History

• Founded 2002
  – Humance AG in Heidelberg
  – Bureau42 GmbH as SpinOff of Fraunhofer FIT in Sankt Augustin
• Merged in 2005, moved to Cologne
• Initial solutions: e-learning technologies and services
• Following market demands: focus shift towards portal solutions and mobile solutions
# Business fields and services

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Mobile Learning in Logistics - Situation

Workforce in logistics is inherently mobile

Image Source: http://www.flickr.com/photos/kenjonbro/3418689657/
Situation

Regular education is hard to perform

Image Source: http://www.flickr.com/photos/thriol/540149426/
**Situation**

- Special goods
- International Regulations
- Time restrictions

**Image Source:** http://www.flickr.com/photos/photohome_uk/1494590209/

**Situation is becoming increasingly complex**
Situation

• Logistics should be an ideal field for mobile learning!

• But: use of mobile learning is still not state of the art
What we don’t want

Image Sources:
http://www.flickr.com/photos/mikekline/910518150/in/photostream/
http://www.flickr.com/photos/mikekline/868227132/in/photostream/
Complexity

- International regulations
- Security issues
- Environmental issues
- Time restrictions due to optimization
- Goods with special transportation requirements

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Educational situation

• Rising number of required certificates
• Internationalised teams with heterogeneous background
• Time slots for educational processes small
• Formal educational requirements mixed with concrete problem situations
Logistics?

• Huge variations between different logistic fields
  – Duration of tours from hours to months
  – Teamsizes from individuals to large teams
  – Regulations differ

Image Sources:
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http://www.flickr.com/photos/sejanc/2162673379/
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Assistance, Communication and Education for today’s logistics
Situation in road-based transportation

- Tour from hours to days
- Cross-national traffic regulations
- Contextual information needs and learning requirements are mixed
LogiAssist – Learning & Assistance approach

- Map
- Events
- Community
- Education
- Forms
- Dangerous goods
- DocStop
- Language learning
Location-based services
Educational goals

- **Germany: BKrFQG: Law for education of professional drivers for special vehicles**

- **Required Modules**
  - Eco-Training
  - Regulations for Freight Traffic
  - Security technology and driving safety
  - Load restraint

- **Dangerous good assistance**

- **Language trainer**
  (currently: GER, ENG, FRA)

- **Checklists**
  (e.g. dangerous goods, departure control, occupational safety, health)
• Mobile education always bound to the concrete task context

• Formal educational topics not yet allowed to be taught in mobile way

• Acceptance of mobile learning increases with additional services
Education in Ship Management and Crew planning

Planning, Resources, Certificates and Education
Situation in sea transportation

- Tours from weeks to months
- Crews usually compiled for a specific tour
- Crews hired for tours
- International crews
- Crews work 9 months, then 3 months off-board
Problems

• Identify crews with best qualification and availability for a planned tour
• Identify educational gaps which can be filled in off-board times
• Identify educational offers, which can be given on-board
Ship management
– Where is a ship?
– Where will it be soon?

Crew planning
– On-/Off-board

Crew self-services
– Profiles
– Education
Crew planning

- Which crew is on-board?
- Who has to be replaced?
- Which certificates required?
• Profile
• History
• Educational background
• Education services
Mobile solutions

• Devices don’t matter: ships have space for any device
• Connectivity is the main issue
• Mobile solutions complement online solutions: offline capability is essential
• Off-board: formal qualifications, distance education
• On-board: concrete ship handling instructions
Conclusion

• Education in Logistics is usually intertwined with concrete requirements
• Educational processes have to be synchronized with logistic processes
• Education is highly individualised

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Thank you!

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