<table>
<thead>
<tr>
<th>Title</th>
<th>The human factor in the multimedia environment</th>
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<tbody>
<tr>
<td>Author(s)</td>
<td>Becker, Andreas</td>
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<td>URL</td>
<td><a href="http://hdl.handle.net/10220/3009">http://hdl.handle.net/10220/3009</a></td>
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<td>Rights</td>
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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
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
- high involvement
- continuous learning
- 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

- digital media designer
- publisher
- intranet system engineer
- co-ordinator multimedia
- multimedia producer
- multimedia programmer
- screen designer
- 3-D operator
- interactive media developer
- presentation designer
- electronic publisher
# Qualification and culture

## Education & qualification profile: media designer

<table>
<thead>
<tr>
<th>Theoretical background</th>
<th>Specific IT knowledge</th>
<th>Core competences</th>
</tr>
</thead>
<tbody>
<tr>
<td>media history &amp; ethics</td>
<td>operating systems</td>
<td>data import</td>
</tr>
<tr>
<td>copyright regulations</td>
<td>user interfaces</td>
<td>data export</td>
</tr>
<tr>
<td>communication theory</td>
<td>screen design</td>
<td>data manipulation</td>
</tr>
<tr>
<td>industry knowledge</td>
<td>3-d animation</td>
<td>picture manipulation</td>
</tr>
<tr>
<td>business administration</td>
<td>audio integration</td>
<td>colour manipulation</td>
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<tr>
<td></td>
<td>video integration</td>
<td>typography</td>
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<tr>
<td></td>
<td>data manipulation</td>
<td>project planning</td>
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<tr>
<td></td>
<td>video integration</td>
<td>Internet editors</td>
</tr>
<tr>
<td></td>
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<td>proofing</td>
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</tbody>
</table>

## Qualification and culture

Multimedia requires a different culture (1)

<table>
<thead>
<tr>
<th>from...</th>
<th>to...</th>
</tr>
</thead>
<tbody>
<tr>
<td>function oriented</td>
<td>process oriented</td>
</tr>
<tr>
<td>hierarchies</td>
<td>teams and projects</td>
</tr>
<tr>
<td>specialists</td>
<td>generalists</td>
</tr>
</tbody>
</table>
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

information

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>
</tr>
</thead>
<tbody>
<tr>
<td>economy</td>
<td>manufacturer-based</td>
</tr>
<tr>
<td>means of production</td>
<td>centralised &amp; private:</td>
</tr>
<tr>
<td></td>
<td>the factory</td>
</tr>
<tr>
<td>means of transportation</td>
<td>physical</td>
</tr>
<tr>
<td>mass communication</td>
<td>- uni-directional</td>
</tr>
<tr>
<td></td>
<td>- controlled-content</td>
</tr>
<tr>
<td></td>
<td>- broadcast</td>
</tr>
<tr>
<td></td>
<td>- passive audience</td>
</tr>
<tr>
<td></td>
<td>- elite as censor</td>
</tr>
</tbody>
</table>

- information-based
- decentralised & public:
- mind & network-computer
- networks
- omni-directional
- public
- uncensored
- multicasting
- interactive audience
- audience as censor