((o))LEADING PRACTICE
We set the Enterprise Standards!

GLOBAL UNIVERSITY ALLIANCE
Researching Best & Leading Practices | Developing Standards

Industrial Revolution and changes impacting organizations

Best Practice and Leading Practices in how to tackle change

Presenter: Prof. Mark von Rosing

Prof. Mark von Rosing

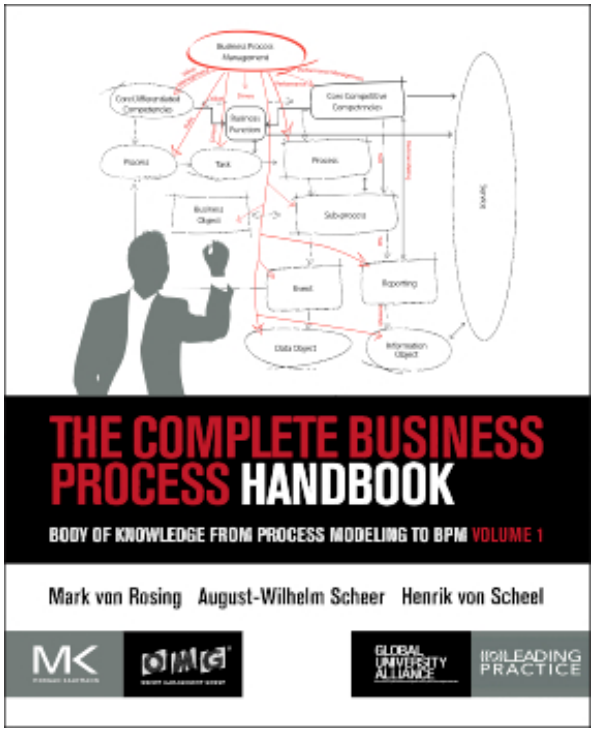
Professor | Modelling & EA Guru | Business Transformation Evangelist |…

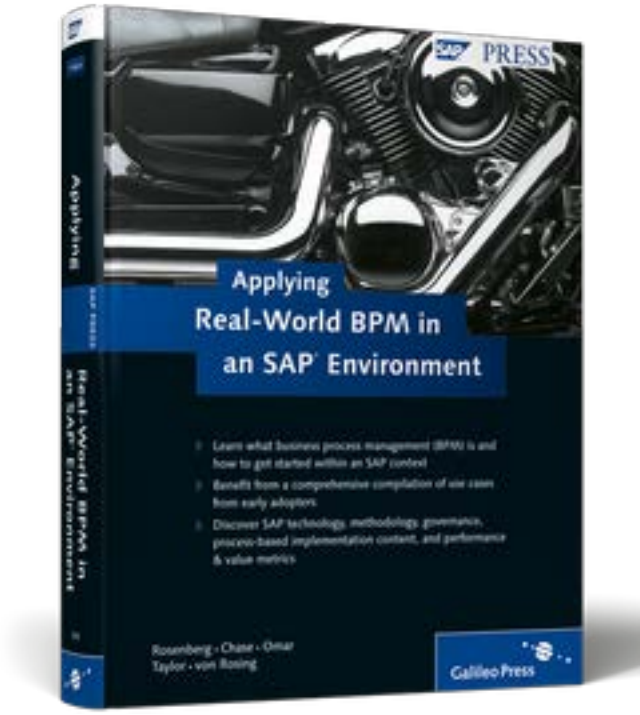
Prof. Mark von Rosing is in every way an innovator affecting standards, frameworks, methods, and approaches internationally. In1999, he founded the Global University Alliance (GUA), an international consortium of +450 university lecturers and researchers whose aim it is to provide a collaborative platform for academic research and analysis leading to the creation of de-facto enterprise standards.

He has been involved of developing 96 Enterprise Standards and 55 Industry Standards. Founder of 'LEADing Practice" the Enterprise Standard body, and also has had a significant or primary role in developing standards in the following standard bodies:

- **World Wide Web Consortium (W3C):** lead the World Wide Web development to its full potential by developing protocols and guidelines that ensure the long-term growth of the Web/Internet.
- **ISO:** coordinating the development of international standards among various national standards organizations. Currently focused on are ISO 42010, the Systems and Software Engineering Architecture Description, and ISO 279, the Innovation Standard.
- **CEN:** the European Committee for Standardization (CEN, French: Comité Européen de Normalisation). Developing and maintaining coherent sets of standards and specifications across the thirty-three member countries. More than 60,000 technical experts as well as business federations, consumer, and other societal interest organisations are involved in the CEN network that reaches over 460 million people.
- **NATO:** the North Atlantic Treaty Organization; developing standards for the intergovernmental military alliance organizations. Strategy and Performance Management is used for the collective defence joint mission execution, both in mutual defence in response to an attack by any external party as well as for peacekeeping missions. In addition, the standards from LEADing Practice related to capability modelling, joint Business Process Execution and Enterprise Architecture are used as basis for NATO standard development i.e. the NAF 4 (NATO Architecture Framework).
- **Energetics:** Development of the energy standard body, Energetics, Prof. von Rosing is part of developing the energy standards used by countries and companies around the world. This includes the standards used by the upstream oil and gas organizations; providing improvements for their business models, performance concepts, and process and data models.
- **The Information Security Forum (ISF):** development member of the Information Security Forum
- **Object Management Group (OMG):** develop joint standards between OMG and LEADing Practice. This includes:
- Value Delivery Modeling Language (VDML), Business Motivation Modeling (BMM), Business Process Modeling Notations (BPMN), Decision Model and Notation (DMN) and Risk & Threat Modeling
- **SAP AG** Method developer e.g. ASAP, SAP Agile, BPM, Enterprise Architecture (EAF)

Publictions



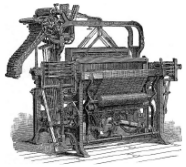


Trends (Forces & Drivers)

Organizations around the world are adapting to various trend drivers, market forces, macro-economic forces and industry forces

The changes are so big that there is a need for both transformation as well as innovation for most organizations

Industrial Revolution Phases: The 1st Industrial Revolution



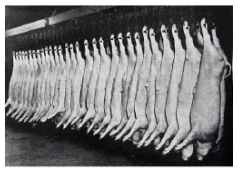
First mechanical loom

1. Industrial Revolution
Follows introduction of water- and steam-powered mechanical manufacturing facilities

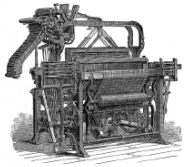
1784

6

Industrial Revolution Phases: The 2nd Industrial Revolution



First production line, Cincinatti slaughter-houses



First mechanical loom

2. Industrial Revolution
Follows introduction of electrically-powered mass production based on the division of labour

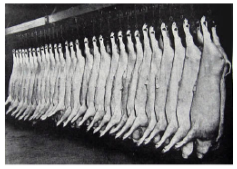
1. Industrial Revolution
Follows introduction of water- and steam-powered mechanical manufacturing facilities

1784 1913

7

Industrial Revolution Phases: The 3rd Industrial Revolution

First programmable logic controller (PLC), Modicon 084



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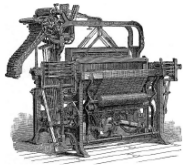

First mechanical loom

3. Industrial Revolution
Uses electronics and IT to achieve further automation of manufacturing

2. Industrial Revolution
Follows introduction of electrically-powered mass production based on the division of labour

1. Industrial Revolution
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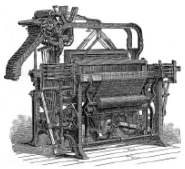
1784 1913 1969

8

Industrial Revolution Phases: The 4th Industrial Revolution



First mechanical loom

1. Industrial Revolution
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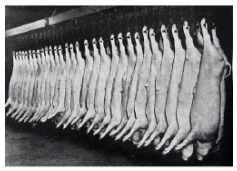

First production line, Cincinatti slaughter-houses

2. Industrial Revolution
Follows introduction of electrically-powered mass production based on the division of labour

First programmable logic controller (PLC), Modicon 084

3. Industrial Revolution
Uses electronics and IT to achieve further automation of manufacturing

4. Industrial Revolution
Based on cyber-physical systems

Complexity

1784 | 1913 | 1969 | 2016 | Time

Source: LEADing Prac

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The game is changing – how do we adapt?

When compared with previous industrial revolutions, the Fourth is evolving at an exponential rather than a linear pace.

The emerging technology breakthroughs in fields such as artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3-D printing, nanotechnology, biotechnology, materials science, energy storage and quantum computing.

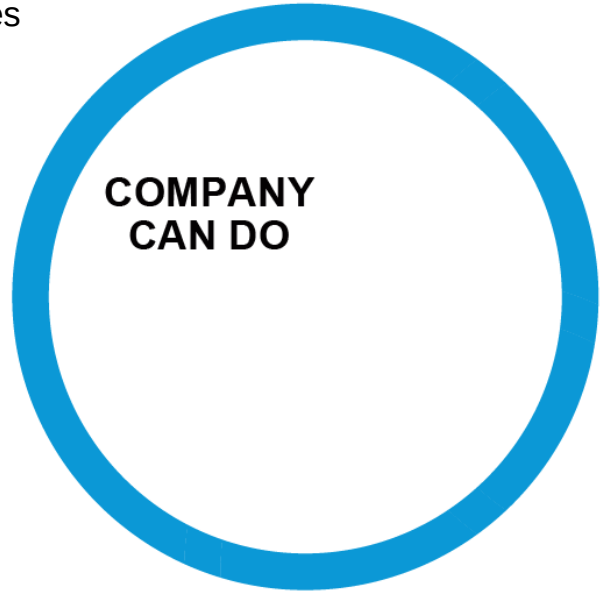
Organizations around the globe are asking themselves how to adapt in both people, competencies, services, products, processes and technology.

Key Findings: SHOULD DO, WANT TO DO and CAN DO

Learning from the Leaders, Global University Alliance Outperformer Study 2010-2015

CAN DO (existing capabilities)

- Employee
- Core Competencies
- Production Faculties
- Service
- Product
- Process



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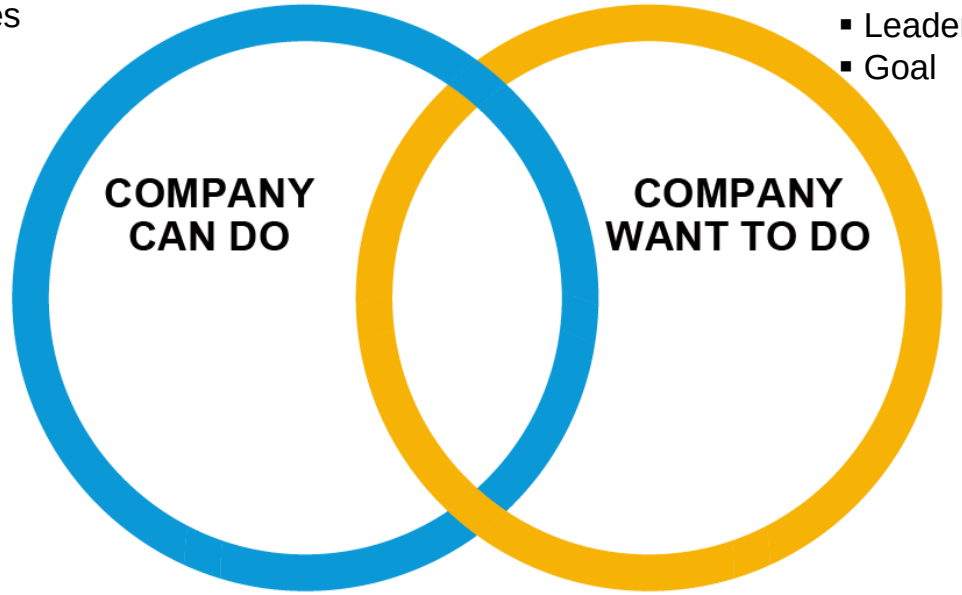

WANT TO DO (Strategy intent)

- Business Idea
- Business Demand
- Leadership preference
- Goal

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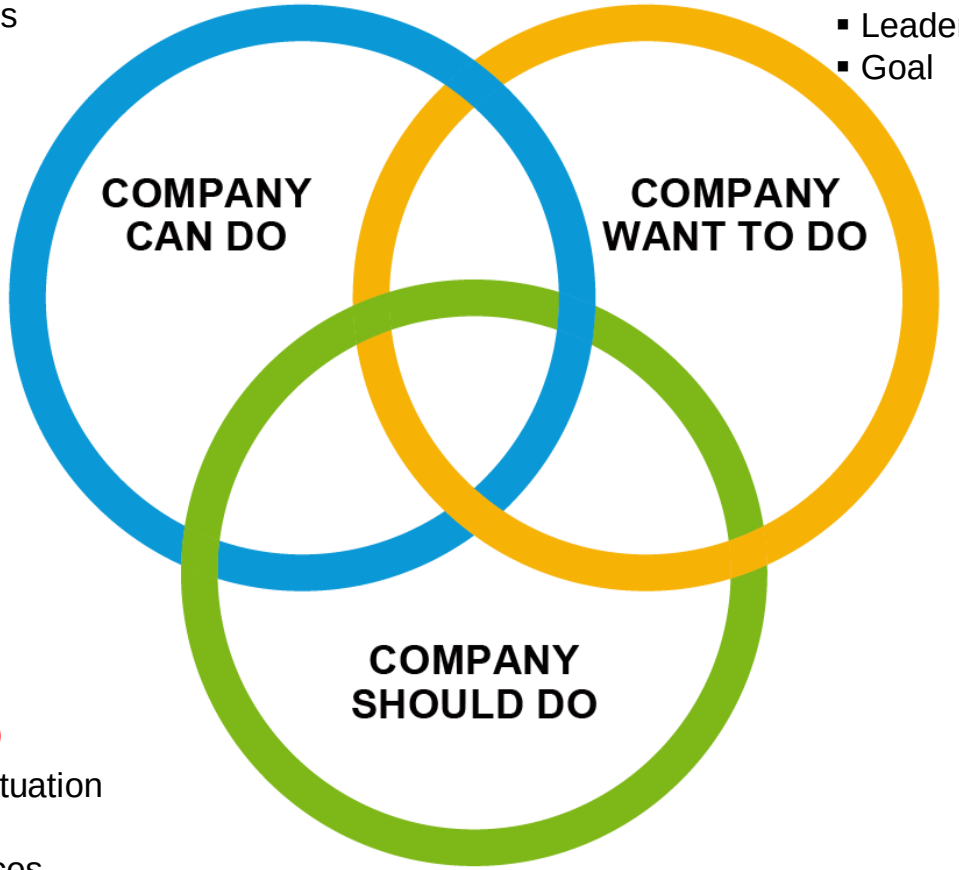

SHOULD DO

- Competitive Situation
- Market forces
- Technology forces
- Macro-economic forces
- Trend drivers

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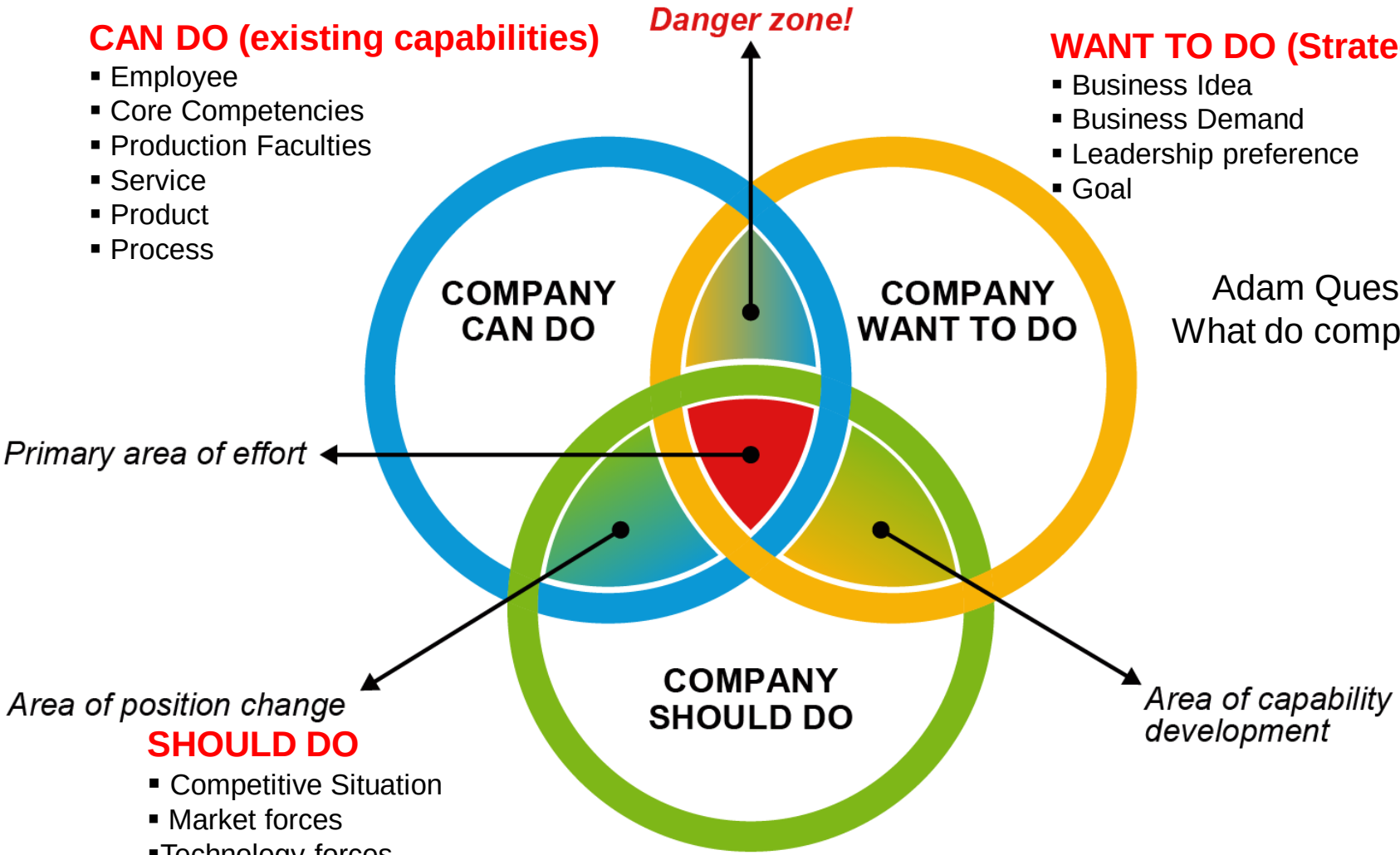
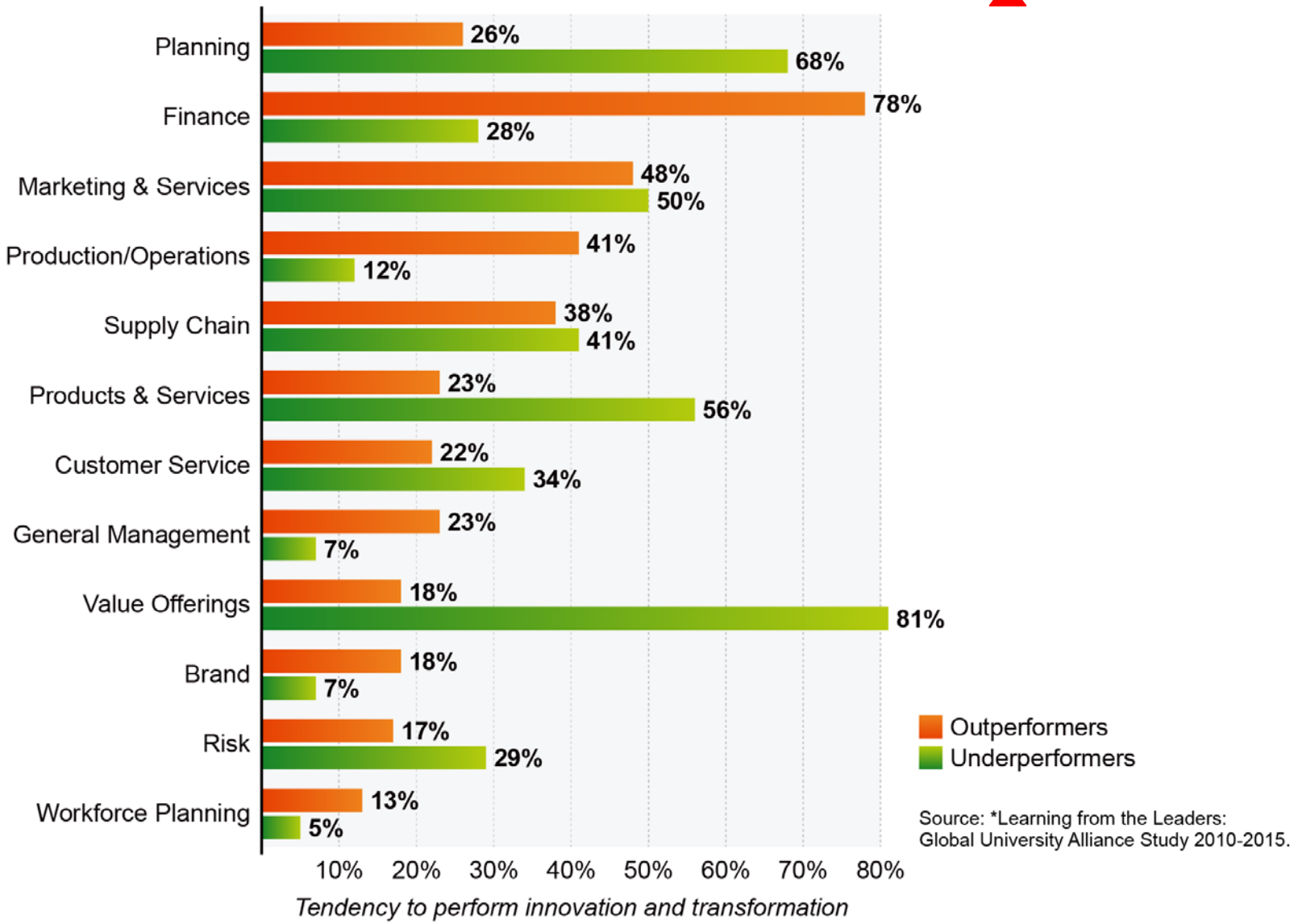


Adam Questions:
What do companies do

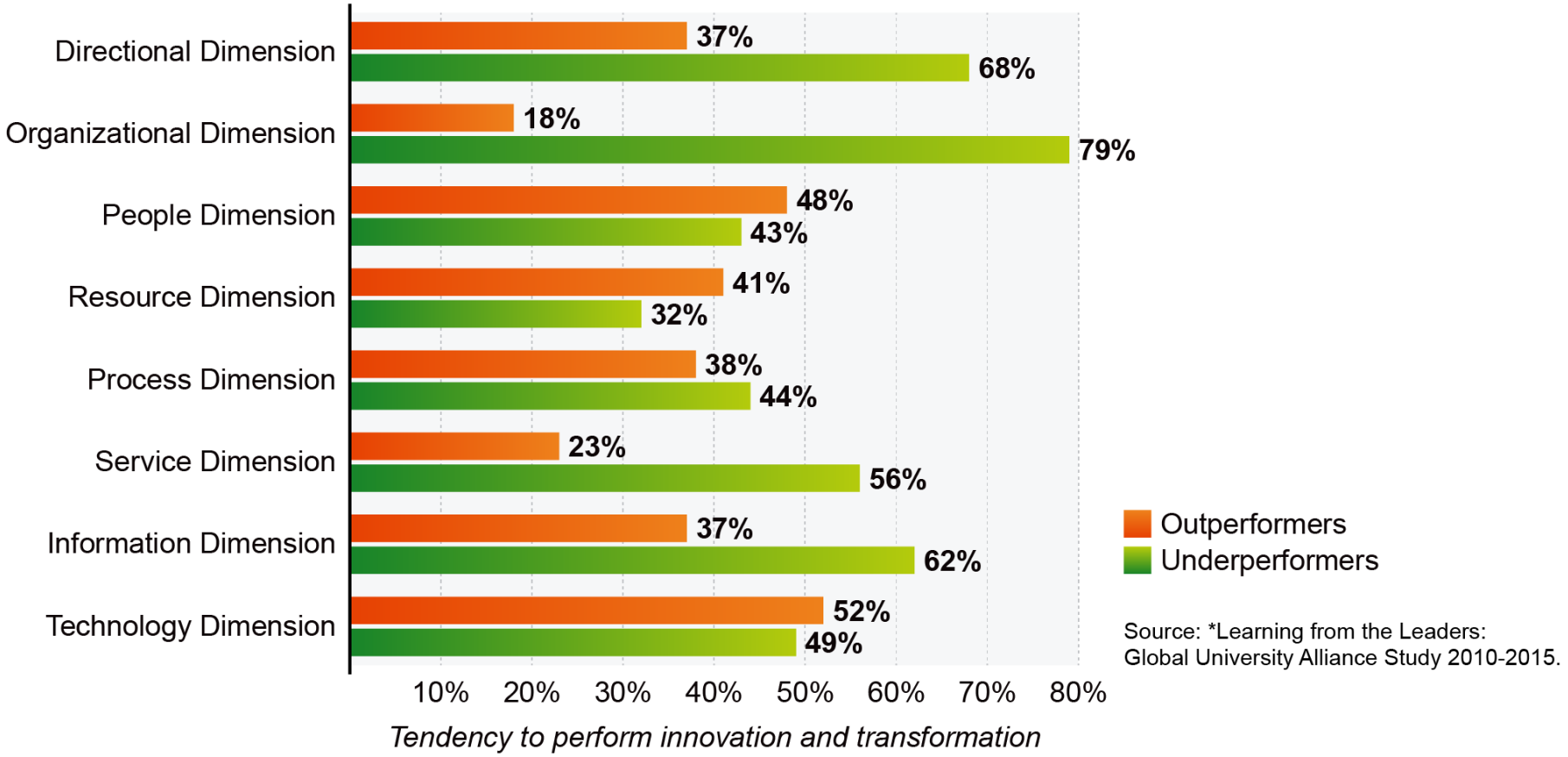
SHOULD DO

- Competitive Situation
- Market forces
- Technology forces
- Macro-economic forces
- Trend drivers

What is it leading organizations actually do around capability development:



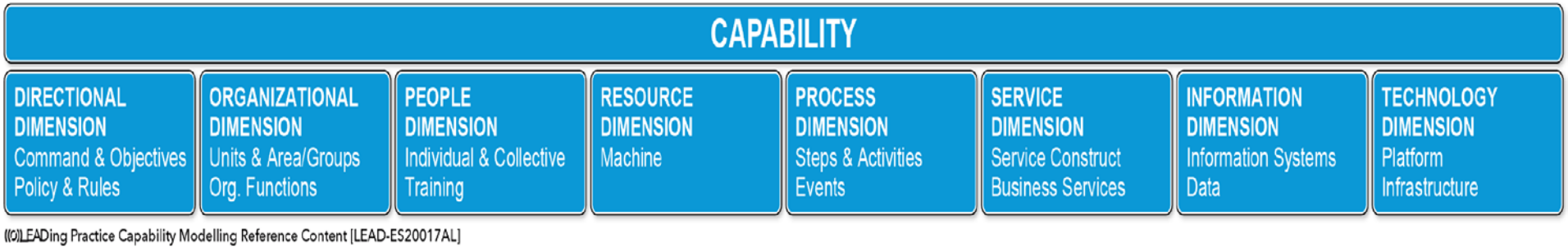
Where is it leading organizations do capability development:



Source: *Learning from the Leaders: Global University Alliance Study 2010-2015.

Capabilities really matter!!!

Capability: A capability is an abstraction that represents the ability to perform a particular skill set. In organizations this would be organizational capabilities, directional capabilities, service capabilities, information capabilities and technology capabilities



((o))LEADing Practice Capability Modelling Reference Content [LEAD-ES20017AL]

So how to work with capabilities??

Global University Alliance research around capabilities and the relationship to:

- Strategy
- Business Model
- Products
- Services
- Operating Model
- Etc.

http://www.globaluniversityalliance.net/research-areas/enterprise-capabilities/

Next slides will be about:

- What is it leading organizations actually do around capability development
- Where is it leading organizations do capability development

The 3 webinar sessions

Session 1: **Introduction to Enterprise Capability concepts**

- What is a capability?
- How are they used in an enterprise context?
- What can you do with capabilities?

Session 2: **Advanced Capability Modelling & Capability Architecture**

- The value of modelling capabilities?
- How to do capability modelling?
- How to do capability in the context of enterprise architecture?

Session 3: **Capability Management**

- How to do management capabilities?
- How can you develop your Capabilities?

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Questions?

Global University Alliance

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Global University Alliance, Chairman

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Thank You

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