

Toward strategies and methods for disabled users profile

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Partenariat

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Hôpital Raymond Poincaré de Garches

Plate-Forme
Domotique-
Robotique

Collaborations

AFM

Association Française
contre les Myopathies



HUMAN COMMUNICATION AND INTERACTION
Research Group

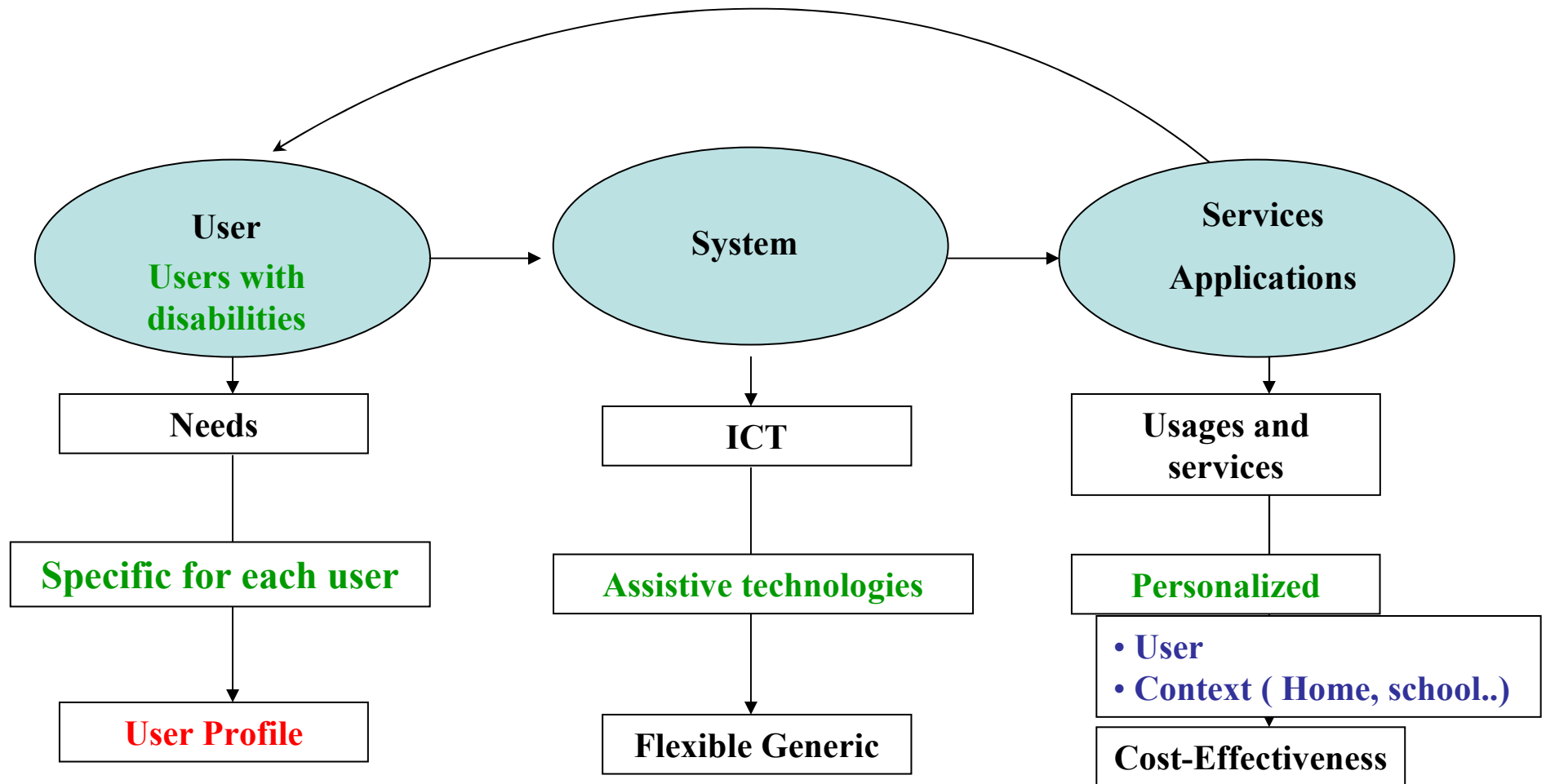
University of Oviedo
SPAIN

Inserm

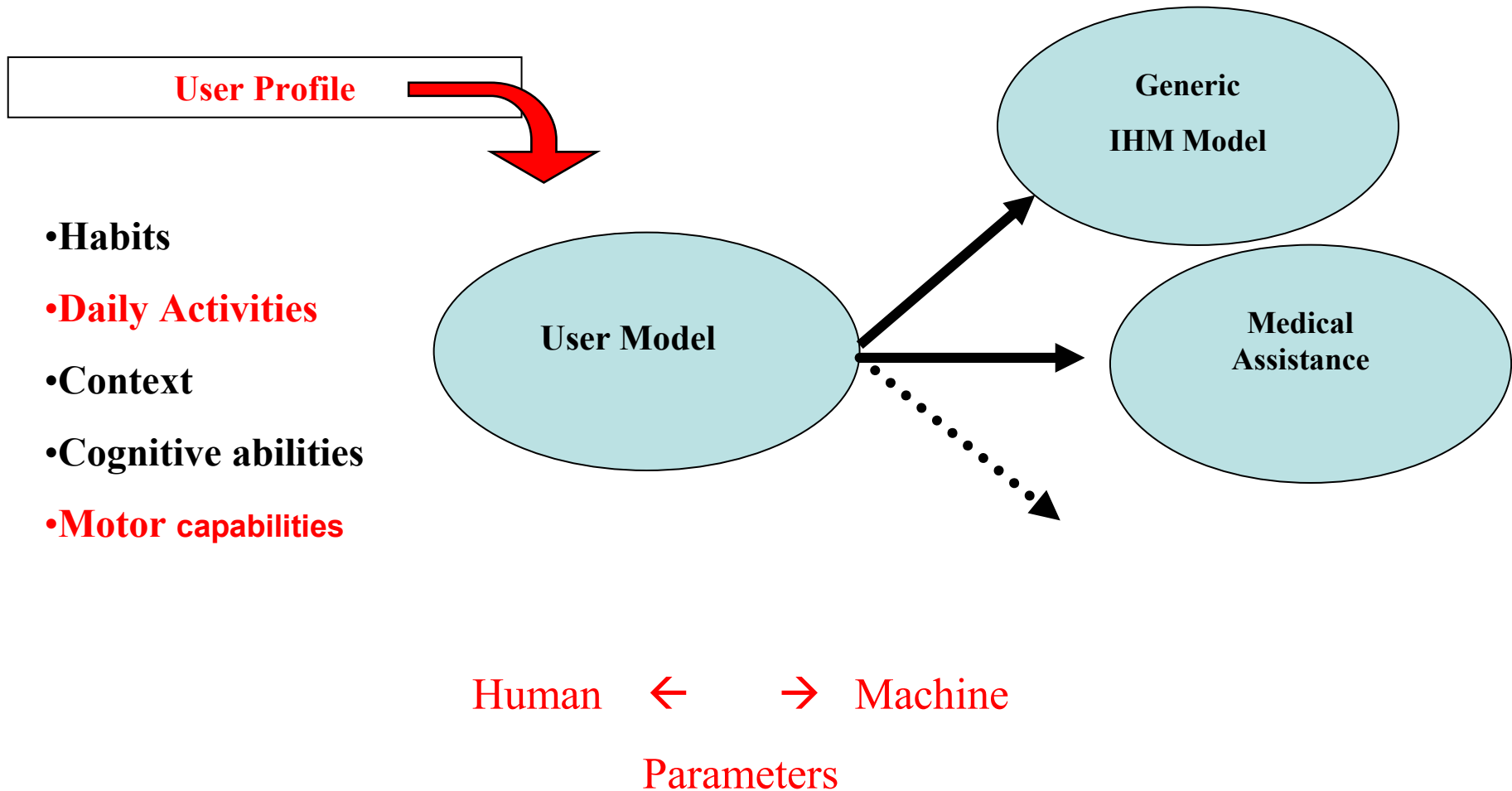
Institut national
de la santé et de la recherche médicale

INSERM (U. 483)

Smart environment architecture



User profile and User Modal Interaction



Human ← → Machine

The Processes of user Modeling

Qualitative Methods :

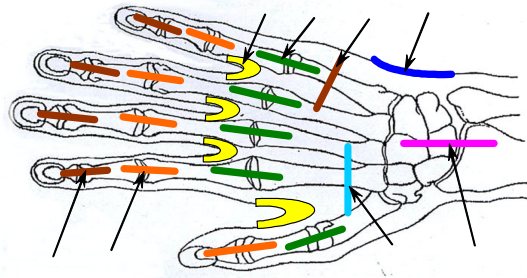
- Elicitation of user information (Questionnaires)
- Observing The user (Ergonomist, Occupational therapist, etc.)
- Stereotypes: Community (peoples groups), using statistical methods

Quantitative Methods :

- Log files
- Sensors

Mathematical Models, predictions algorithms

Human Parameters

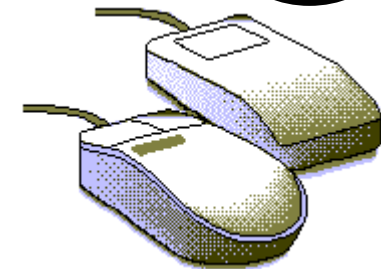
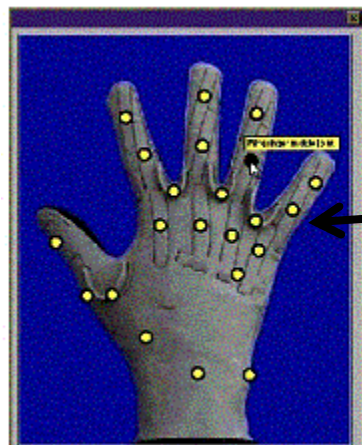
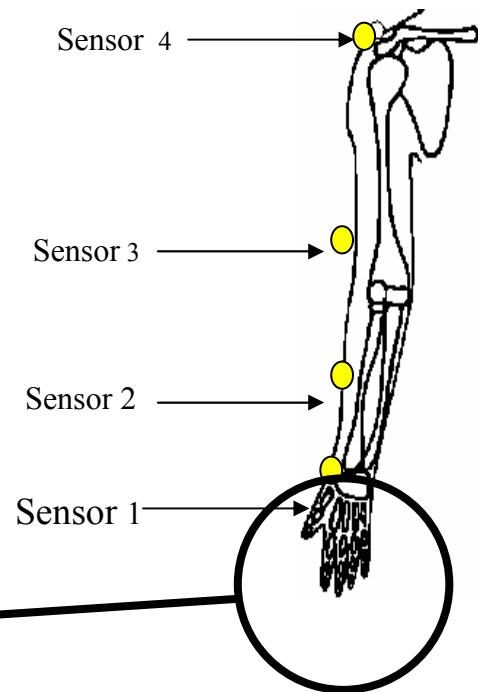


Motor



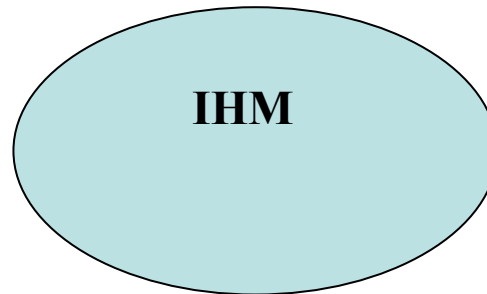
Sensor position

STS

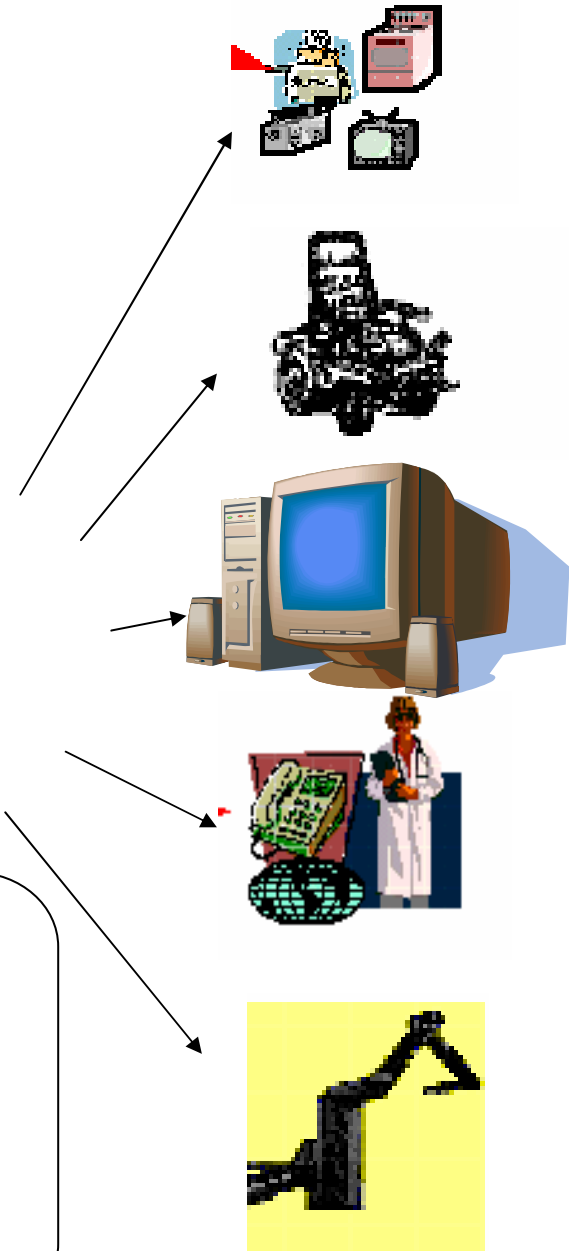


Machine Parameters

Computer Access



- Pointing
- Clicking
- Drag and drop



Machine Parameters

Cursor Tracking System



Test1 : duration of the task.
connecting the two targets

Test2 : the accuracy error is
the area between the real
layout and the ideal one

Test 3: the number of clicks

Conclusion

- Experimentation environment
 - Garches Hospital
 - AFM
- Evaluation and validation in real Context
 - Leisure environment (Bastidon EDF)
 - School environment (Toulouse Lautrec)
 - Residence environment (ADEP)

Thank you for your attention