

## SESSION 6: CONSUMER ACCEPTANCE

### Beyond the Ubiquitous Network Society

Dr. Miwako Doi, Toshiba Corporation, Kanagawa

The 20<sup>th</sup> century is the Internet society where persons can communicate each other via cyber world. Knowledge circulated within cyber world. The 21<sup>st</sup> century is the ubiquitous network society where persons and things can communicate each other via cyber world and real world. Much knowledge circulation between real world and cyber world using sensors, ubiquitous network and the Internet. The 21<sup>st</sup> knowledge circulation is the difference from the 20<sup>th</sup> knowledge circulation in respect of the real world.

Interface design must be changed in accordance with the knowledge circulation change. The knowledge circulation changes and the technology makes rapid progress. Nevertheless, human does not so change and progress rapidly. The research result about human gives the principle for the ubiquitous interface design.

Key factors for human interface design are E. T. Hall's Proxemics and operation knowledge accumulation. Table 1 shows the relations between proxemics and machine operation.

The ubiquitous network society makes the paradigm shift of knowledge circulation. Conventional knowledge circulation was that the downlink was far more than the uplink. CGM (Consumer Generated Media) changes knowledge circulation the downlink becomes less than the uplink. In the future, consumers will share knowledge and process through the networked communities and the downlink will be more than the uplink.

**Table 1 Proxemics by E.T. Hall and Machine**

#### Operation

|                   | Distance (cm) | Features  | Machine Operation                          |       |                       |
|-------------------|---------------|---|--|-------|-----------------------|
| Intimate distance | <15           | Telling secrets, comforting others and lovemaking | Speech via cellular phone                  |       | R<br>O<br>B<br>O<br>T |
|                   | 15~45         | Shaking hands                                     | Mail via cellular phone, remote controller | AV PC |                       |
| Personal distance | 45~75         | Minimal touch                                     | PC, car navigation                         |       |                       |
|                   | 75~120        | Personal conversation                             |  |       |                       |
| Social distance   | 120~210       | Formal conversation                               | TV conference                              |       |                       |
|                   | 210~360       | Business space                                    |  |       |                       |
| Public distance   | 360~750       | Interpersonal interaction is not possible         | Remote lecture                             |       |                       |
|                   | <750          | Public speech                                     |  |       |                       |