VŠEM
VYSOKÁ ŠKOLA EKONÓMIE A MANAŽMENTU

Impact of Circular Economy Challenges on Business Sector

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Norway grants

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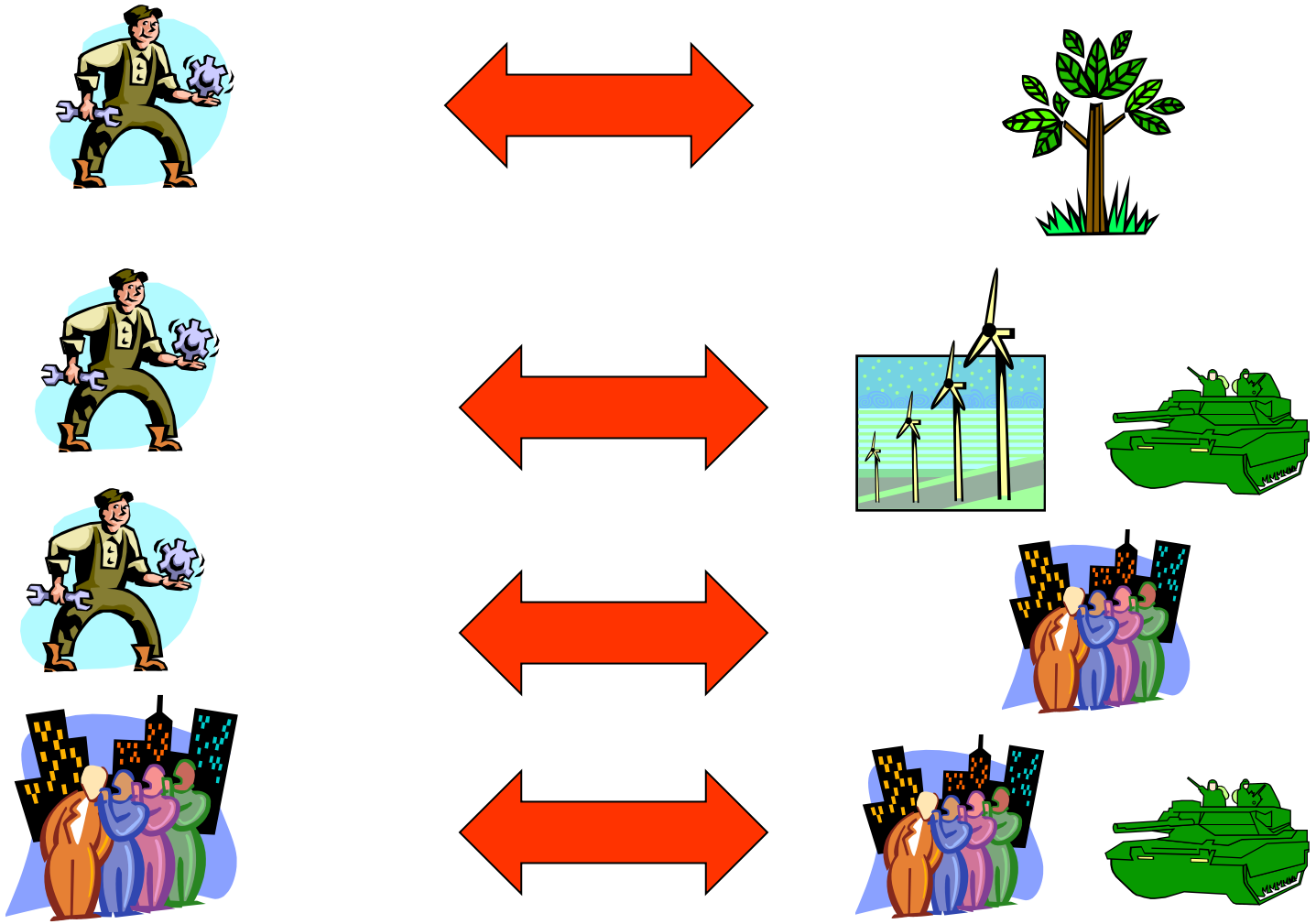
BRATISLAVA UNIVERSITY OF ECONOMICS AND MANAGEMENT

Circular Society Challenges in the Economy 4.0

- Project of the Bratislava University of Economics and Management, financed from the Norway grant mechanism and co-financed from the Slovak Republic state budget, registered as BIN SGS02_2021_011, is built on the long-term continuous improvement of the university educational process with a connection to practice.
- More information about the project: https://www.cscheco40.eu/en/

Contradictions of humanity

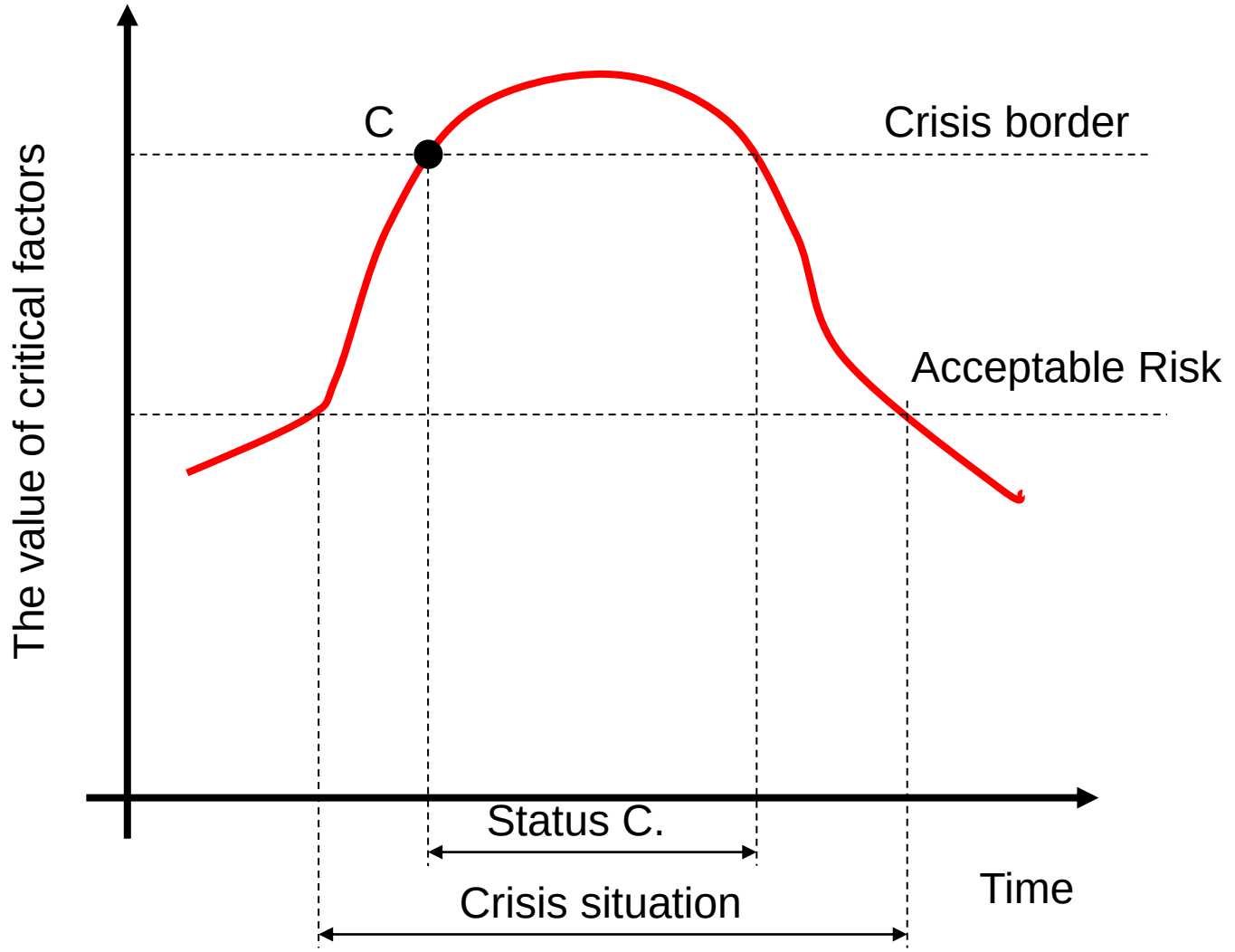


Imbalance conditions

Huricane Sandy

Huricane Sandy

Mutual Relation – Crisis, Crisis Situation, Crisis Status



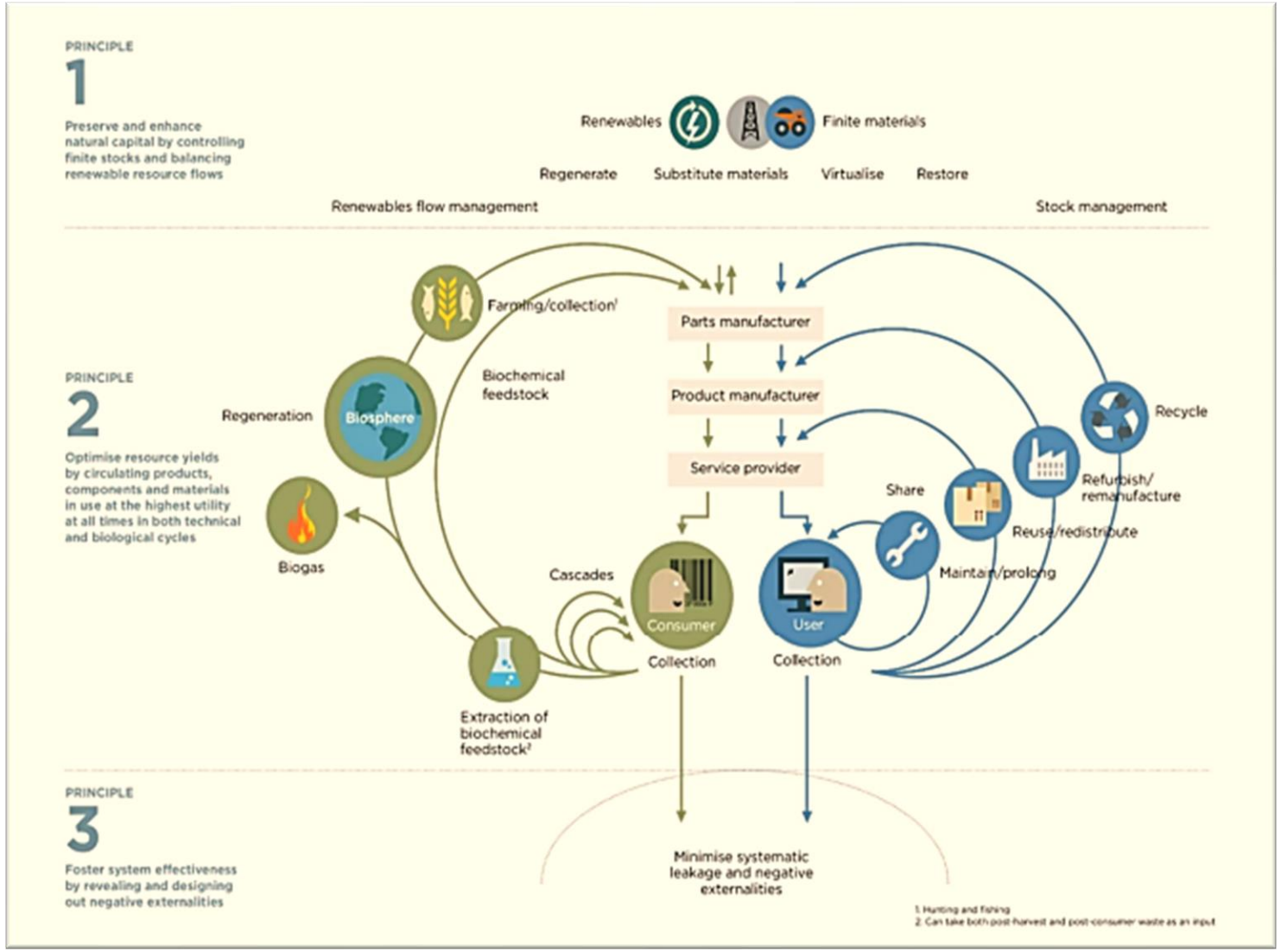
Current world population: 8 000 976 921.
Number of births this year: 118 830 840
Born today: 258 729
Deaths this year: 59 504 918
Deaths today: 129 559
Net increase in world population this year: 59 325 923

Circular economy is and "industrial system, the essence of which is the achievement of the ability to renew, or regeneration.”

The concept of "end of life" is replaced by the concept of renewal.

The circular economy thus brings new business opportunities and the creation of jobs, while at the same time creating positive benefits for the environment through better use of materials and energy.

The essence of the circular economy is the consideration of social costs in economic equations and the subsequent identification and application of effective and efficient tools and approaches in the technical solution, production, use and removal of products.



Ellen MacArthur “

Foundation

- 1. The principle to preserve and renew natural resources by managing the use of limited supplies and maintaining a balance in the flows of renewable resources.

- 2. Principle of revenue optimization using the circulation of products, components and materials with the highest possible usability at all times both in the technical and in the biological cycle.

- 3. The principle of supporting the efficiency of systems by revealing and projecting negative externalities.

SEVEN PILLARS OF THE CIRCULAR ECONOMY

1. Materials are in circulation at a constantly high value

2. Energy is based on renewable sources

3. Biodiversity is supported and increased by human activity

4. Human society and culture remain preserved

5. The health and well-being of humanity and other species are supported structurally

6. Human activities maximize the creation of social value

7. Water resources are obtained and circulated in a sustainable manner

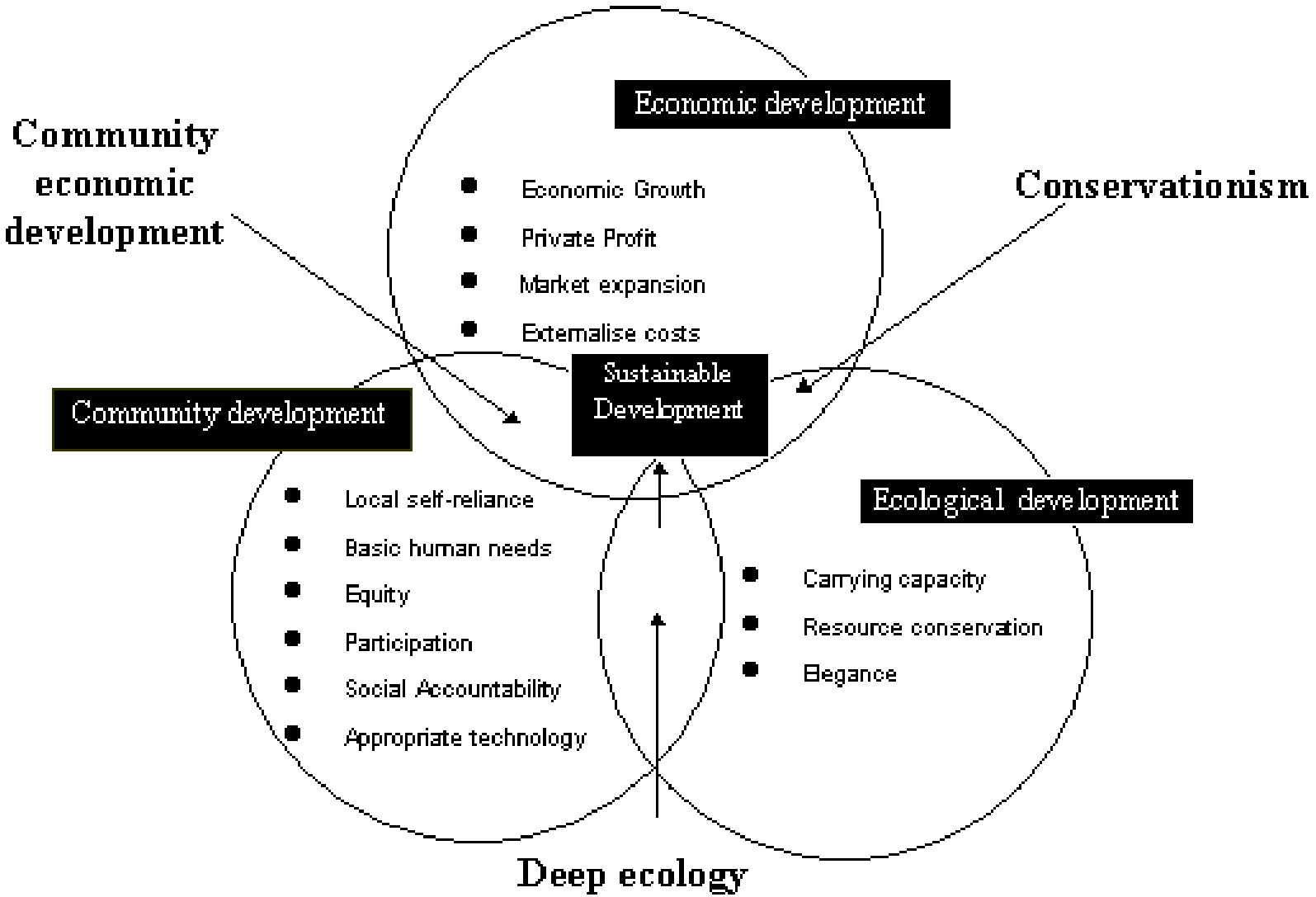
The circular economy risks

The principle of circularity is connected with many issues that have only been outlined so far, such as

- the markets of secondary raw materials,
  - the market price for waste,
  - the needs of participants in economic processes,
  - the question of profit and reward,
  - the economic advantage of processing and recycling, and so on.

The current emergence of the terms circular economy and circular economics does not yet mean whether they will be reflected in economic science and economic practice.

The key research question is not only whether the circular economy will become a significant or even the main current of economic thinking in the future, but also how we prepare for that future.



The overlapping zones of interest within the weak interpretation of sustainable development represented by ecological modernisation (Pinfield 1997)

Early warning system

- Crisis symptoms = various intensity changes
- Early registration of changes
- Rapid information transfer
- Identification, Analysis and Evaluation of changes (Crisis scenario)
- Taking a decision – to identify the causes and to take the necessary measures

Indicators of Changes

- Acute phase

Definite financial measures

profit decrease /

problems with liquidity

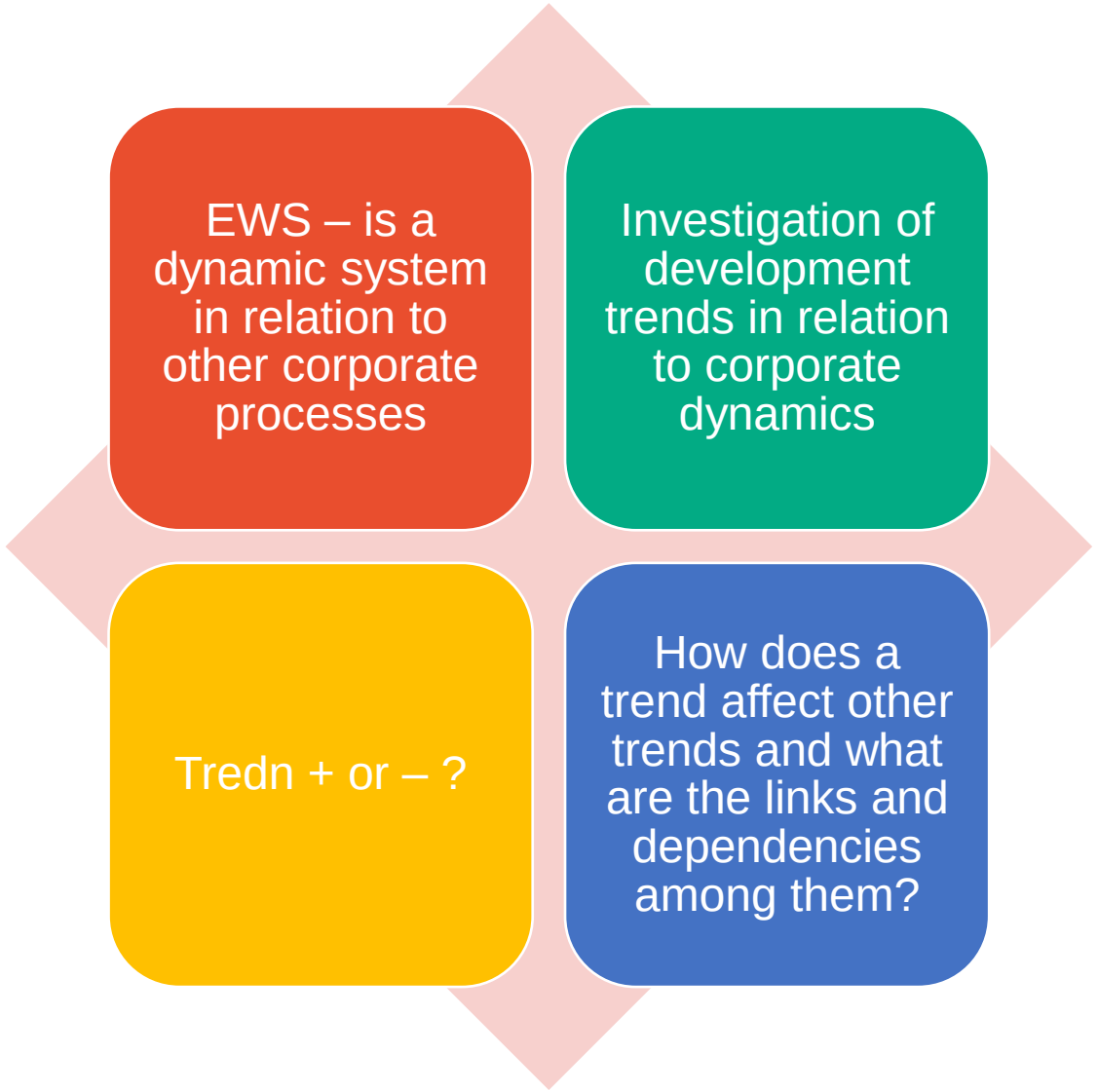
Indicators of Changes

- Latent phase quantification problems:
- Changes in internal corporate culture
- Changes in workplace relationship
- Organizational changes

- Soft (weak) signals – qualitative

(workplace, employees behaviour, ... way of acting of subordinars, customers behaviour)

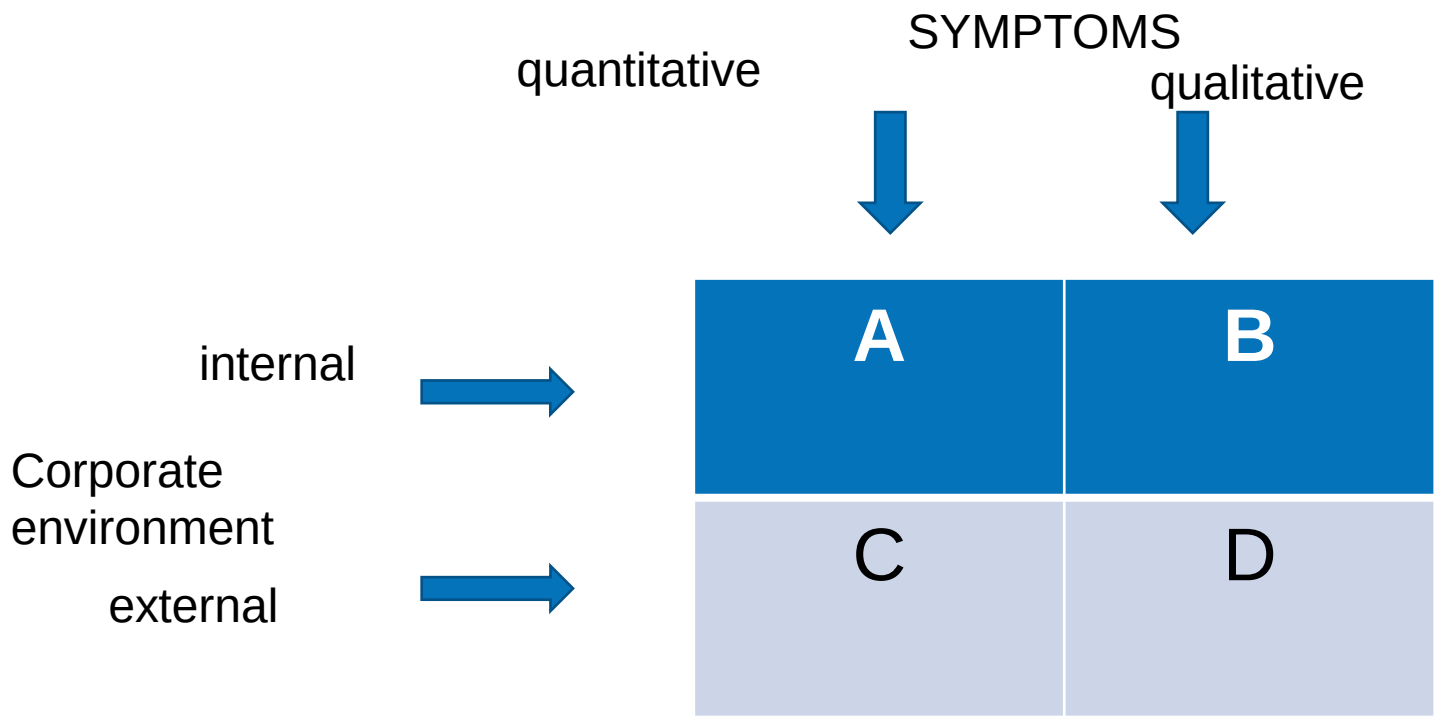
EWS - signal


EWS – is a dynamic system in relation to other corporate processes
Investigation of development trends in relation to corporate dynamics
Tredn + or – ?
How does a trend affect other trends and what are the links and dependencies among them?

Interaction of several negative trends can lead to financial quantitative manifestations such as loss or are reflected in cash flow

Identification of elements within the internal and external environment of the company is the basis for their involvement into EWS

EWS Structure



Source: Zuzák, R., Konigová, M. 2009. Corporate Crisis Management

Segment A

- The quantitative data inside the company reflect the past
- Not just to monitor the indicator, also to control how the results are used
- Crises of key processes
- To identify the key processes and their weak points

Segment B

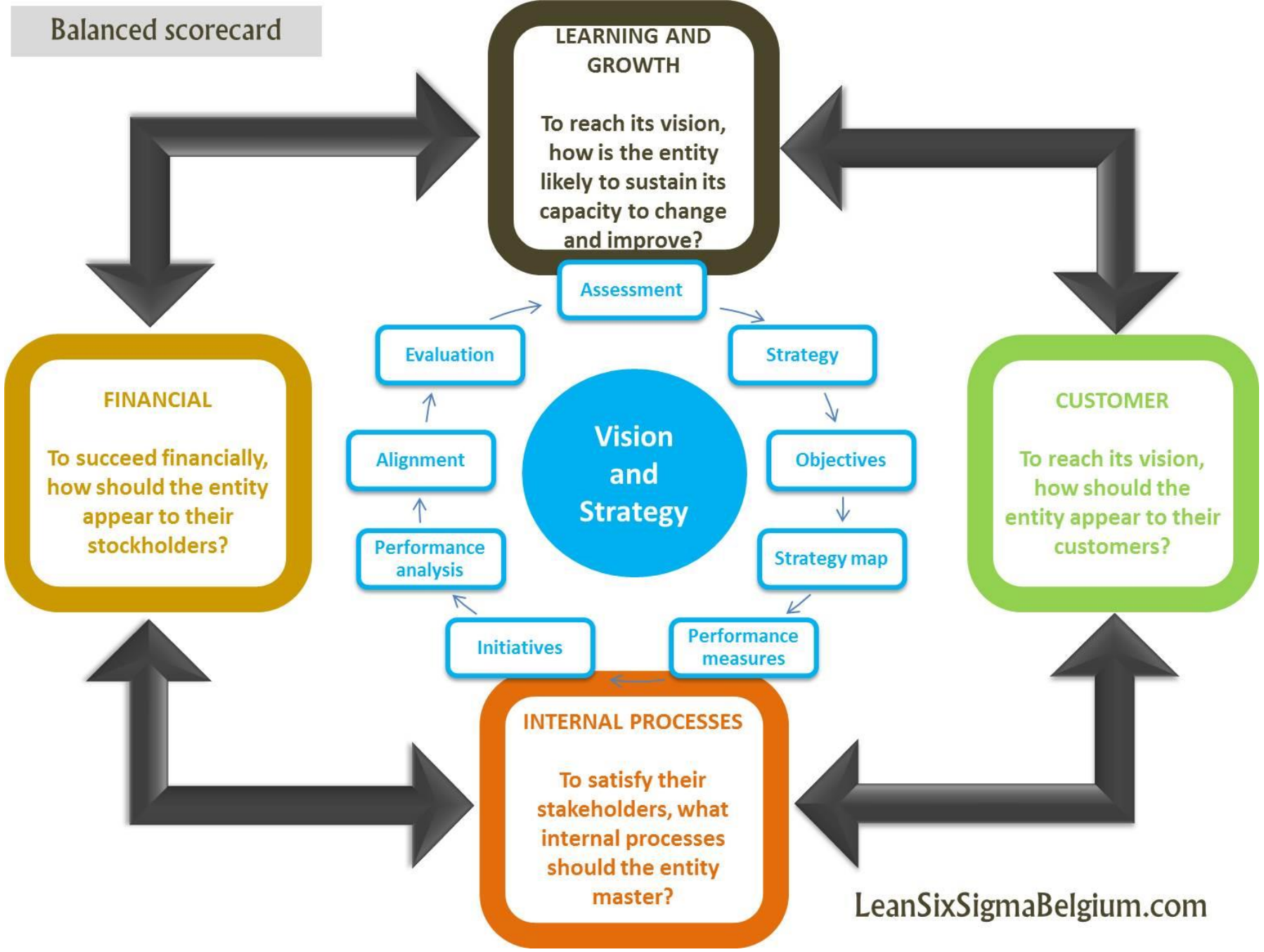
Qualitative data only

Changes as a react on external factors

Better to be identify on the operative level

Result of workplace problems

Balanced scorecard



LeanSixSigmaBelgium.com

Additional perspective of crisis preparadness

What goals for our potentials should we set to respond to current and future challenges

Sources:

Employees, knowledge, innovation, creativity, technology, information and information systems

To create preconditions for managing future changes and increase adaptability

THANK YOU FOR YOUR ATTENTION