

CHALLENGES FOR SUSTAINABLE SUPPLY CHAINS IN BUSINESS

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FREE RESEARCHER**

Challenges for Sustainable Supply Chains in Business

PRESENTATION

Supply Chains

Globalization

Networks

Sustainability and Requirements of our Planet

Complex Operations, Green Barriers

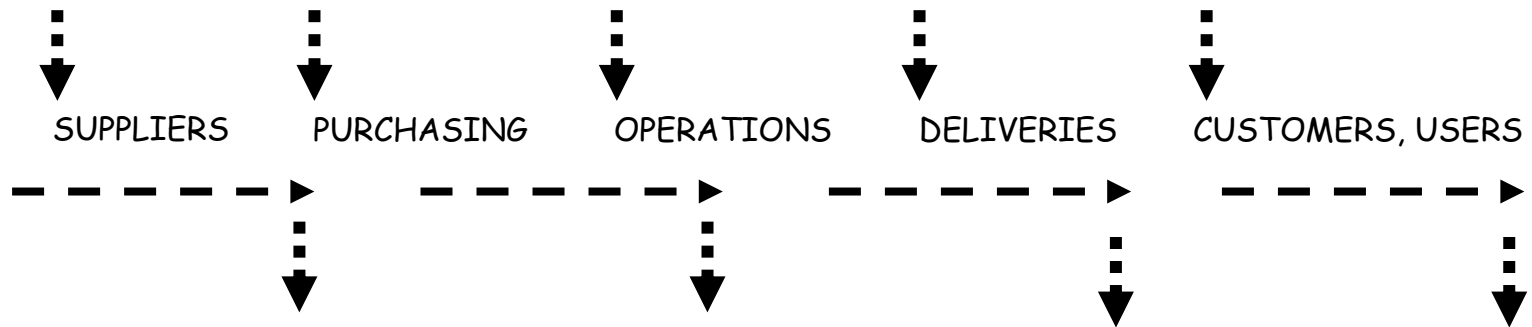
Risks and Opportunities

Knowledge management

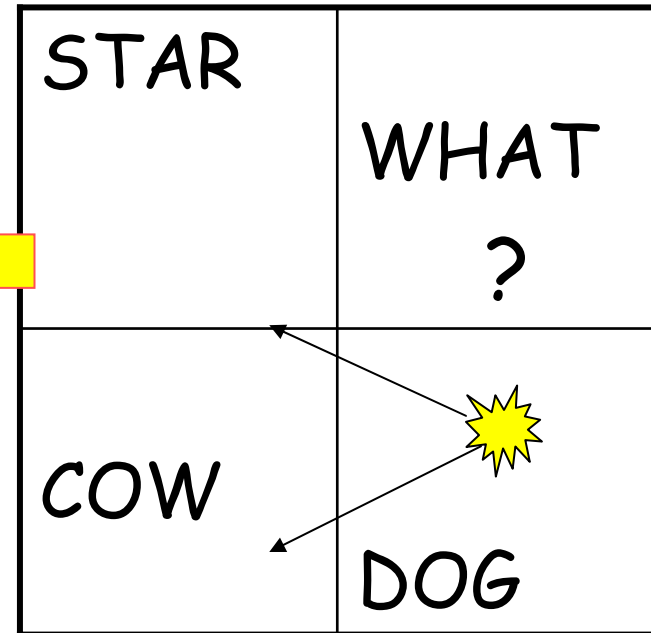
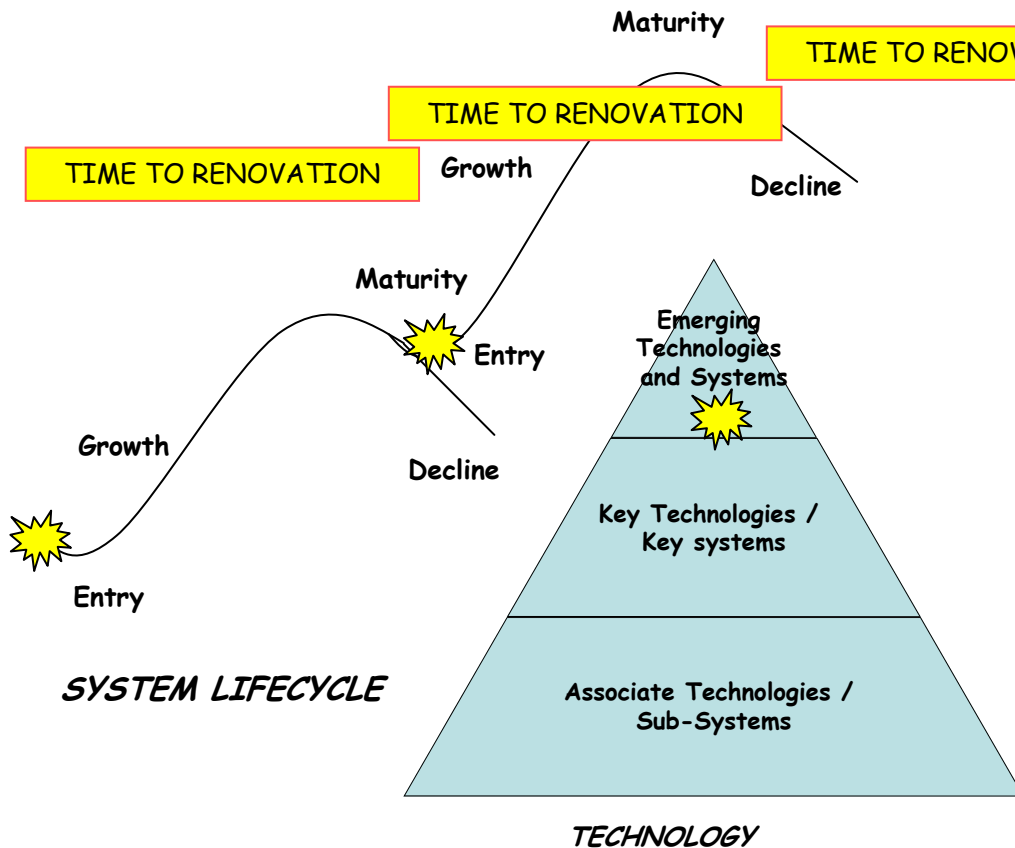
Green Challenges

Requirement Management (RM) and Systems Engineering

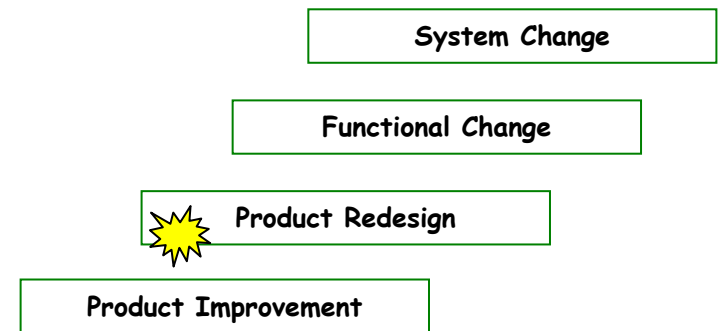
SUPPLY CHAIN I



ANALYZE

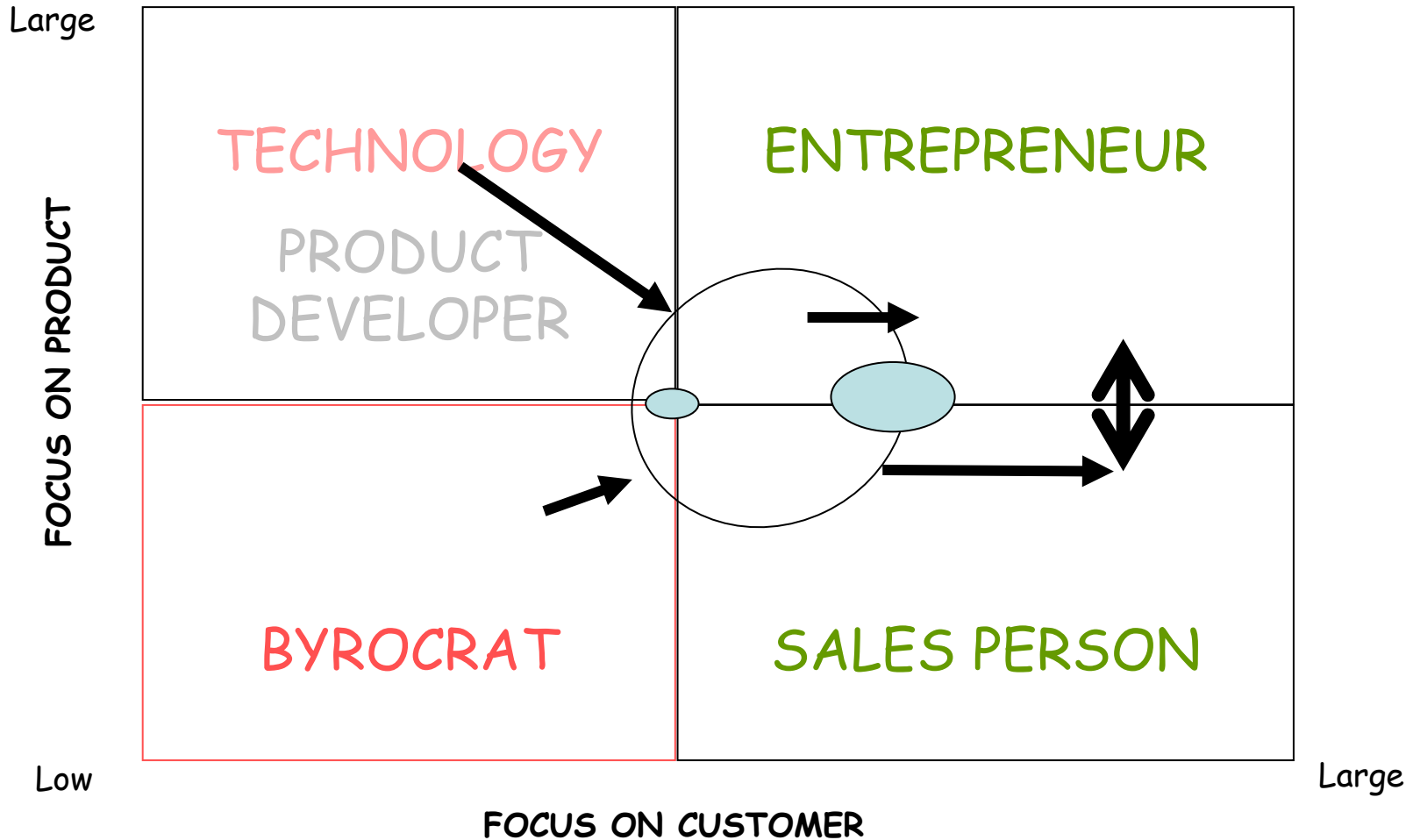


FOURFOLD



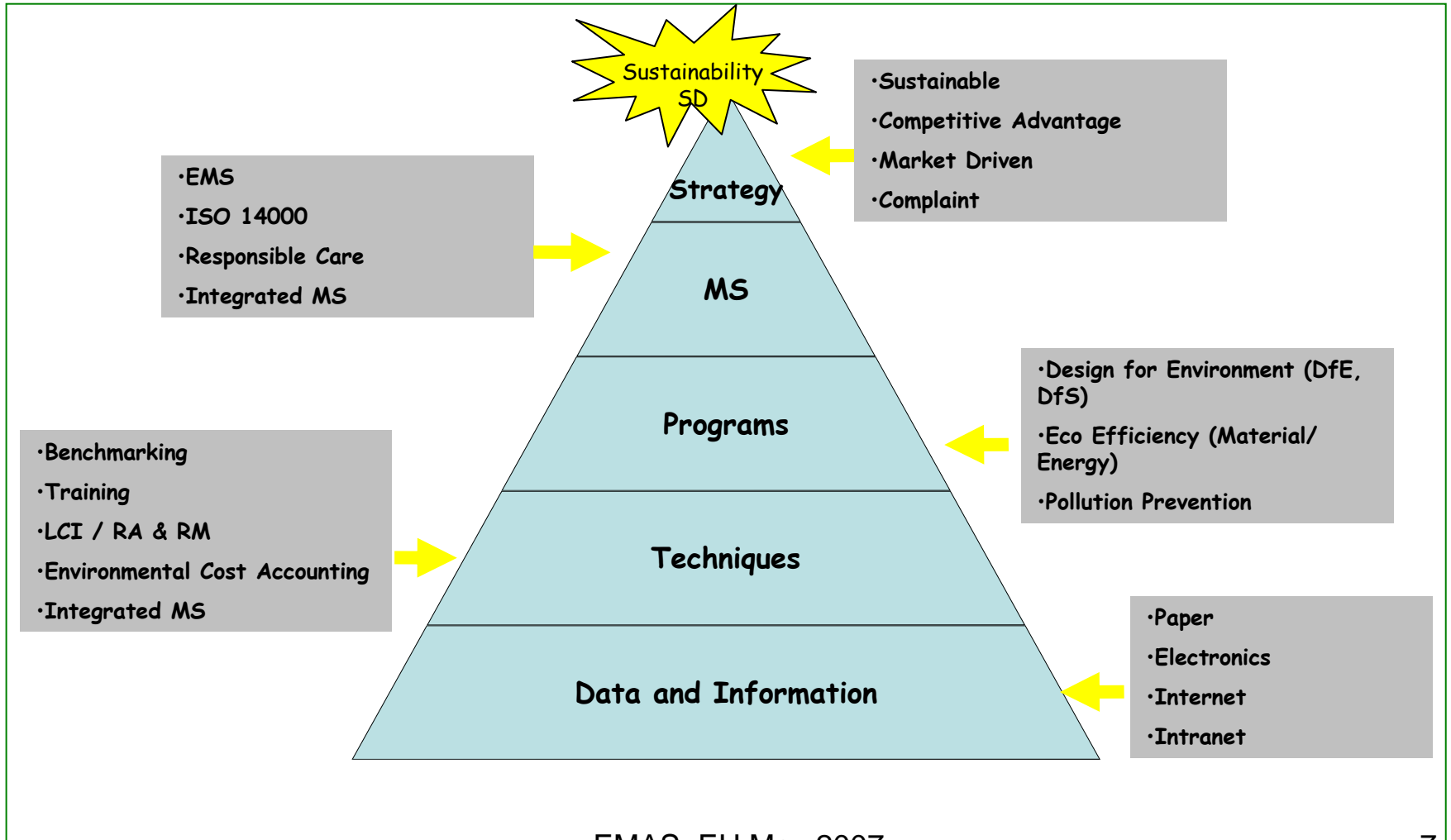
LEVEL OF SUSTAINABILITY/TIMEFRAME

PRODUCT VS. CUSTOMER



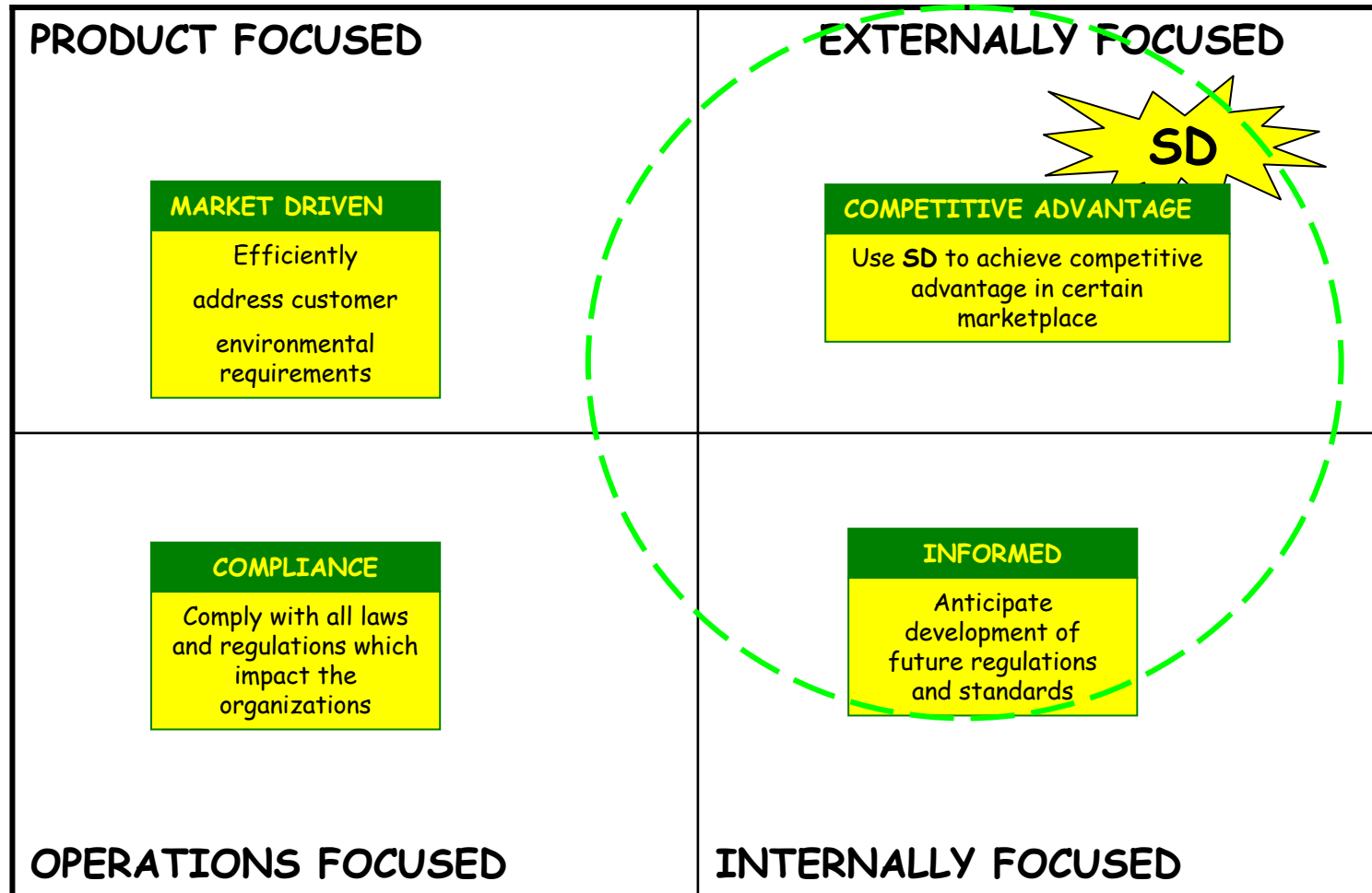
ENVIRONMENTAL MANAGEMENT PYRAMID

TZE K Sauer et al 1999



ENVIRONMENTAL STRATEGY LEVELS

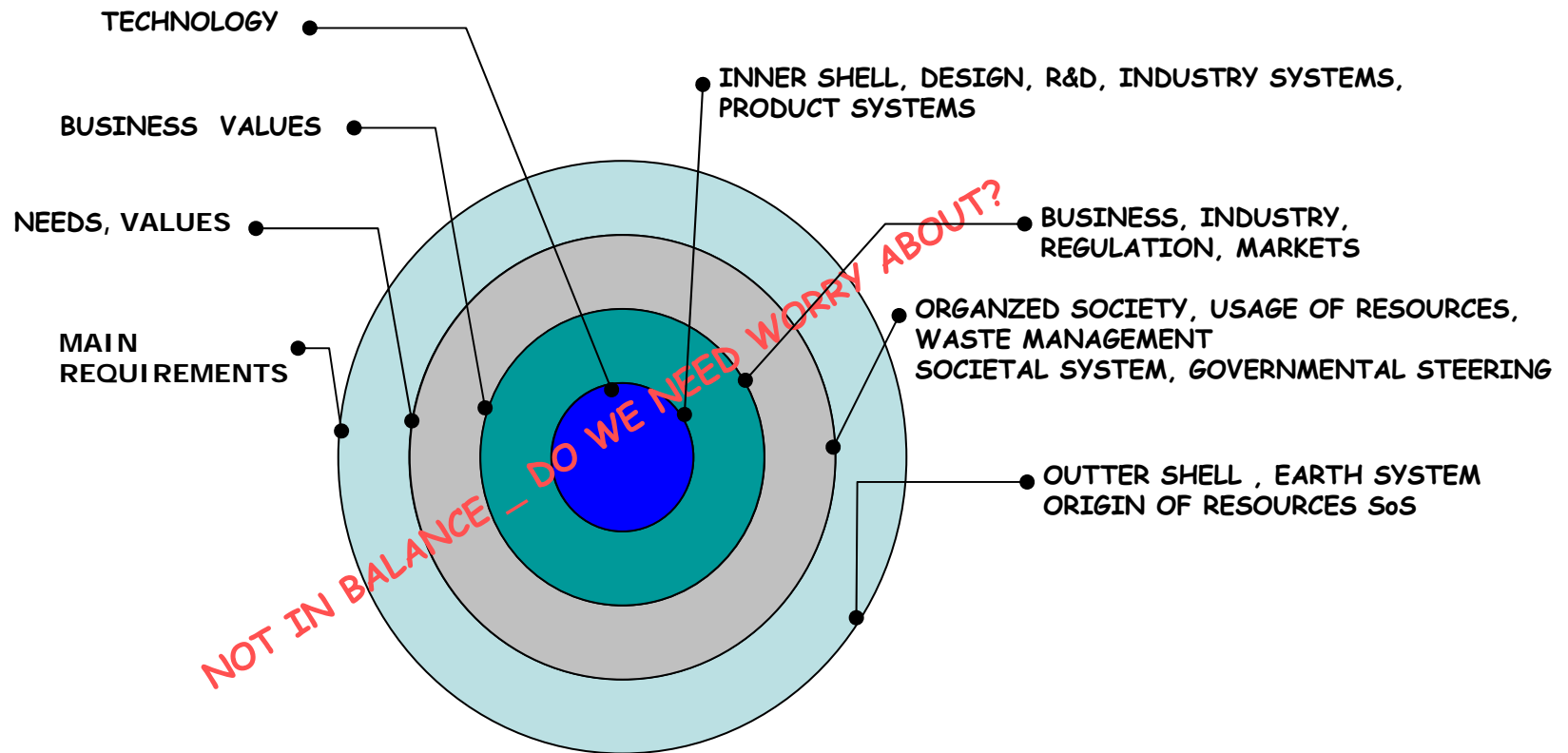
TZE K Sauer et al 1999



TELLUS

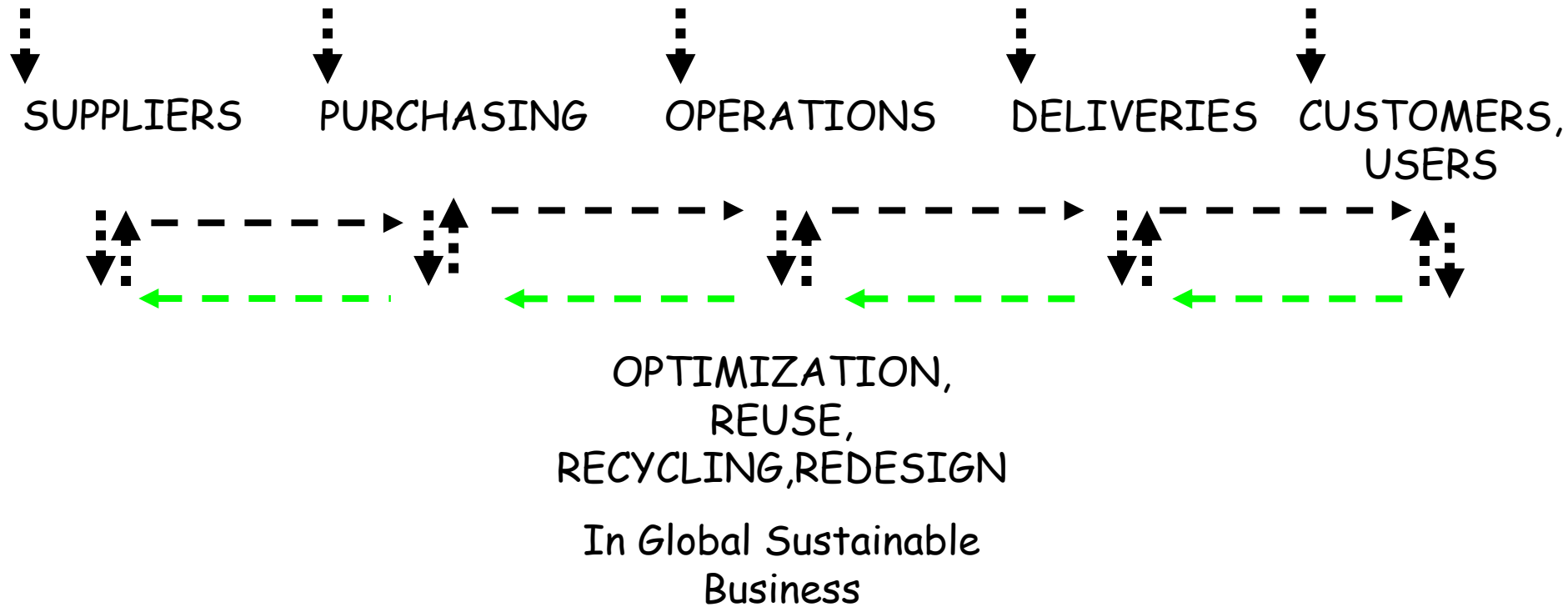


SCOPE TO GREEN BUSINESS

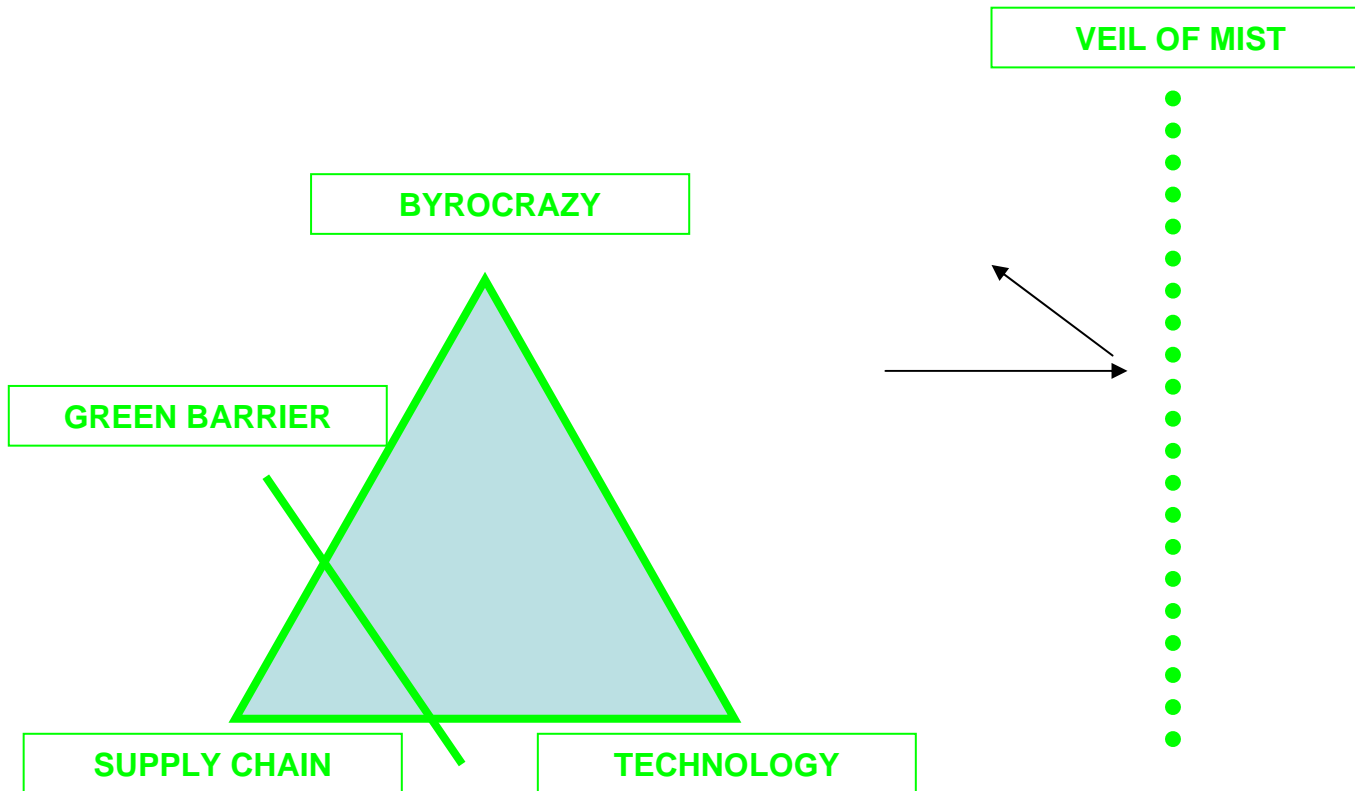


Why Worry About
Sustainability Issues? DfS

SUPPLY CHAIN II



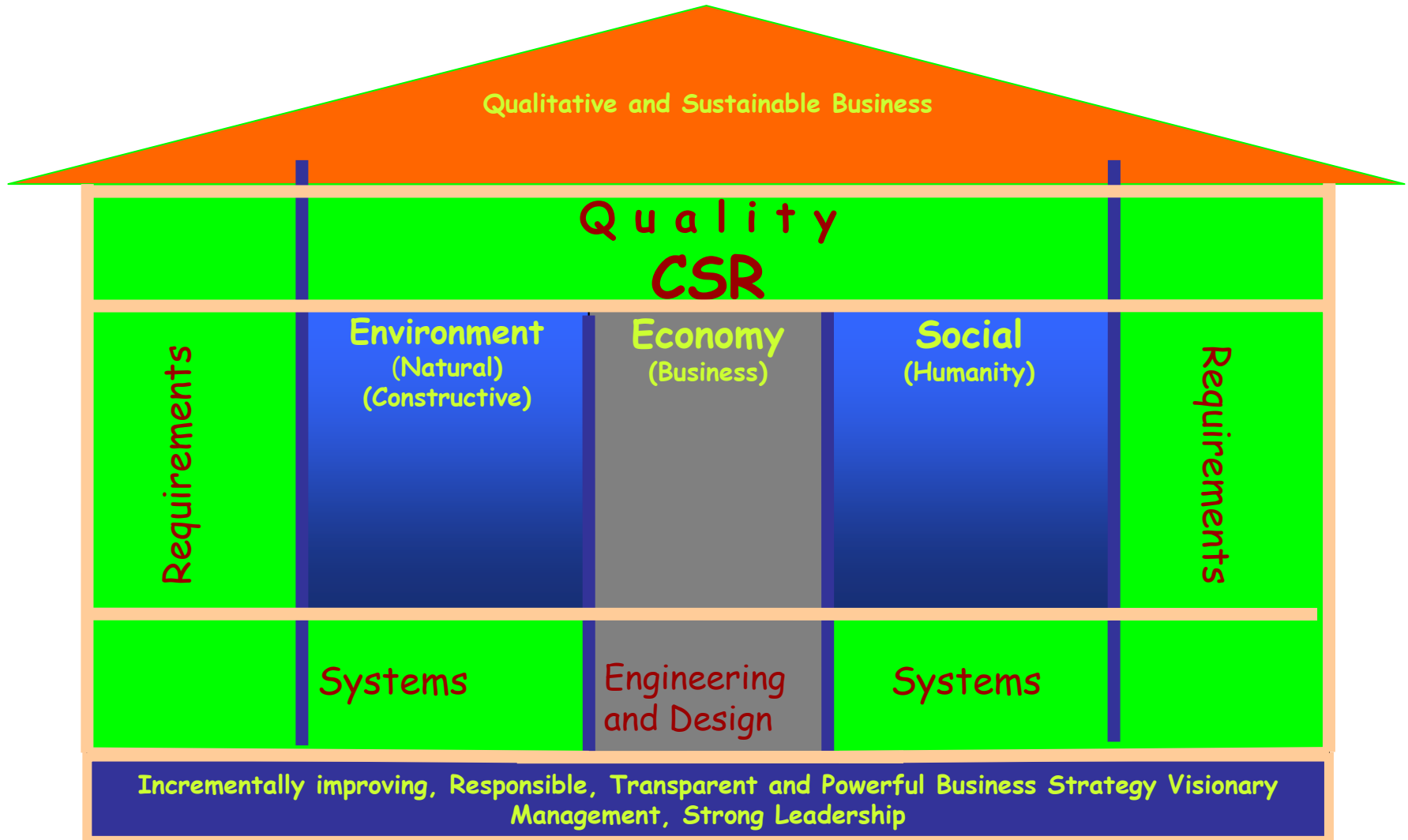
GREEN BARRIER



SUPPLY CHAIN BARRIERS

- A limited awareness of organizations' impacts on the local (and global) environment.
- Lack of access to relevant information, and the mismanagement of such information.
- Shortage of well-trained employees on a long-term basis.
- Emphasis on operational (profit generating) rather than strategic (long-term competitive advantage generating) priorities.
- Minimal performance measurement systems lacking measurement devices (gauges), indicators, and records of activities.
- Ignorance of relevant legal and technical realities and prospects. No monitoring mechanisms.
- No expertise in sustainability issues complemented with a protectionist attitude about transparency.
- Limited funds for developing sustainability in processes.

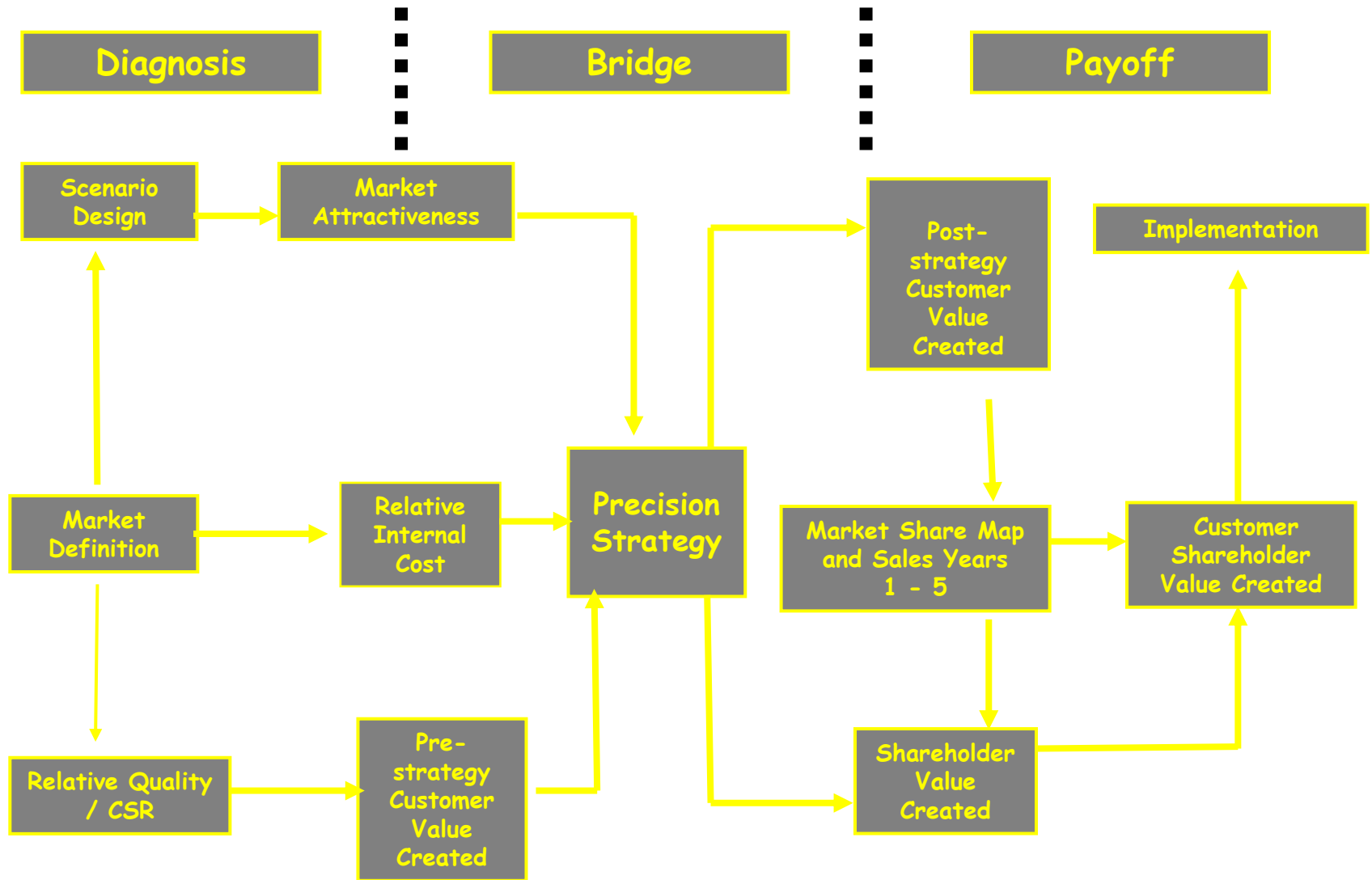
Sustainable Business Model



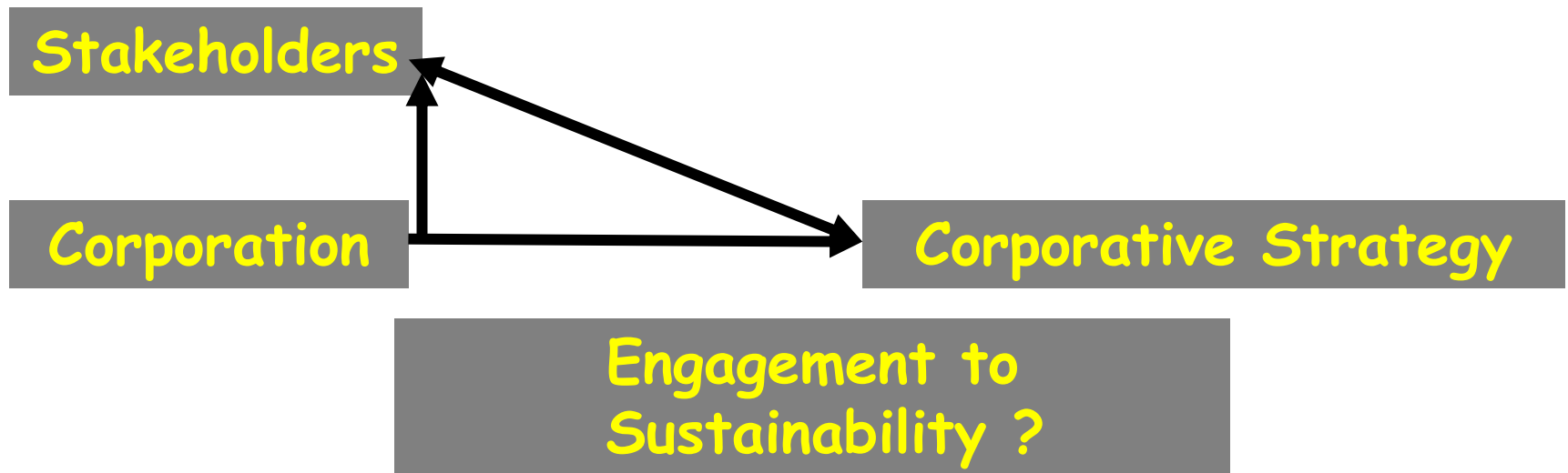
SUPPLY CHAIN CHALLENGES

- Knowledge on environmental and social aspects related to business operations should be confirmed in the companies which belong to supply chains and networks.
- Collaboration between a network's companies and actors should have a framework determined by participants; the framework should include the main rules on sustainable management and operations.
- Data on economic, environmental and social issues should be gathered through a supply chain, and use information for improving operational practices among the members of a network.
- Reporting on sustainable information should be ordinary and reports would be sent to the all actors of a supply chain.
- Ordinary meetings where the actors of a network will take part should be organized; these seminars would also offer updated information on sustainable aspects for companies.

Market-Value Process



MARKET VALUE



SYSTEMS ENGINEERING

Design for Sustainability

A Cultural Change

A System Change

Building Cover Competencies

Defining the Value

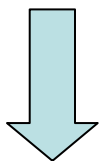
Organization Assessment

Disciplines

Managerial Tools

Project Assessment

Ideal State - How to reach It



- Develop Steps for Each One of any Projects
- Technical and Business Execution

Guide  Tools

LEARNING

**BALANCE
POLICIES**

PROCESS

TRAINING

**SUPPORT OF
SENIOR
LEADERSHIP**

REALITY

**SEEKING
OPPORTUNITIES
THE CULTURE**

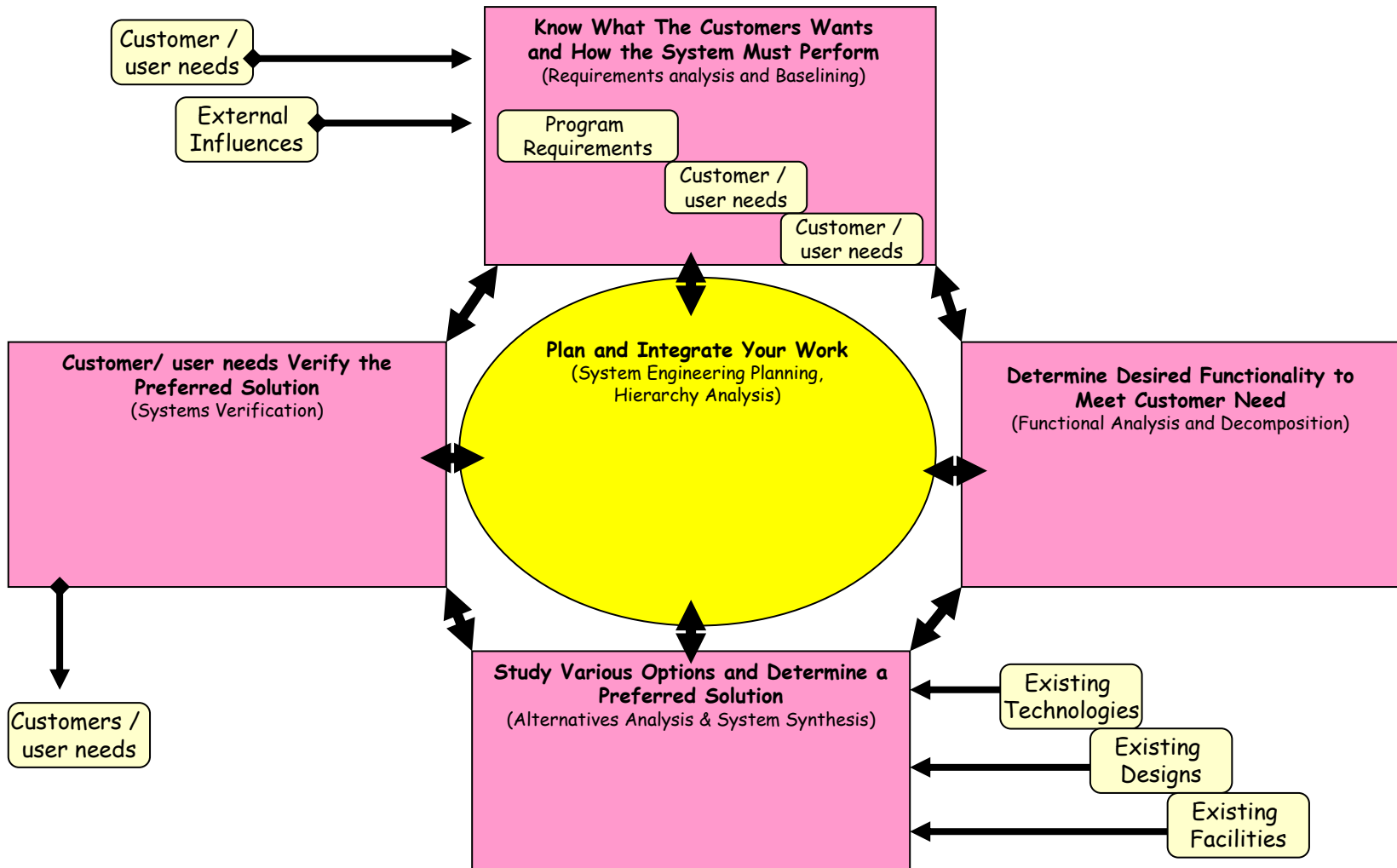
Steps to be taken:
Training for seniors Leadership

- Design for Sustainability
- We set up a SE leads + Workforce
- Establish our own approach for our own SE Process
- Establish KEY POLICIES
- Establish SE Tool Kit
- Project Plan and SE-process Template
- Assessing / working with top priority
- Project SEP (1st Metric)

COMMUNICATION:

- Provide Services to Project
- Managers for stayed Projects w/ under SD responsibilities

MODEL OF THE SYSTEMS ENGINEERING PROCESS (Plowman)



SUSTAINABLE BUSINESS

	High	RESOURCES	Weak
H I G H	Significant Entering into the Marketplace	Selective Growth	Full Competition
D E M A N D	Limited expansion or Fallback	Selective Expand	Strengthen Superiority
W e a k	Minimization of Losses	Collecting Profits and Growth	Partial Risk Taking

Challenges for Sustainable Supply Chains in Business

Conclusion

Masinstream topics to be discussed

Outsourcing

Networks

Organizational Changes

More complex operations

Risks and opportunities

Knowledge management

Globalized business - how do we see it or we do not see it



Any Further Questions?

Thank you for your Attention and
have a Pleasant Conference Dinner