
Changes in education and further training

(as illustrated by German companies)

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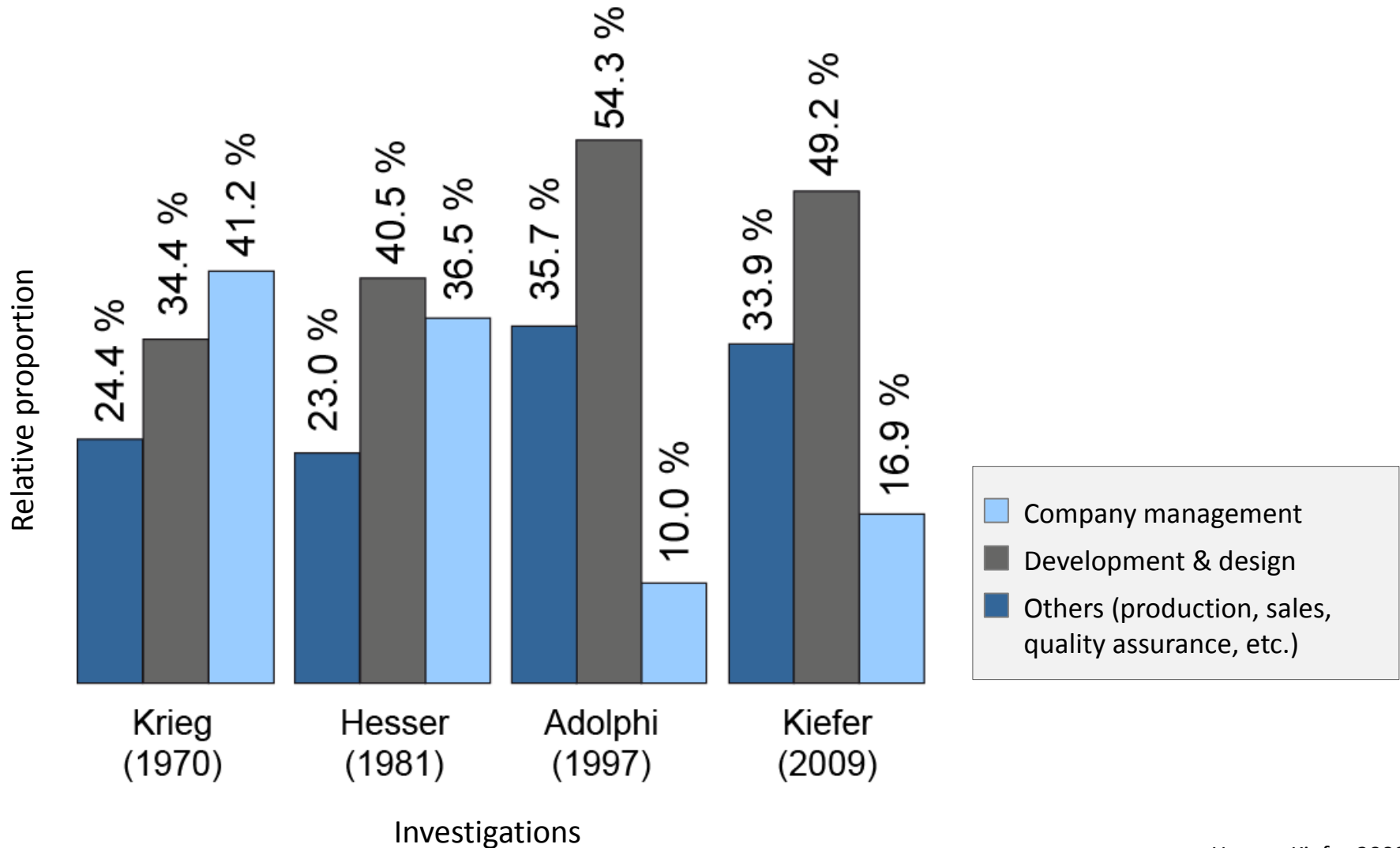
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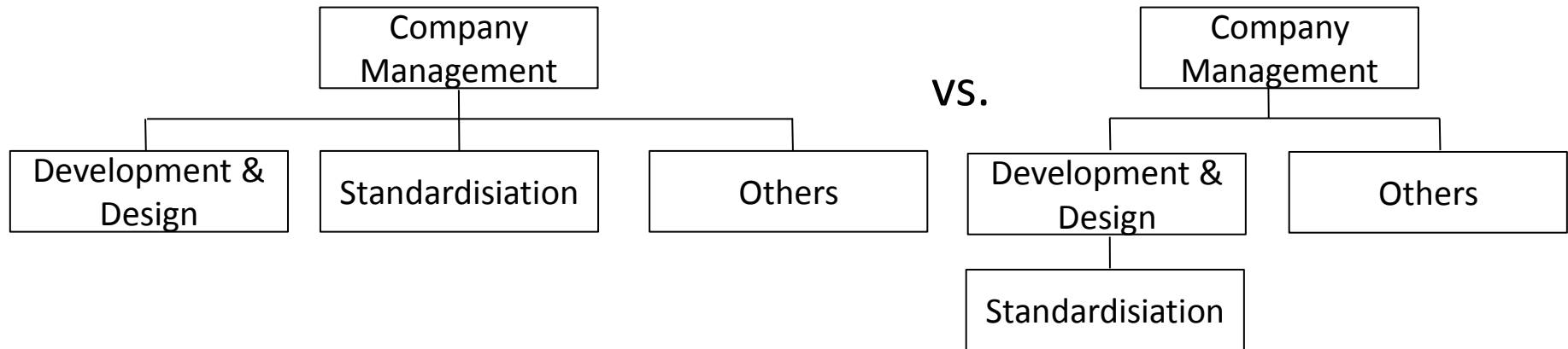
- 1 Organisational integration of the standardisation department and its advisory expertise**
- 2 Qualifications and tasks of standardisation experts
- 3 Training and awareness for the strategic potential of standardisation
- 4 Continuous development of education and further training in networks
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The organisational integration of the standardisation services department



Hesser, Kiefer 2009

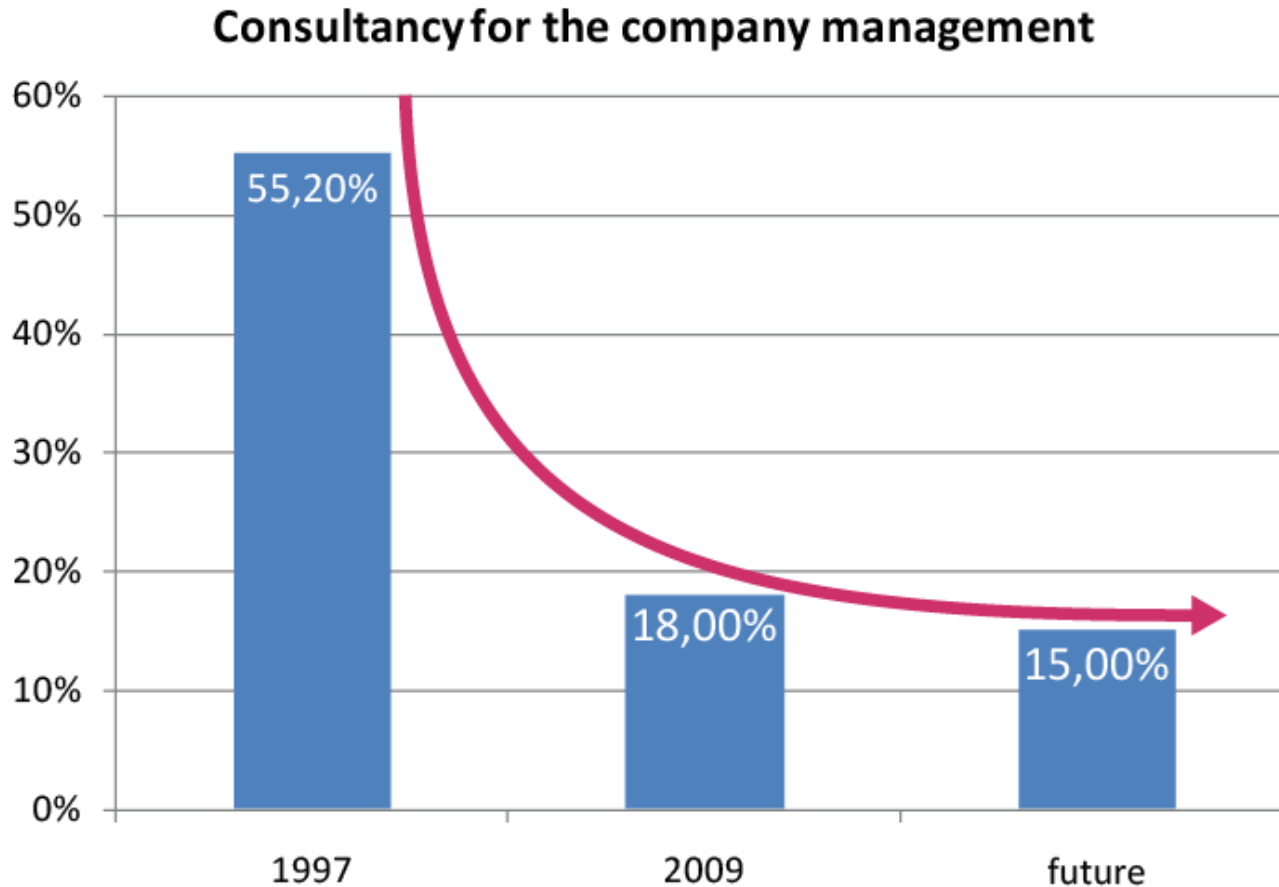
Approaches to explaining why standardisation departments are less frequently directly responsible to the company management



- The company management should be a small and flexible unit.
- In organisational terms, the standardisation department is located where it will generate the greatest benefit.
- The objective is short service channels between the departments.
- **But:** There is a risk that there will be insufficient exchange between the company management and standardisation department. At worst, the company management will not be aware of the strategic potential of standardisation.

Kiefer, p. 171 f., 2009a

To what extent does the standardisation department advise the company management?

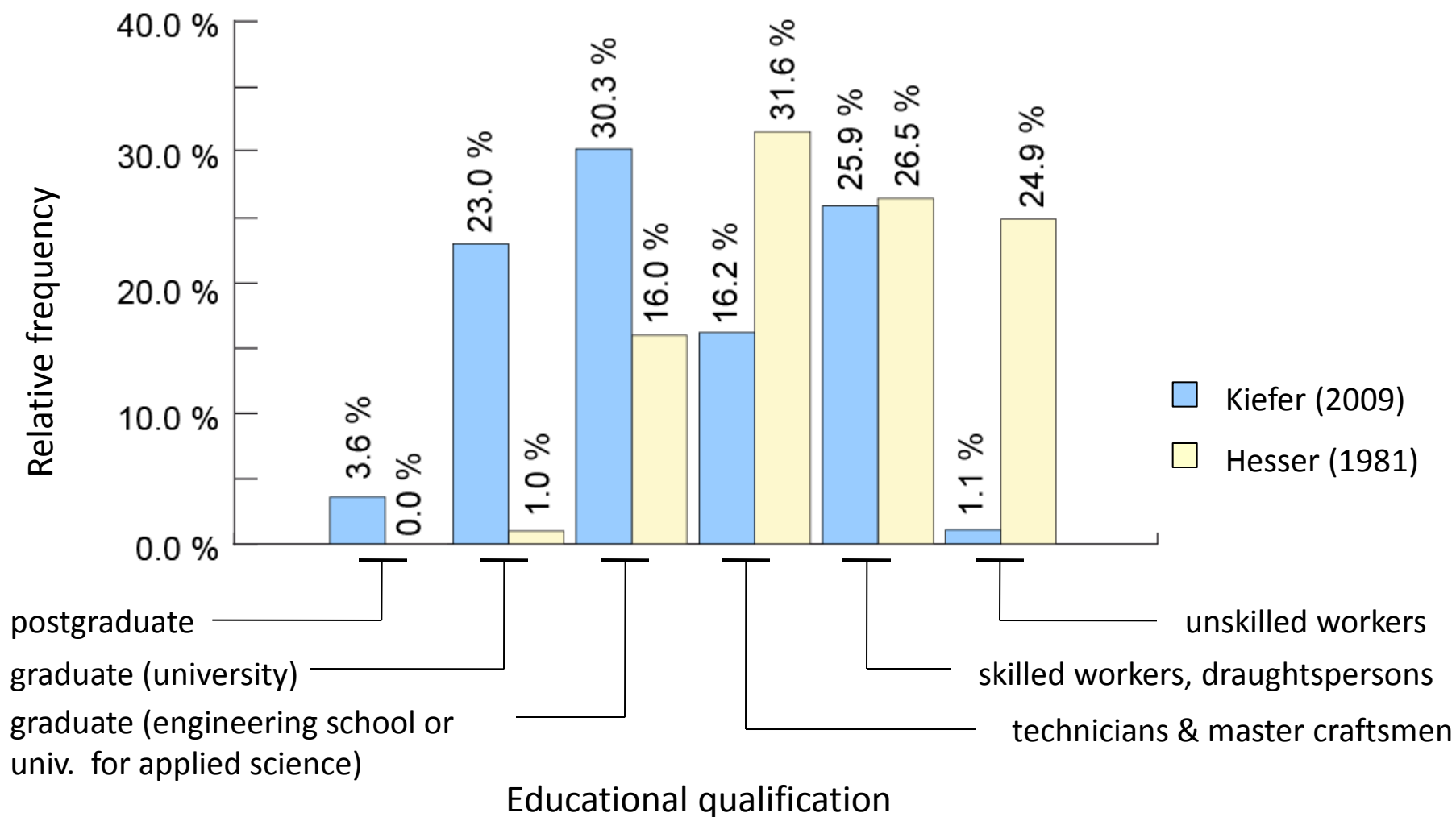


- Today standardisation is still largely considered to be an instrument of rationalisation; insufficient attention is given to its strategic potential for opening up markets.

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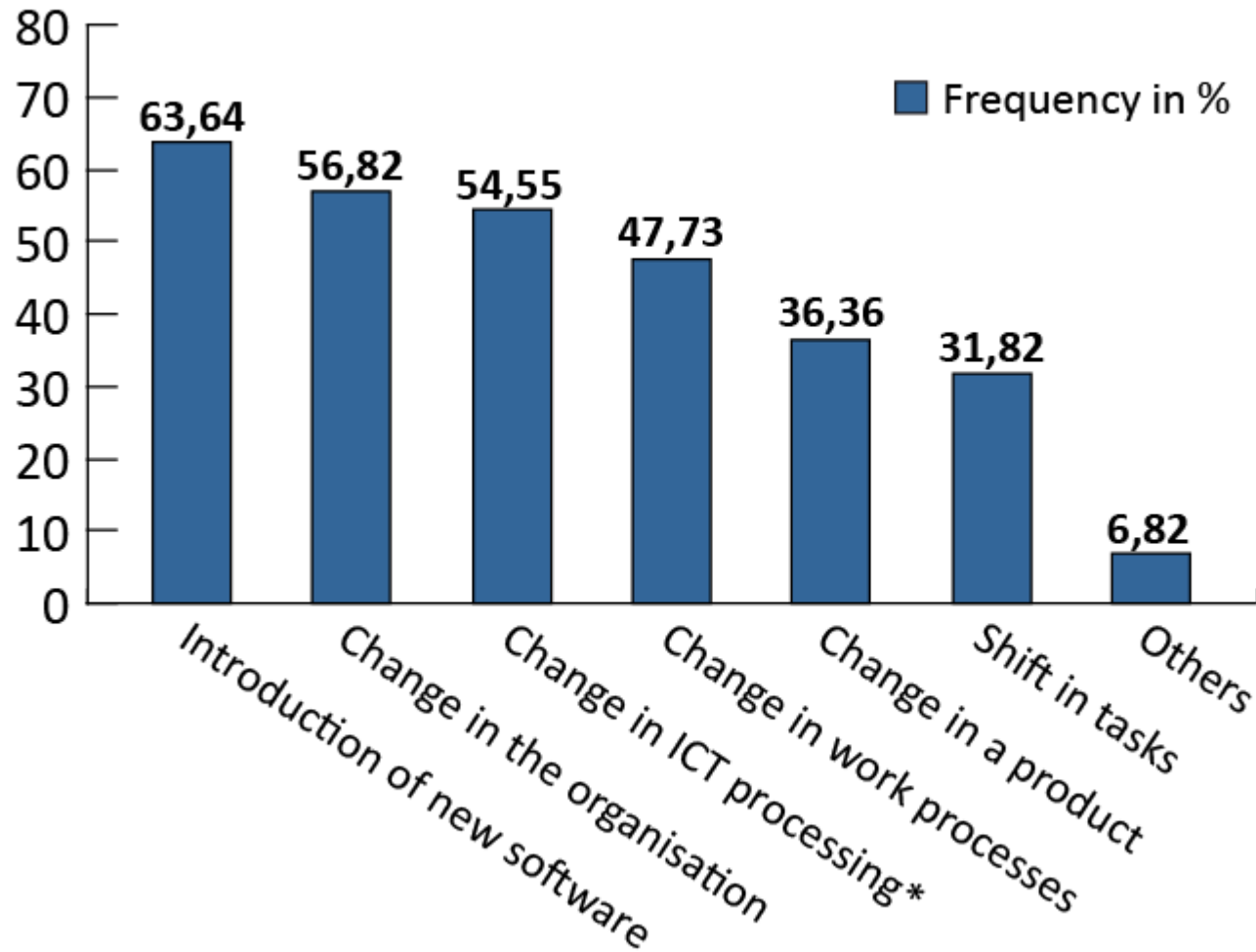
Statements on the educational qualification of employees in the standardisation services department



Hesser, Kiefer 2009

Explanation for the rise in qualifications in standardisation departments

Events of the technical change during the last 10 years (N=44)

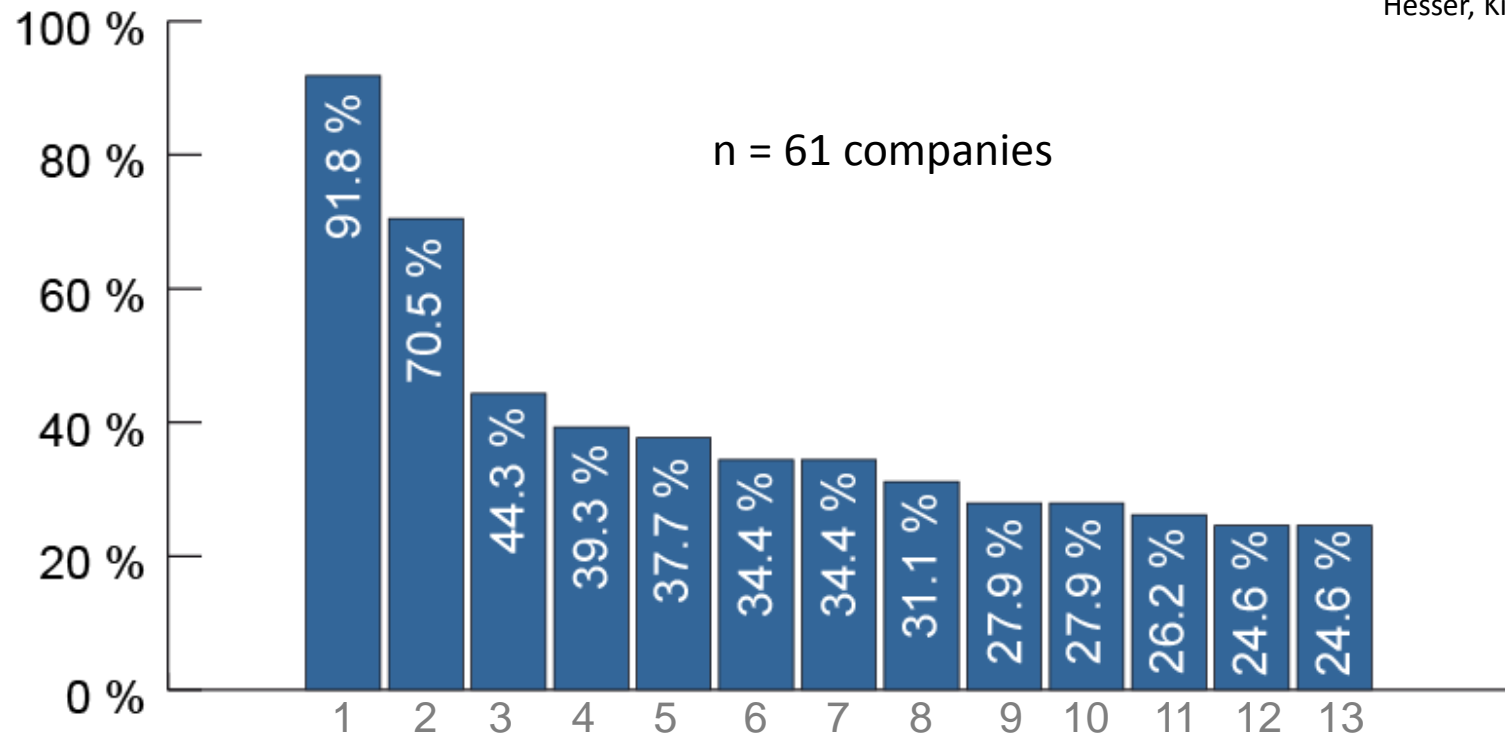


(More than one answer possible)

* ICT = information and communications technology

The principal tasks of the standardisation services department at present

Hesser, Kiefer 2009



[1] Drafting/creating in-company standards

[2] Consultancy for specialist departments

[3] Involvement in nat. stand. committees

[4] Creating tables of product characteristics

[5] Change management control

[6] Inspection of drawings

[7] Involvement in internat. stand. committees

[8] Evaluation of EC Directives

[9] Duplication, archiving

[10] Evaluation of nat. stand. activities

[11] Management and creation of master data

[12] Technical product documentation

[13] Evaluation of internat. stand. activities

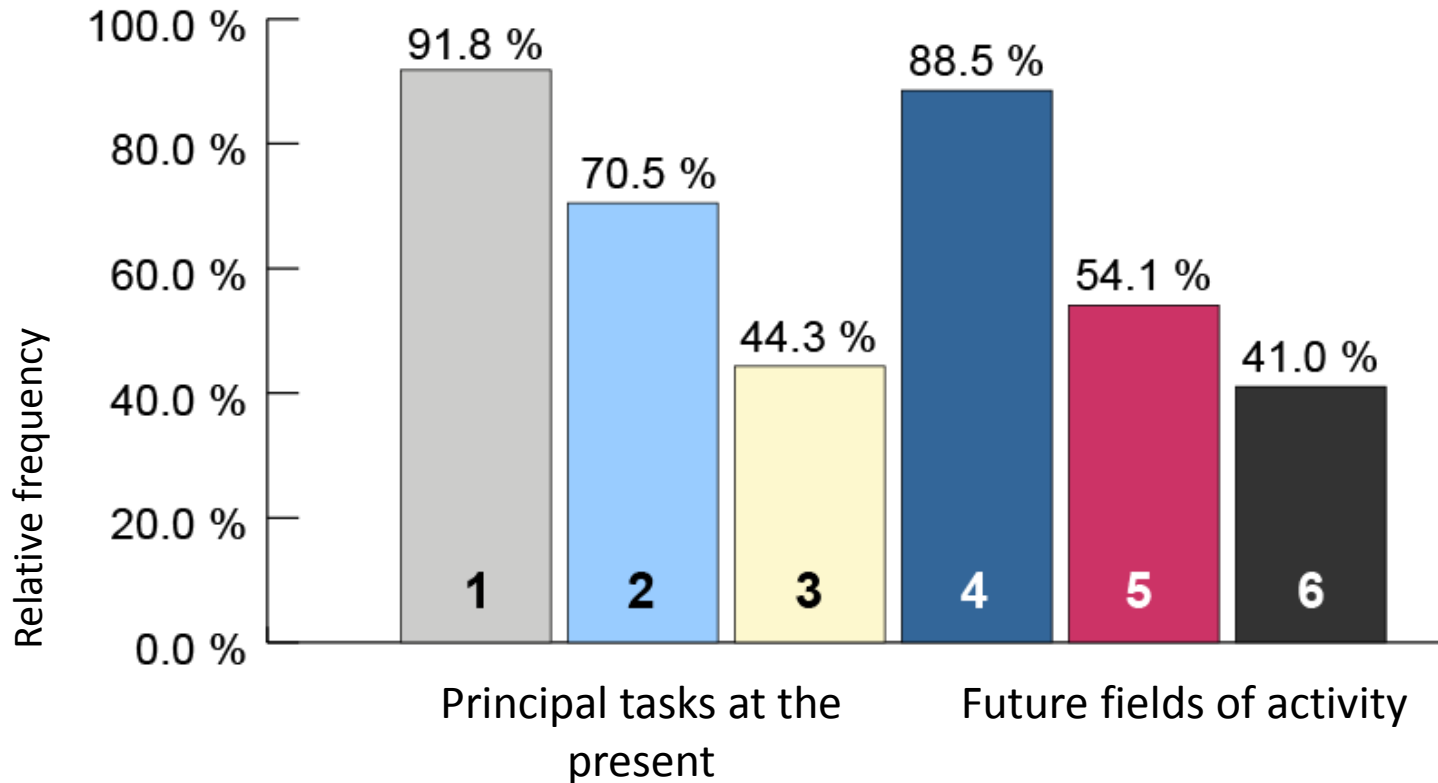
Overview of the principal technical and IT-specific duties for the standardisation services department

Technical tasks	IT-specific tasks (SAP; CAD; PDM)
Drafting/creating in-company standards	Technical product documentation
Consultancy for specialist departments	Creation and management of parts classifications
Evaluation of EC Directives	Change management control for technical drawings
Evaluation of national standardisation activities	Duplicating and archiving of technical drawings and standards
Evaluation of international standardisation activities	Creating and managing tables of product characteristics
Consultancy for the company management	Creating and managing master data, e.g. creating parts lists
Involvement in national standardisation committees	Inspection of technical drawings
Involvement in international standardisation committees	

Hesser, Kiefer 2009

A comparison of the present and future principal tasks of the standardisation services department

Comparison between principal tasks at present and future fields of activity



- [1] Creation of in-company standards
- [2] Consultancy for specialist departments
- [3] Involvement in nat. standardisation committees

- [4] Consultancy for specialist departments
- [5] Technical product documentation
- [6] Collation of industry-wide information

Hesser, Kiefer 2009

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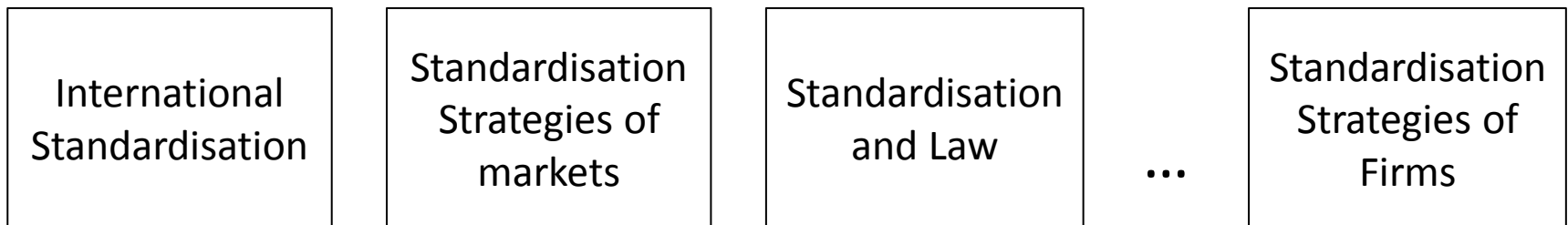
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Does an increased level of qualification lead to awareness of the strategic potential of Standardisation?

- Engineers frequently do not see the economic benefits of standardisation, which among other factors is due to the one-sided nature of the courses with their concentration on mechanical engineering (Kiefer, p. 31, 2009a).
- The strategic potential of standardisation continues to receive insufficient consideration during the education and further training of standardisation experts.

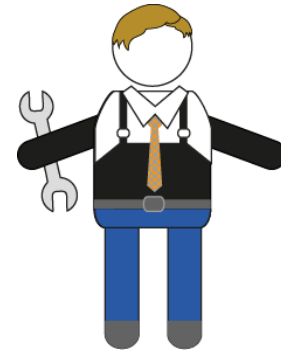
The strategic potential of standardisation is conveyed through appropriate teaching contents, such as:

Teaching contents in standardisation:



Target groups of further education in standardisation

- The strategic potential of standardisation must be communicated to standardisation experts.
- It is often incorrectly assumed that standardisation experts have strategic skills.
- The strategic aspects of standardisation also have to be conveyed in other subject areas (**particularly business administration, economics and law**).
- The strategic potential of standardisation can be readily communicated to **business administration students**, because the principles are present in strategic management.



Engineer



Economics and
further
specific fields

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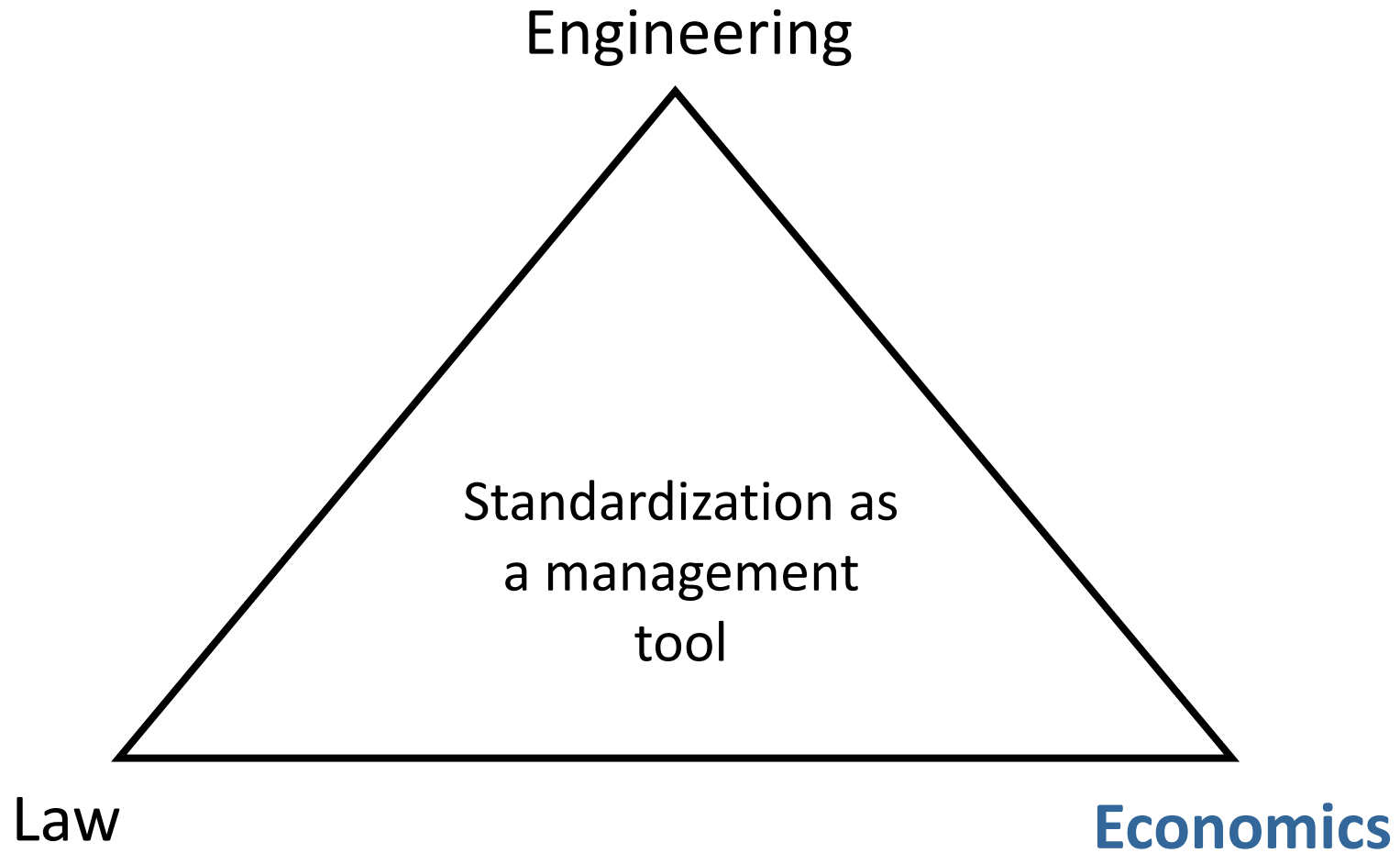
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Continuous development of education and further training in a network

- Standardisation is characterised by global and complex interrelations.
- Periodic workshops for all involved are time-consuming and cost-intensive.
- Possible solution: Continuous further development in one network; use blended learning concept on the internet to achieve a closely knit network.



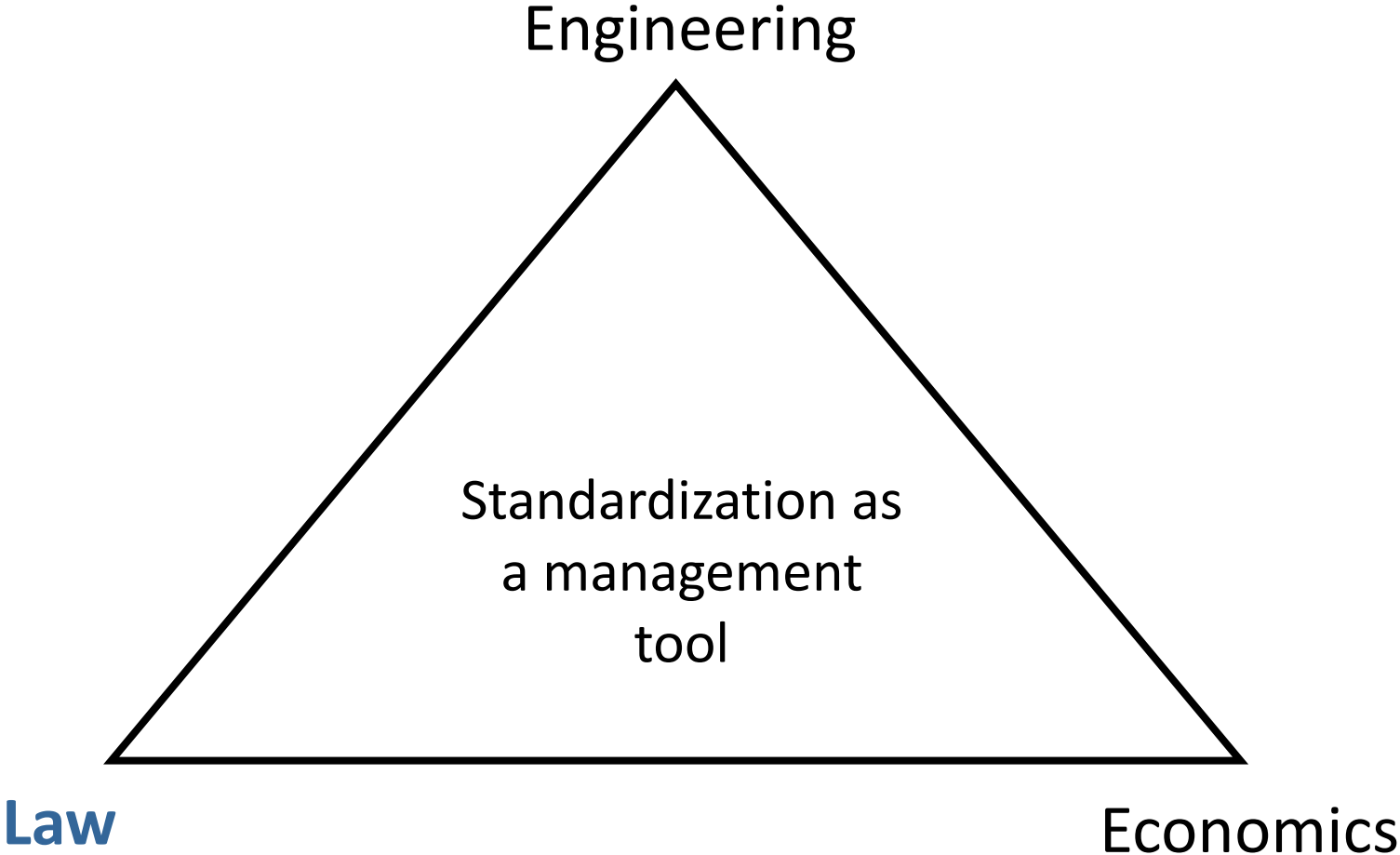
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- The focus is on economic objectives in the implementation of standardisation

“He who has the standard has the market”

- Examples of the strategic aspects of standards
 - **Compatibility standards**
 - **Strategy of dominance**
 - **Lock-in of a standard**
 - **Participation in standardisation processes**



The Basics

Development of mutual confidence through
harmonization and standardization
by

European Directives

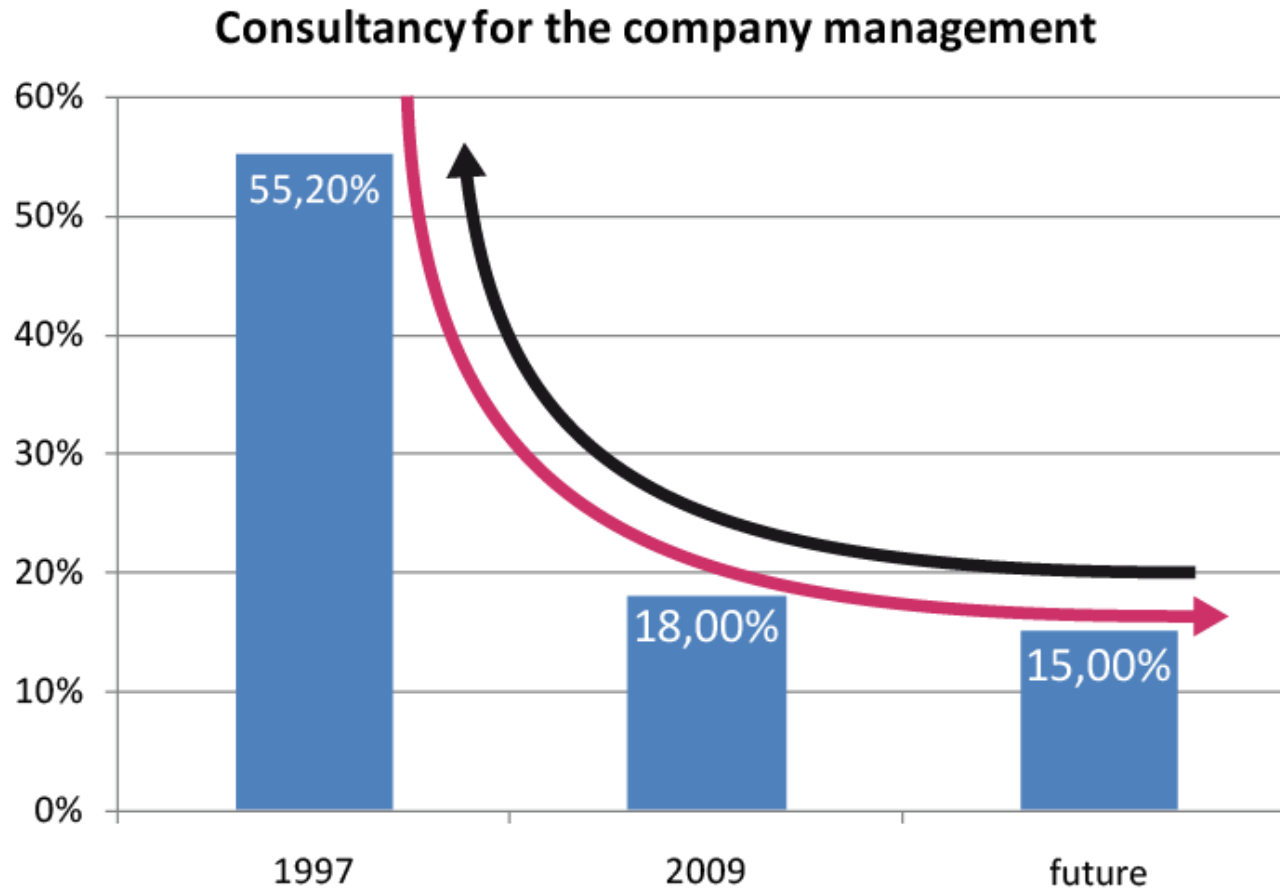
and

European Standards

Today both of them already regulate:

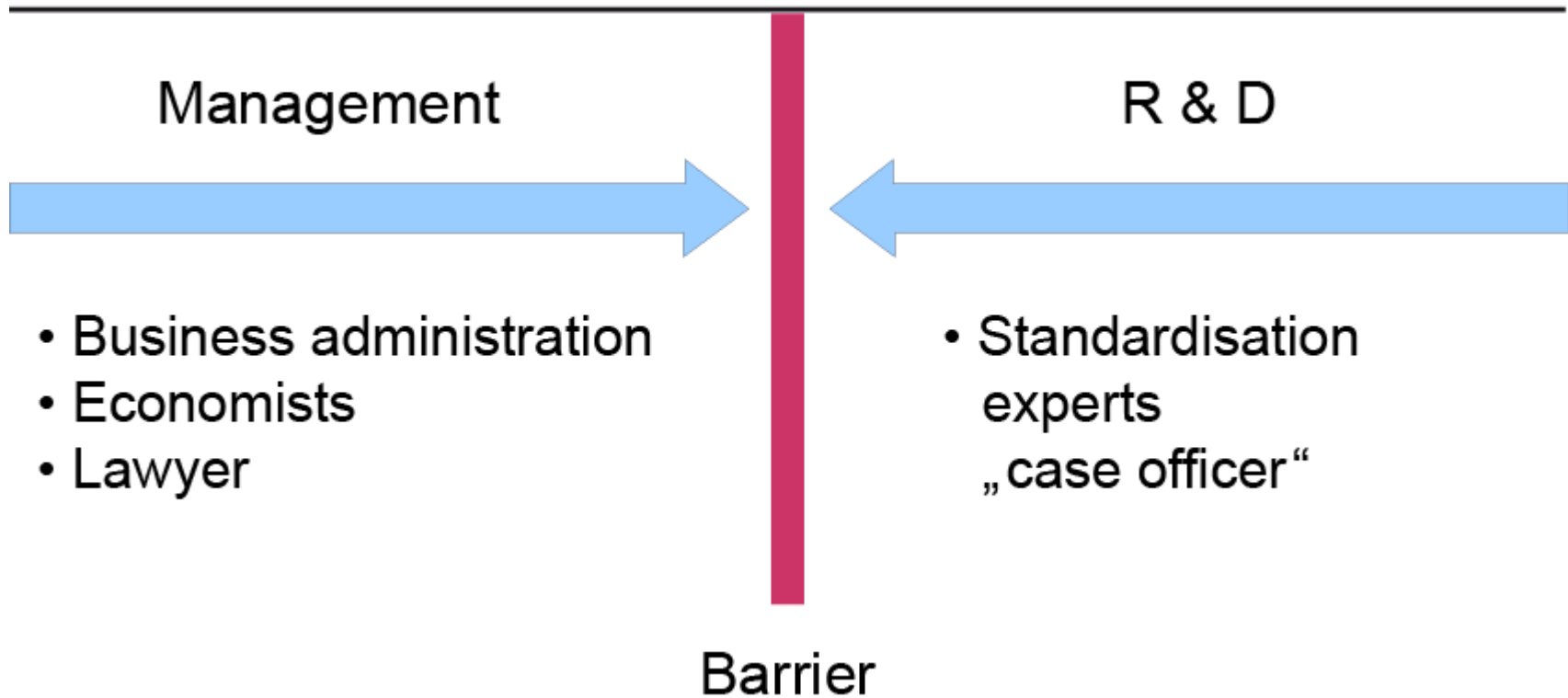
- the accreditation system
- the certification system
- conformity declarations
- technical specifications

To what extent does the standardisation department advise the company management?



- Today standardisation is still largely considered to be an instrument of rationalisation; insufficient attention is given to its strategic potential for opening up markets.

Know How Transfer



Business administration

- e.g. standardisation of production and assembly processes
- e.g. standardisation in logistics
- e.g. standardisation of business processes

Economists

- e.g. standardisation theory, markets, national and international benefits

Lawyers

- e.g. legal systems and connection with standardisation systems

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- There is a demand for research and development of further teaching material in the field of **economic aspects** of standardisation, such as
 - Economic Theories of Standardisation,
 - Standardisation Strategies within a Company,
 - External Standardisation as a Company Strategy,
 - Standardisation Strategies of Firms etc.

For further information to our lecture program
Standardisation please visit the website

www.pro-norm.de

Thank you for your attention!

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