Exploring relationships between people, devices and displays

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Ubicomp... about relationships

• Ubicomp in use... the ‘messy’ world
  – Innovative constellations of people, devices, displays and spaces
  – Focussed on the user experiences in this relationship

• Foundational approaches
  – Cognitive informatics
  – Social informatics

• Methods – an iterative reflective lifecycle
  – Understanding current contexts and requirements
  – Exploring innovative possibilities
  – Iterative design / deployment in context / evaluation / reflection

• Various domains
  – Playing & learning, complex collaborative planning, collaborative information sharing
The eSPACE project

- Aim: to design a new user experience around collaborative planning

- Based on extensive fieldwork and analysis of cognitive, social and commercial issues
A new workspace
eSPACE and ubicomp

• A system which enhances an activity by creating a new user experience

• Designed for an environment
  - social, cognitive, physical

• ‘Calm’ computing, accessible, intuitive

• Visions:
  - cross-device (PDA, PC, laptop)
  - cross-display (single, multiscreen, smallscreen, largescreen)
  - cross-channel (phone, face-to-face, text)
  - cross-space (home, shop, train)
The DYNAMO project

- Core focus is supporting cooperative access to/sharing of information across different devices, including PDAs, laptops and interactive whiteboards

- One application is an interactive large screen system for community file-sharing, and meeting support
A DYNAMO system
DYNAMO and ubicomp

- Supports simultaneous, co-located sharing and exchange activities

- New user experience
  - multi-user
  - integrates different devices
  - supports the bringing and taking of content in different media
Summary and future

• Understanding ways of integrating people, devices and displays – a relationship perspective… implications

• Focussing on user experience
  – Cognitive and social
  – UbiComp in use
  – Driven by user data & evaluation in context

• Designing for new user experiences
  – New forms of playful learning
  – New forms of situated collaborative displays
  – New domains e.g. clinical healthcare

• Reflecting to draw out design lessons and conceptual frameworks
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