A photograph of a table with a bowl of fruit, a mobile phone, and a small dish of bread. The table is white and the background is dark. A yellow horizontal bar is overlaid on the image.

## Mobiles and the Home of the Future

Todd S. Harple, PhD  
Digital Home Group  
Intel Corporation

ITU New Initiatives Workshop on  
The Regulatory Environment  
for Future Mobile Multimedia Services  
Mainz, Germany  
21-23 June 2006

# Outline Agenda

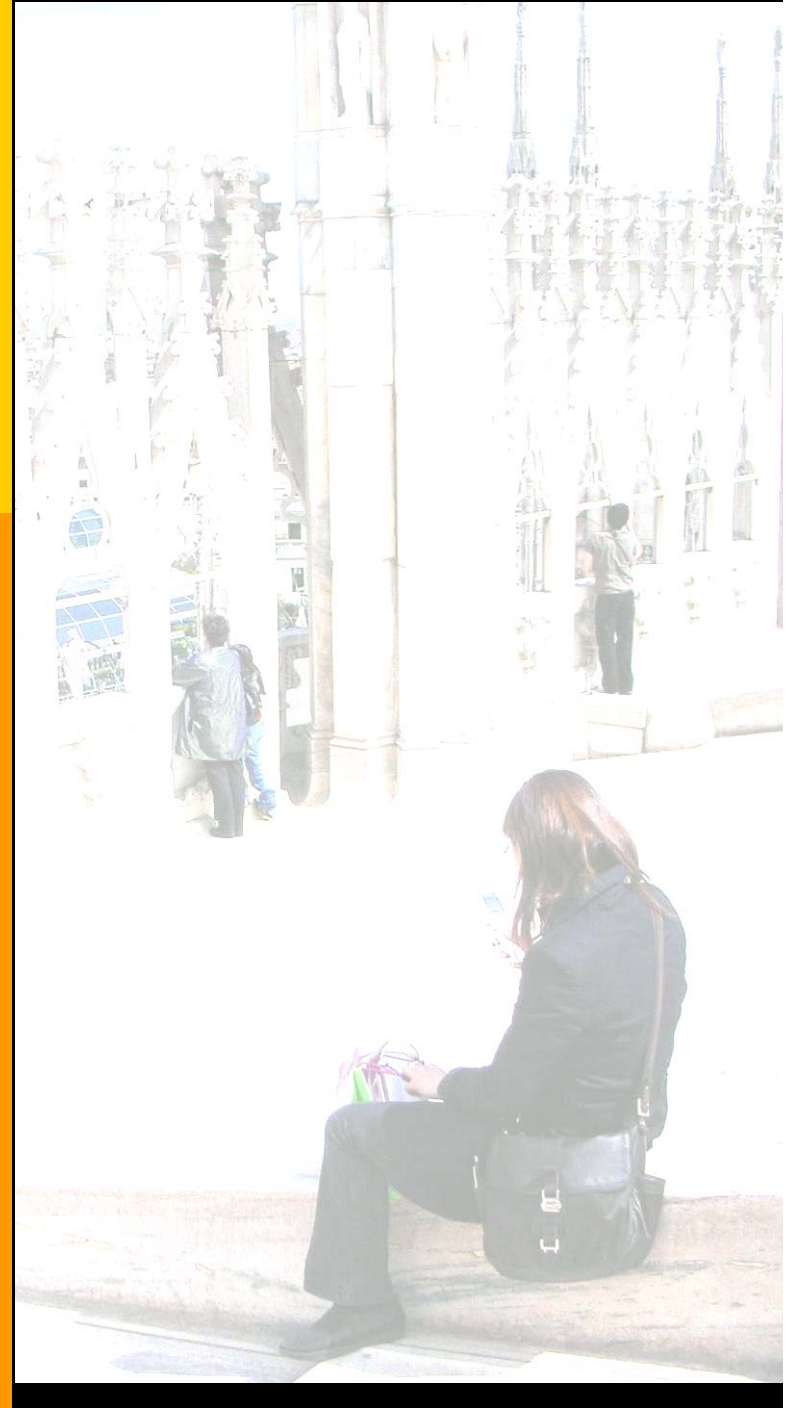
Introduction

Understanding User Experience  
in the Digital Home

You *can* take it with you...

Preliminary insights . . .

Questions



# User Experience / Digital Home Group Domestic Designs & Technologies Research Understanding User Experiences in and of Domestic Spaces

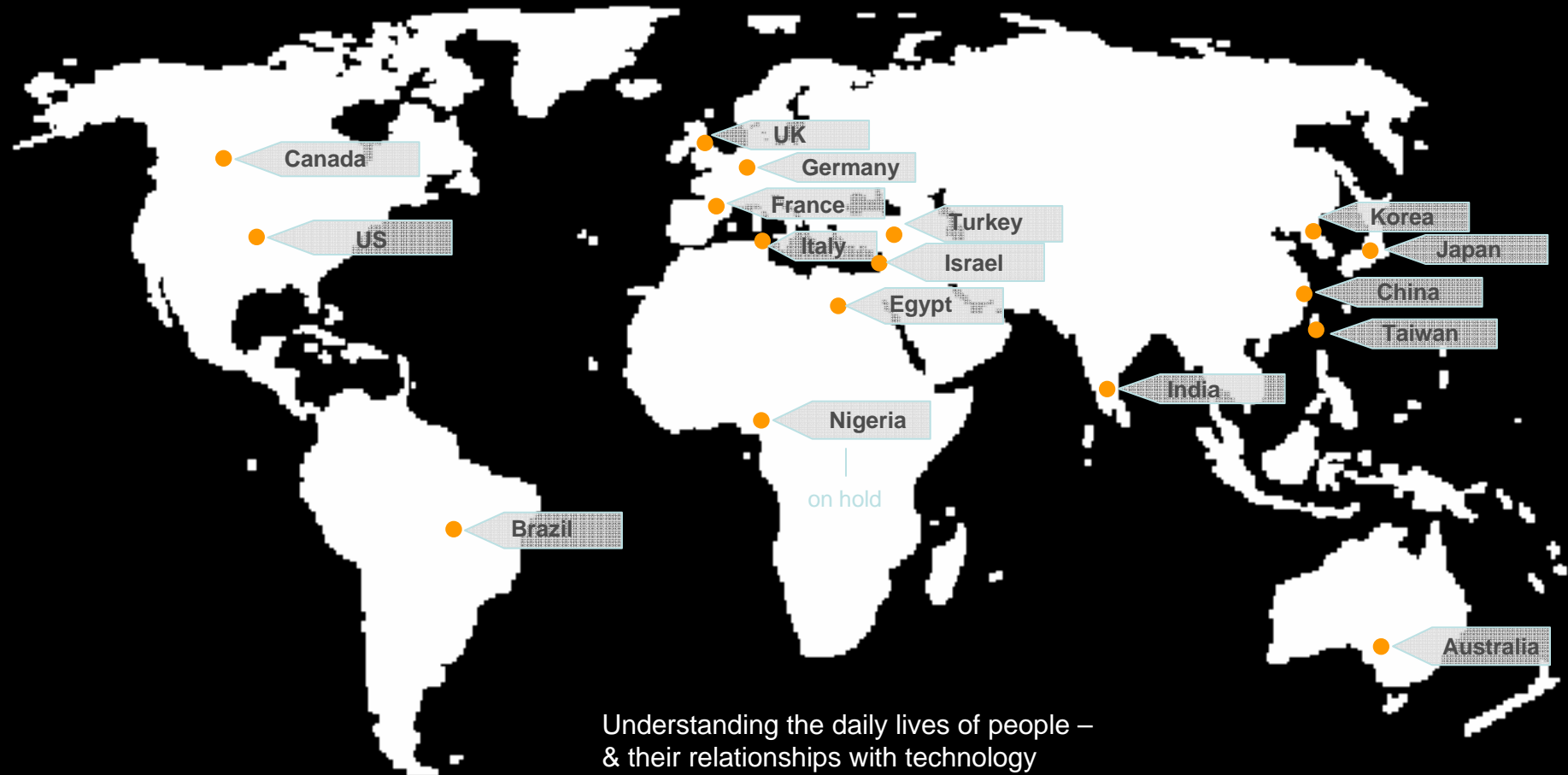
## Our Charter

- Develop a clear & actionable understanding of daily life all over the world.
- Identify opportunities for our platforms to enable experiences that consumers value
- Merge original insights with technology, market, platform & planning intelligence to define usage models & platform requirements
- Design exceptional user experiences into Digital Home Group platform offerings
- Set goals and measure user experience at key points in platform/product creation to enable continuous improvement; seed future research & platform opportunities



# Our Research Agenda


## Jump starting innovation with ethnographic & design research



Understanding the daily lives of people –  
& their relationships with technology

Targeted visits to major population centers in 16 countries around the world  
Explicit sampling of 5-10 'middle class homes' in each city  
Ethnographic and design research with families and individuals

# Thinking about mobility...and the implications of portable (domestic) objects



## You *can* take it with you

Global, ethnographic studies of handheld devices in- and outside the home

4 COUNTRIES . 19 HOMES . 131 PEOPLE { Japan . Taiwan . Italy . Turkey }

### the project

- to understand what people carry with them outside the home and why those things are important
- to explore culturally-specific relationships between handheld devices and domestic life
- to identify global and local opportunities for the integration of Intel's handheld and home technology platforms

### the people

- nuclear families, extended families, temporary and atypical living arrangements
- a range of income levels, household configurations, and mobility of work situations

### the methods

- semi-structured ethnographic interviews
- home tours & technology inventories
- home mappings
- participatory design sessions
- purse/wallet/bag probes
- photo-elicitation of travel scenarios
- participant shadowing to "second-" and "third places"
- cultural immersion & observational research

## ...but *why* do you?

Exploring cultural values around the world to identify opportunities for Intel innovations in the home

Jay Melican { jay.melican@intel.com } Todd Harple { todd.s.harple@intel.com } Brooke Foucault { brooke.e.foucault@intel.com }

# Thinking about mobility...and the implications of portable (domestic) objects

## You *can* take it with you

### Technology occupies a place of significance among carried objects.

Purse Probes: This scavenger-hunt-like game was designed to encourage people to show what they carry with them and to explore the meanings that people attach to those possessions. Twelve groups of men and women in four countries (Japan, Taiwan, Italy, and Turkey) answered the following questions and gave us a glimpse into their personal, portable identities.

### "Show us what's in your bag..."



#### Show us something that reminds you of home...

- *Even though I use my iPod\* everywhere, I need to sync it at home.* – Edo, Japanese businessman
- *I say the rosary while I'm driving, and I pray for my family.* – Benedetta, Italian grandmother and businesswoman
- *My national ID card is next to my children's cards in my wallet. We're all together, kind of like we are at home.* – Buket, Turkish mother of two



#### Show us the most valuable thing you carry with you...

- *I use my electronic dictionary at work when I can't remember an English word; speaking English helped me to get a better job.* – Kirin, Japanese office worker
- *My mobile phone, because it's the only place I have saved phone numbers for my friends and family.* – Yin, Taiwanese art director
- *My husband's medicine; he has high blood pressure, and at any moment, he may need it. It is vital that I have it with me.* – Eylul, Turkish housewife



#### Show us the most useful thing you carry with you...

- *A digital camera. My memory is really bad and even writing things down is not so helpful, so I take pictures to remember.* – Pearl, Japanese office worker
- *My house keys. My parents get very upset when I come home late and have to wake them up because I have forgotten my keys.* – Maura, Italian high school student
- *I use my USB memory stick all the time for downloaded music and transferring files. We used to say we didn't know what we did before mobile phones, but now we say we don't know what we did before USB.* – Jian, Turkish university student

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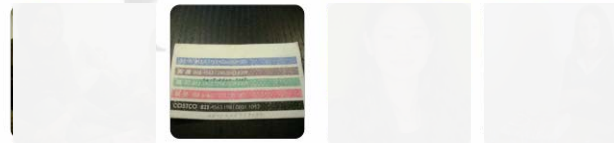
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### "Show us what's in your bag..."



#### Show us the thing that best represents you...

- I carry a wallet-size card to remind me of all my monthly expenses. I'm in charge of making sure my sister and I get our bills paid on time. – Jenne, Taiwanese television producer
- A ring I bought for myself after I lost weight. When I look at it, I remember to be skinny. – Czu, Japanese office worker
- My whole handbag. It's an English bag that is pink and stylish. It's my favorite. – Sofia, Italian administrative worker



#### Show us something you never show to anyone...

- I don't like other people to know I have an ATM card. In Taiwan, thieves will target the elderly and force them to withdraw cash. – Wu Mama, Taiwanese grandmother
- I carry a picture of my uncle who passed away so I never feel like I'm alone. – Fabiana, Italian university student
- A page with prayers from the Koran: it's important to me, but people might judge me if they saw it, so I keep it hidden. – Eftlya, Turkish housewife



#### Show us something that is badly designed...

- My national ID is very large, and it has information on it that shouldn't be on an ID. They automatically put your religion on there. No one asks; they just automatically put Islam, even if that's not what you are. – Tizi, Turkish schoolteacher
- My company mobile phone: it's hard to use; it's heavy; there's nowhere to keep it; the buttons are exposed; it breaks; plus, you can only fit one charm on there. But I have to carry it anyway. – Pearl, Japanese office worker
- I have nothing that is badly designed. If it's badly designed, you don't buy it. – Giorgio, Italian salesman

Jay Melican [ [jay.melican@intel.com](mailto:jay.melican@intel.com) ], Todd Harple [ [todd.harple@intel.com](mailto:todd.harple@intel.com) ], Brooke Foucault [ [brooke.e.foucault@intel.com](mailto:brooke.e.foucault@intel.com) ]

A final story....and questions...

[todd.s.harple@intel.com](mailto:todd.s.harple@intel.com)