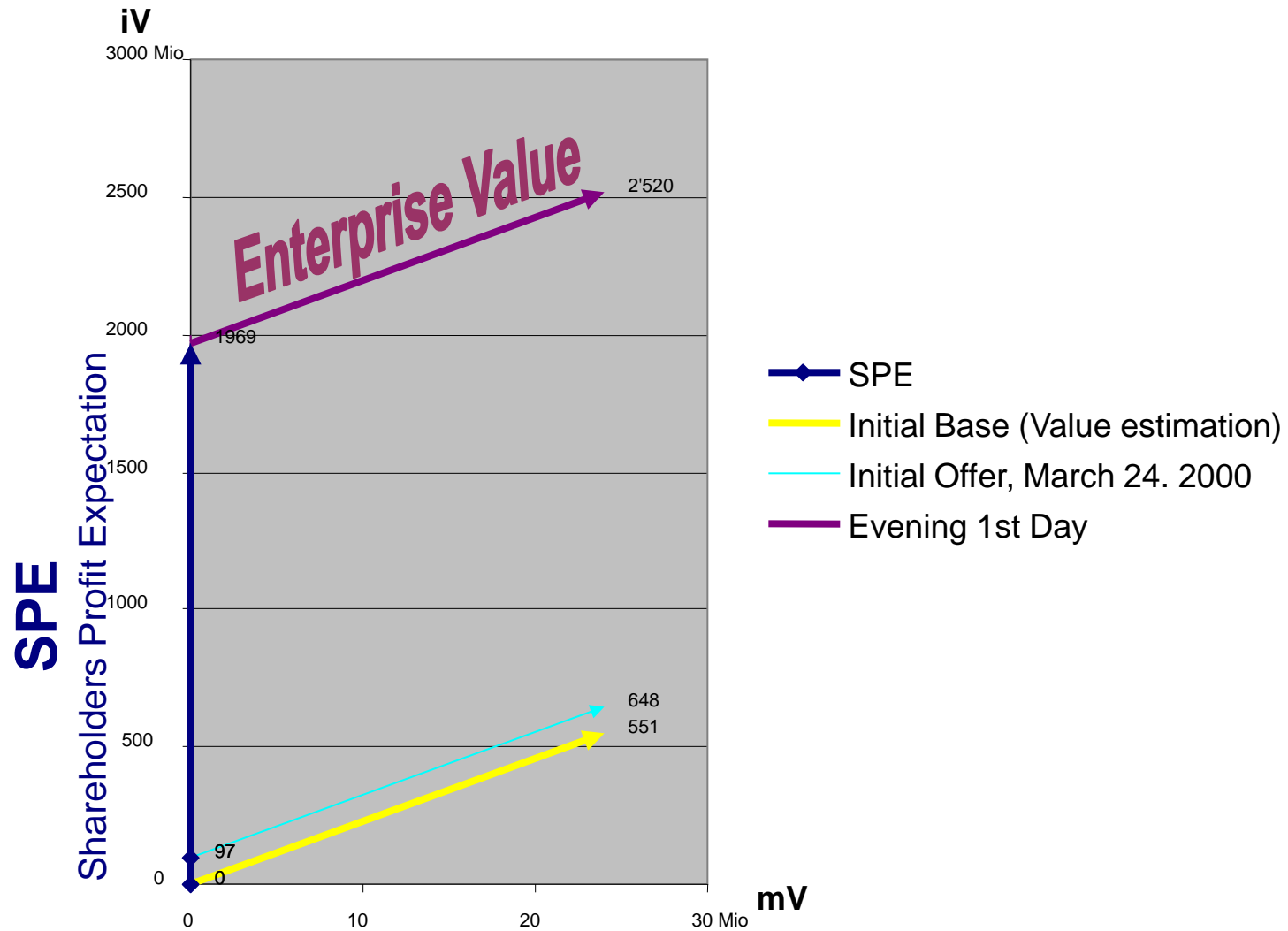
2<sup>nd</sup> Question:

Is this loss of intangible values compensated by the price received for the sold part of enterprise.

Answer: ?

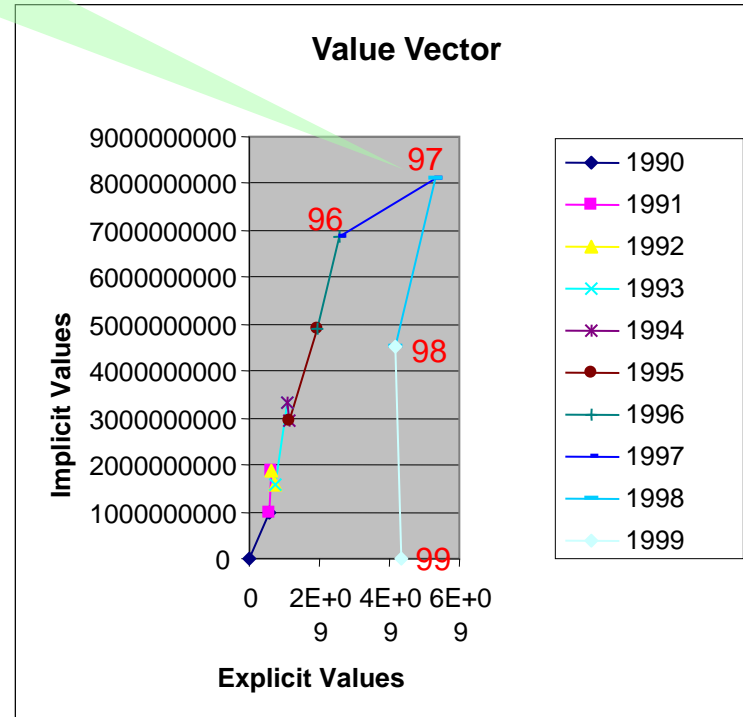
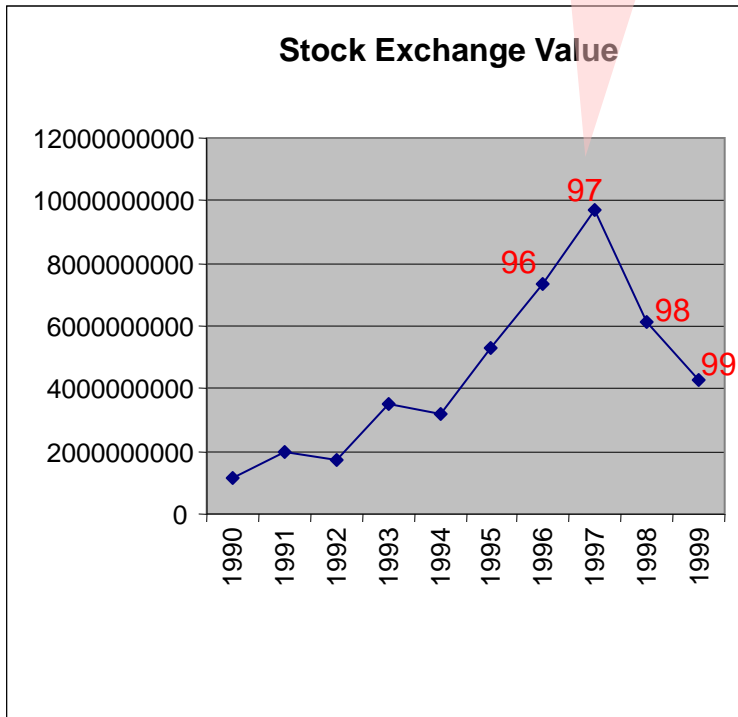
→ Ask the Auditor – if he's still available....

# Value Development (Shareholders view)

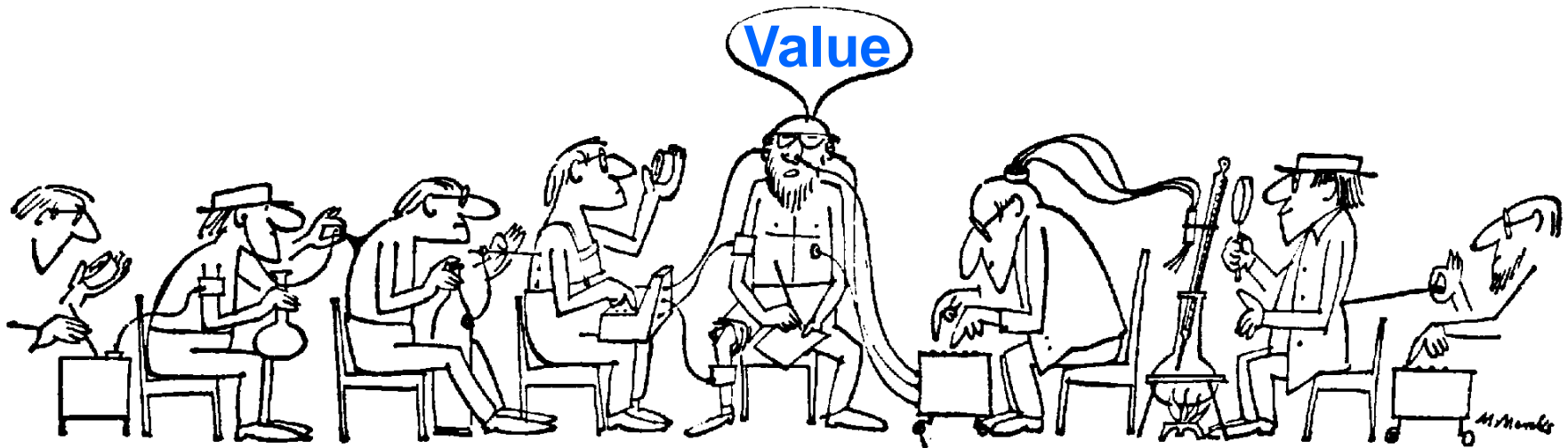


# Overpriced Papers?

....one year before the classic Market Analysis,  
the Vector map showed a change in Coca Cola Amatil.....



# Explained world



Nach: Marle Marks,  
Manager Magazin 3/85