

“UBWALL”,
ubiquitous wall changes an ordinary wall
into the smart ambience

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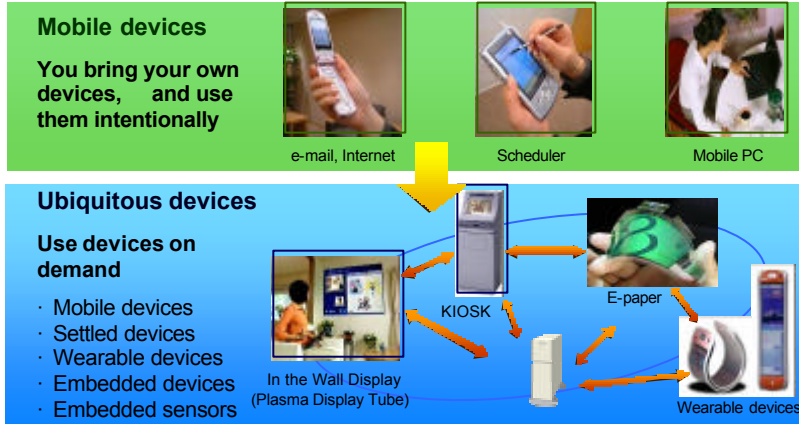
- Introduction
- What is UBWALL?
- Simple Demo
- Sample Scenario
- Discussion
- Future work

Paradigm shift in computing

“Ubiquitous Computing”

Ownership of Computing → Situated Utilization

Enjoy computing power even though you have no device.

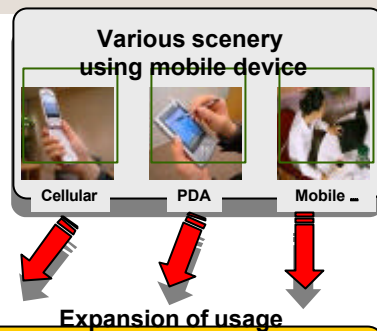


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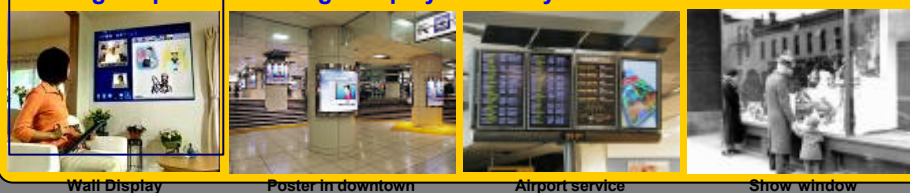
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Paradigm shift in Display

- Change of IT usage situation
 - Ubiquitous device in the future
 - Use device on demand, on site
 - Printed matter (Poster, Advertisement, or Directory info.) will be provided with a large display
- Large display
 - “Watch” expand to “Interaction”
 - “Personal use” expand to “Plural and simultaneous”
 - Change of setting location



Usage expansion of Large Display / One way info. service → Interaction

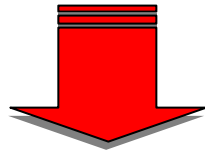


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Smart Ambience

- “Smart Ambience” is the system which Intelligent function is installed in environment



System detect a person and
provide optimal service
||
AGENT



Wall Display



Poster in downtown



Airport service



Show window

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UBWALL (PDP model)

Motion Sensor

PDP with touch sensor

REID R/W (8 series)

PC with W-LAN



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UBWALL Demo

Demonstration with VTR

UBWALL (projector model)



“UBWALL”
projector model is
easily installed in a
wall.

Motion Sensor

Screen (Projector)

RFID R/W (8 series)

PC with W-LAN

Interaction rule example

```
<Rule>
  <MenuName >airport.time</MenuName >
  <Id>D80003</Id>
  <Demo>AIRPORT</Demo>
  <State>1-Screen</State>

  <Action
  url="http://10.25.184.60/PutMemoWebService/Service.aspx
  " method="putMemoOnPositionEx "
  namespace="http://tempuri.org/">
    <Parameter name="width" value="1024"/>
    <Parameter name="height" value="48"/>
  </Action>
</Rule>
```

Condition part
When a user touches UBWALL, next action is activated.

Action part
When upper condition is satisfied, this action is activated.

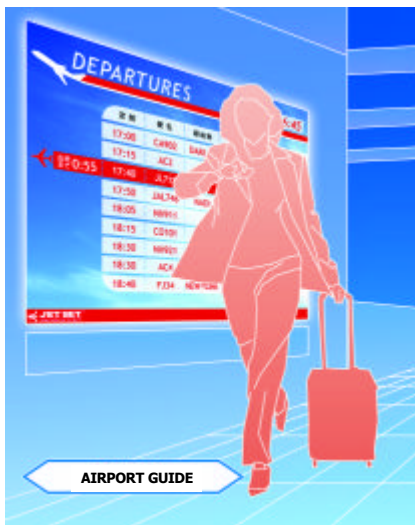
Scenario

Scenario is consist of a series of interaction rules.

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Scenario in Airport



Flight information service

- Personal service and public service
- Simultaneous information providing

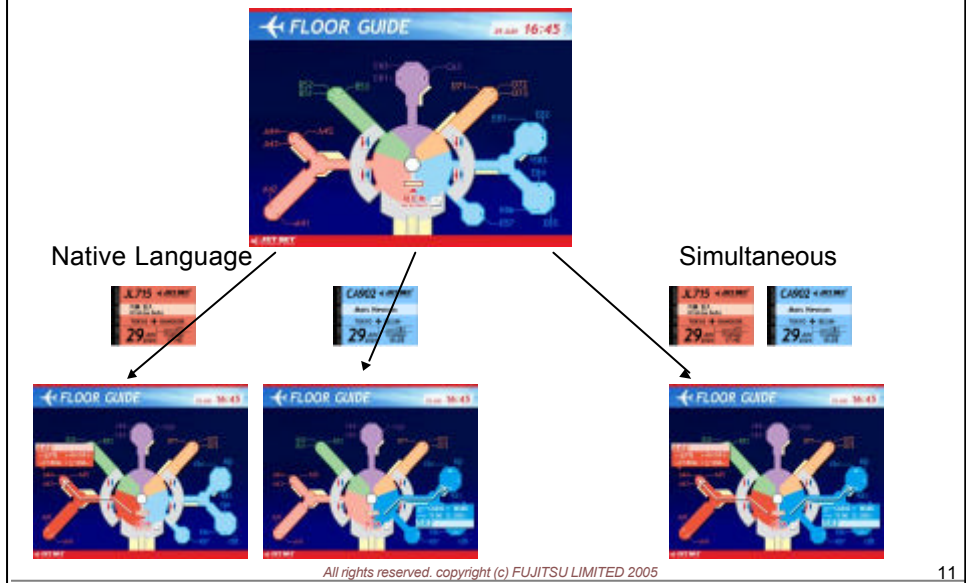
« Boarding pass with IC chip is the key »

- (1) In the departure floor, there are so many people and many flight information are displayed.
- (2) Personal customer might be want to know his/her own information at first.
- (3) When the boarding pass get closer to UBWALL RFID reader, ID is detected and flight information is displayed.
- (4) But information about privacy matter is inhibited, only the person who touched UBWALL can know adequate info.

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Directory service in Airport



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Shopping scenario

Shopping service with UBWALL

- Promotion
- Awareness
- CRM service
- Guide people into the shop

« Offer sample music in the CD shop »

- ? UBWALL shows music titles now on sales for promotion
- ? Customers find it and get interested
- ? Sample music items are listed on their mobile device and can make selection
- ? The music is transmitted to the mobile device wirelessly and then it plays
- ? Download and buy favorite music on line with the mobile device
- ? Multiple plays and downloads are permitted

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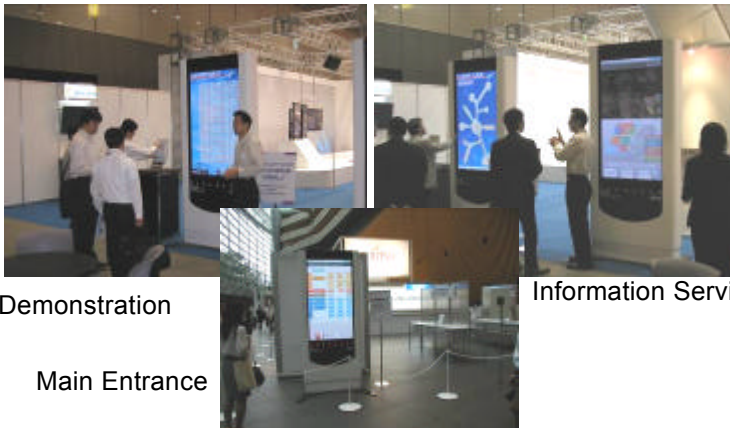
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Discussions

- Service Value Test
- User Interface Test
- RFID Usability Test

Service Value Test

- Appropriate for directory services, promotion services



Demonstration

Information Service Area

Main Entrance

User Interface Test

- People want to touch display, but...
 - General Information is enough for almost all the people and those people satisfy only touch and look at the general information.
 - In order to make them use RFID cards, we need to offer extra service like delivering a discount ticket.



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RFID Usability Test

- With easy Interface, get users' real taste
- How to deliver cards



RFID card



Felica ready
Cellular
(Future)

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Customers' Opinion

- Privacy issue is clear?
- W-LAN device become popular?
- RFID cards become popular?



AI-MATE
(KDDI)



WipCom
(Net-2Com)



Ubiquitous
Communicator



Wireless IP
Video-Phone

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UBWALL for future

- Expand it to interactive service tool with intelligence

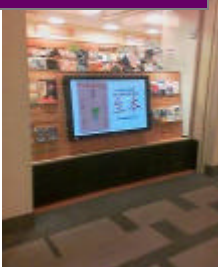
**Directory
services**



**Electronic
Poster**



Field Promotion



Pillar Poster



Public Space



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The Fujitsu logo consists of a red infinity symbol positioned above the word "FUJITSU" in a bold, red, serif typeface.

THE POSSIBILITIES ARE INFINITE