

Implementing Universal Design: Phase 2

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Outline

- Framework for Analysis and Evaluation
 - ◆ UD “Phase 1”
 - ◆ AT service model
 - ◆ UD service model
 - ◆ distinctions & implications
- Specific Recommendations
 - ◆ quantification
 - ◆ information resources
 - ◆ technology planning
 - ◆ disability studies



UD “Phase 1”

- Focus on technology
 - ◆ what are the right features?
- Training, cheerleading, browbeating the designers & engineers
- Excellent technical results
- Fair to poor social results
 - ◆ massive underadoption and underutilization
 - ◆ service delivery model has not evolved



The AT Model Is Based On:

- ◆ Professional practitioners working with known clients, one at a time
- ◆ AT companies that stay close to both consumers and practitioners because it is their main business
- ◆ Relatively scarce product base, long product life cycles



The UD Model Is Based On:

- Independent consumers in the mainstream market
- OR
- Technology decision-makers in enterprises where consumers participate
- Mainstream companies with marginal interest in this market segment
- Hyper-profuse product base, short product life cycles

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Distinctions

- Weaker link to consumers
 - ◆ met & unmet needs – how much?
 - ◆ what outcomes?
- Uninformed decision-makers
 - ◆ information needs to reach more people, more roles
 - ◆ cannot assume any expertise
- Uncontrolled, unexpected technology



Research Implications

- Need to understand non-users (of all types)
 - ◆ who are they?
 - ◆ why?
- Need to understand information & market behavior
- Need to understand the technology ecosystems – get out of reactive mode



Public Health Analogy

- Inaccessible technologies are “infectious agents” or “vectors”
 - ◆ rapid evolution; epidemics
- People with disabilities are “at-risk populations”
- Accessibility features are “treatments”



Specific Recommendations for Research



Quantification

- Disability statistics
 - ◆ develop consumer/ICT user view
 - ◆ measure functional gaps
- Consumer & decision-maker behavior
- Economics
 - ◆ social cost of inaccessibility
 - ◆ tools for UD decisions

Quantification Partners

- Industry (many facets)
- Federal agencies (many)
 - ◆ Education/NIDRR
 - ◆ FCC (e.g., NDBEDP)
 - ◆ Commerce/NTIA
 - ◆ Labor/ODEP
- Regulators & program managers
- Advocates



Information Resources

- Target specific audiences & their goals
- Contextually rich
 - ◆ problem solving, not professional development
- Schematically consistent
- Development by dialogue
- Outcome management

Information Partners

- Industry (mainstream & AT)
- Federal agencies
 - ◆ NIDRR, FCC Clearinghouse, Access Board, JAN, disability.gov, GSA & CIO Council, ...
- Other public sector
 - ◆ K-12, universities, municipal governments, ...
- Consumer advocates
- Grassroots (blogs, listservs, ...)

Federation

- Each expert entity puts up its own resources; permits others to query it
 - ◆ example: software, AT, consumers
- Customized search tools
- Oversight roles
 - ◆ consistent, coherent schemata
 - ◆ accuracy & dispute resolution
 - ◆ outcomes

Technology Planning

- Study the value chains
 - ◆ many mainstream entities, with no coordination except through the market
 - ◆ actions and inactions of each may have accessibility implications
- Identify emerging technologies early
 - ◆ note positive and negative potential
 - ◆ communicate with industry, regulators, AT, ...
 - ◆ Access Board's Pioneer Committee



Disability Studies

- Issues of privacy, security, autonomy
- Sociology and anthropology of technology
- Design definition of disability

But is this real research?

- Public health analogy
 - ◆ epidemiology
 - ◆ medical anthropology
 - ◆ “non-adherence”
- Other analogies
 - ◆ nutrition
 - ◆ criminology

Q&A