Market conditions
Economy

Management concepts

1) Modern concepts of business organization
2) Workplace learning as issue of research
3) Demographic developments: Aging workforces
4) Exemplary empirical study
5) Conclusions

Changes of management concepts

<table>
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<tr>
<th>Market conditions</th>
<th>Management concepts</th>
<th>Characteristics</th>
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<tbody>
<tr>
<td>Supply-driven economy</td>
<td>Scientific Management (Taylor)</td>
<td>Formalization, repetition, exchangeability of labors</td>
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<td></td>
<td>Bott production (Ford)</td>
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<td>Automation (Kern/Schumann)</td>
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<td>Teamwork (Breig)</td>
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<td>Demand-driven economy</td>
<td>Lean Management (Womack et al)</td>
<td>Transfer of responsibility, drop of hierarchies</td>
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<td></td>
<td>Learning Organization, Knowledge Based Enterprise (Senge, Salzburger)</td>
<td>Change, learning community, employees as individuals</td>
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Educational view on business organization

Shared core of modern concepts of working organization:
Employees’ competence to cope with uncertainty and change

Skill requirements
- High qualification degree (e.g. special knowledge, problem solving competence)
- High extent on independence and responsibility
- Soft skills (e.g. social competence, emotional intelligence)
- Lifelong learning

State of research on workplace learning

“Rediscovery” of practice-based learning in vocational education and training and educational research
- Workplace learning was main mode of ancient apprentices
- Focius of educational research on vocational learning was on formal learning processes until late 20th century
- Workplaces as learning environments of own quality appeared in educational literature in the 1990ies
- Seminal research on workplace learning since 2000

Demographic development: Aging workforces

Forecasts of (European) labour market developments
- Demographic change: Extended lifetime, decreasing birthrates
- Relation between older workforce and younger workforce changes to majority of older workforce
- Social security systems demand extended working time

⇒ Challenge for enterprises: Integrating older workers into efforts of personnel and organizational development
Specific features of older learning workers

- Rich work experiences, routines, wisdom
- Changed cognitive and communication demands
- Reduced time for return-of-invest considerations

Two tasks of organizational development

- Integrating older workers in processes of knowledge actualization
- Organizing the dissemination of older workers’ knowledge base across successive generations of workers

→ Providing learning opportunities for older workers matters

Exemplary empirical study

Method
- Quantitative questionnaire study of a German industrial enterprise (automotive supplier)
- Sample: 146 plant operators (89 respondents, 61%)

Measurements
- Age (up to 30 / 31-40 / 41-50 / >50 years)
- Experience of competence (5 items, α=.67)
- Social relatedness (5 items, α=.87)
- Competence support (4 items, α=.71)
- Work-related know-how (11 items, α=.88)

Descriptive statistics

<table>
<thead>
<tr>
<th>Scale</th>
<th>P</th>
<th>Significance</th>
<th>Post-hoc test</th>
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</thead>
<tbody>
<tr>
<td>Experience of competence</td>
<td>4.75</td>
<td>p=.004</td>
<td>-30;31-40&lt;&lt;41-50;51+</td>
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<tr>
<td>Social relatedness</td>
<td>1.97</td>
<td>p=.125</td>
<td>---</td>
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<tr>
<td>Competence support</td>
<td>1.52</td>
<td>p=.216</td>
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<tr>
<td>Work-related know-how</td>
<td>3.04</td>
<td>p=.034</td>
<td>-30;31-40&lt;&lt;41-50;51+</td>
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<tr>
<td>Work-related knowing-how</td>
<td>2.34</td>
<td>p=.080</td>
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Conclusions
- Findings indicate plausible patterns – in comparison between younger and older workers, no discrimination of older workers is to be observed.
- Generally, subjects rate quite high – but no ceiling effect.
- In terms of older workers (50+) new questions arise:
  - Do they evaluate their knowledge more critically?
  - Do they perceive to lose the contact to the state of knowledge?
  - Are there organizational influences supporting especially 50+?

Thank you for your attention!