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<th><strong>Title</strong></th>
<th>The human factor in the multimedia environment</th>
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The Human Factor in the Multimedia Environment

Andreas Becker
Senior Consultant, Wert & Partner
Frankfurt, London, Singapore, New Delhi
Kuala Lumpur, June 21, 1997

Overview

1. Multimedia and its implications
2. Qualification and culture
3. Change and management
4. Chances and risks
5. Summary and outlook
Multimedia and its implications

Four main areas will be affected by multimedia:

- Home office & shopping
- New information sources
- Individualisation
- Data transfer
1 Multimedia and its implications

How will your customers and employees be affected by multimedia?

2 Qualification and culture

Multimedia requires changes in all major aspects of human resource management

- broad education
- continuous learning
- high involvement
- self motivation
2 Qualification and culture

Qualifications will have to be expanded

traditional publishing approach

content knowledge technology knowledge

multimedia approach

no clear distinction between content and technology knowledge

Today, a huge variety of multimedia jobs exists

co-ordinator multimedia

digital media publisher

intranet system engineer

screen designer

multimedia producer

multimedia programmer

interactive media developer

presentation designer

electronic publisher

3-d operator
2 Qualification and culture

Theoretical background
- media history & ethics
- copyright regulations
- communication theory
- industry knowledge
- business administration

Specific IT knowledge
- operating systems
- user interfaces
- screen design
- 3-d animation
- video integration
- audio integration
- project planning

Core competences
- data import
- data export
- data manipulation
- picture manipulation
- colour manipulation
- typography
- project planning
- Internet editors
- proofing

Multimedia requires a different culture (1)

from...
- function oriented
- hierarchies
- specialists

to...
- process oriented
- teams and projects
- generalists
2 Qualification and culture

Multimedia requires a different culture (2)
from...
outdated technology
orders & control
bureaucratic
low acceptance rate for change

to...
innovative technology
responsibility & delegation
flexible
continuous improvement

3 Change and management

Example: editorial functions in the multimedia environment
3 Change and management

Resistance to change is a permanent challenge for management

Multimedia

Conventional media

4 Chances and risks

... for your employees

Chances
- productivity increase
- development of new professions
- reduction of business travel needs
- better training opportunities

Risks
- loss of professions
- information overload & discrimination
- unwillingness to expand knowledge
4 **Chances and risks**

... for your customers

**Chances**
- easier access to information & services
- individualised information & entertainment
- possibility of continuous education
- chances for home working & shopping

**Risks**
- ready for two-dimensional / active multimedia
- ready for necessary investment in HW / SW
- information overload / discrimination

---

4 **Chances and risks**

... for management

**Chances**
- more flexible company structures
- new products & customers
- better customer service
- less time and money spent on travel

**Risks**
- investment costs for equipment & training
- loss of control
- unawareness of multimedia technology
4 Chances and risks

Multimedia enables you to handle the information overload.

Available knowledge

Different users with different needs

Different levels of knowledge

5 Summary and outlook

Your business will change on many levels. Your employees working with multimedia will be...

- ... multifunctional people
- ... less specialists - more generalists
- ... more creative people
- ... more responsibility taking people
- ... more flexible people
- ... more dynamic people
- ... more entrepreneurial people

Finding these people will be the key success factor.
## 5 Summary and outlook

Paradigm shift through multimedia

<table>
<thead>
<tr>
<th>Production society</th>
<th>Information society</th>
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<tbody>
<tr>
<td><strong>economy</strong></td>
<td>manufacturer-based</td>
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<tr>
<td><strong>means of production</strong></td>
<td>centralised &amp; private: the factory</td>
</tr>
<tr>
<td><strong>means of transportation</strong></td>
<td>physical</td>
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<tr>
<td><strong>mass communication</strong></td>
<td>- uni-directional</td>
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<td></td>
<td>- private</td>
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<td></td>
<td>- controlled-content</td>
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<td></td>
<td>- broadcast</td>
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<td></td>
<td>- passive audience</td>
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<tr>
<td></td>
<td>- elite as censor</td>
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</tbody>
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- information-based
- decentralised & public:
- mind & network-computer
- networks
- omni-directional
- public
- uncensored
- multicasting
- interactive audience
- audience as censor