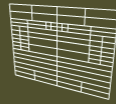


Interactive Experience Environments

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1

Objectives and approach

- Focus on attractions, museums, and learning environments (libraries, schools, etc.)
- New infrastructures
- New spatial interaction techniques
- Augmenting space and interior to provide new experiences
- Interdisciplinary research IT, Industrial Design, and engineering
- Based on participatory design involving prospective users

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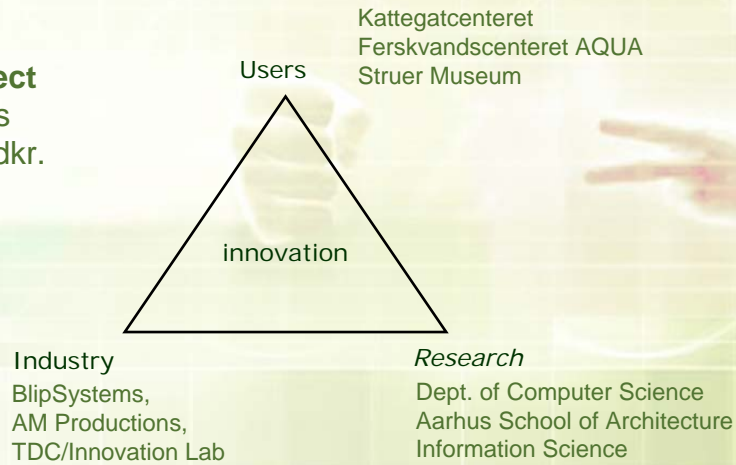
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2

Katrinebjerg innovation model

IXP Project

-1,5 years
-6,9 mio dkr.



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Approaches

- Participatory design
 - Involving prospective users in analysis and design
 - Scenarios, shared narratives, videoprototypes, mock-ups, prototypes, and full-scale experiments
- Experimental software development
 - Iterative, collaborative, object-oriented



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What is Interactive Experience Environments?

Spaces augmented with IT that

- facilitate engaging experiences
- communicate art, stories, and knowledge
- utilize multiple senses and the entire body
- stimulate exploration and participation
- stimulate social interaction
- are remarkable and provocative
- make the user reflect and wonder

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IXP – themes, demonstrators, and cases

<i>Research themes</i>	Context-aware Interaction	Aesthetic Interaction	Space as Interface
<i>Demonstrators</i>			
Active ticket with personal experiences	X	X	X
Collective experiences		X	X
Mobile experiences	X	X	

Cases:

- B&O history at Struer Museum
- Stories about Salmon at Kattegatcenteret and AQUA

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Towards new means for experience design

	Means of expression 1	Means of expression 2	Means of expression 3	...
Narrative 1				
Narrative 2				
Narrative 3				
....				

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Personal
experiences

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Traditional approaches to personal experiences in museums

PDA's or Cell phones



Personal audio



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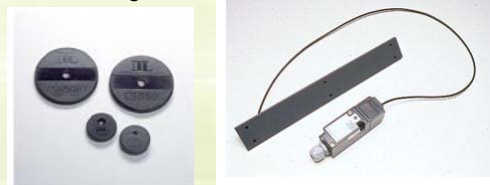
IXP approach to personal experience

- Active ticket
- Optional profile registration
- Personal window on shared displays
- Directional audio
- Continues exploration on the Web at home

BlueTags



RFID Tags



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Personalization...

Utilize parameters such as

- Language
- Interests
- Age
- Gender
- ...

But also support

- Surprises
- Serendipity

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Collective
experiences

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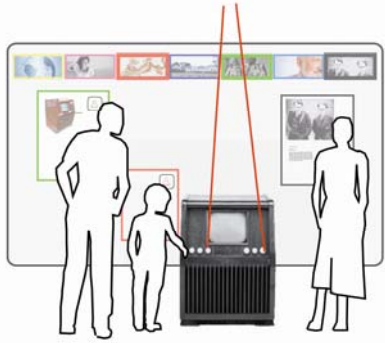
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Personalised windows in shared space

- Collective interfaces that encourage social interaction and knowledge sharing
- Scenario from Struer Museum



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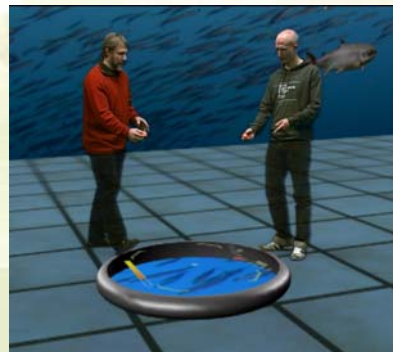
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Common experiences – immersion and games

- Scenarios from Kattegatcenteret and AQUA from the project "Vivid Technology"



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Examples of concepts for collective experiences

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iFloor – an inherently collective interface

- Interactive floor
 - Q&A forum for library users and librarians
 - Camera tracking from ceiling
 - Collective interaction technique
 - Body movement is the means of interaction
- Winner of "Den Danske Designpris" 2004



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More collective interfaces: *iFloorQuest and StorySurfer*



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InfoGallery on large curved displays

- Exhibit digital resources in the physical space
- New user experiences of digital information
- Natural pick up of digital material
- Aesthetical appearance



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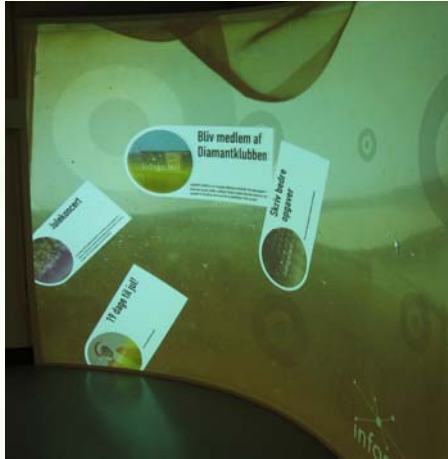
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New library experiences - InfoGallery on large curved displays



Mobile experiences

Attractions provide location based information and games for city/landscapes

- Aquaria tell stories e.g about fish at the riverbanks and harbour sites
- Cultural museum tell local town history on locations in the town/city
- Use mobile phones or the like with GPS
- Information sharing and pervasive games

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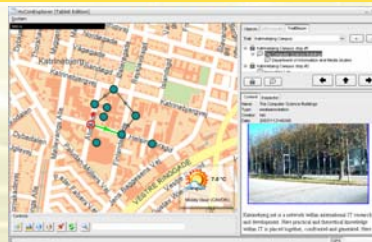
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Location based retrieval and production for school kids - Digital graffiti

TabletPC Interface



Phone Interface



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Pervasive gaming



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Conclusion

- Interactive experience environments
 - Museums, attractions, libraries, schools, innovation spaces,...
- From efficient interaction to pleasurable experiences
- Interactive spaces with meaningful narratives
- New concepts in the pipeline
 - Personal, collective, and mobile experiences

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24

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