

What is Cross-Cultural Design?

Cross-Cultural UX Design Seminar

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Topics

1 Going Global

2 Cross-Cultural Design in Product Development



1

Going Global



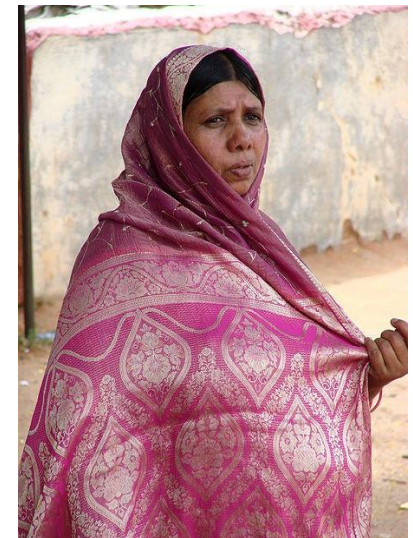
What is cross-cultural design?

- Companies are expanding their customer basis across national and cultural boundaries
- Cross-cultural design is designing technology for different cultures, languages, and economic standings
 - Ensuring usability and user experience across cultural boundaries



Why is cross-cultural design important?

- Technology is always contextualized in a culture and users interpret products based on their cultural backgrounds and values
 - Chinese peasants use washing machine to clean potatoes
 - Cell phones could become means to learn prayer times for Malaysian Muslims
 - Kellogg's in India
 - "The washing machine that ate my sari"



Example: American cars in Japan

- The size of the cars were not practical
- The steering wheel was on the wrong side
- Seat sizes and adjustments did not fit the average Japanese
- Engines weren't designed to run on Japan's lower octane fuel and performed poorly
- R, D, and L on the shift had no meaning for Japanese
- Repairs required hard-to-find English-based tools



Approaches to cross-cultural design

- Using existing cultural theories
- User-centered design in the specific culture and countries
 - User studies with local people
 - Usability tests



From utility to user experience



Utility



Usability



Experiences

User Experience vs. Usability

- Usability
 - **Task-oriented**: efficiency, effectiveness, satisfaction
 - Mostly **objective**: e.g. timing, task completion
 - **Prevention of obstacles** and errors
- User experience
 - **Holistic**: user / product / usage situation
 - **Subjective**: how people experience products
 - **Positive**: positive outcomes; i.e. positive emotions
 - **Functional** (pragmatic) & **Emotional** (experiential, hedonic)



2

Cross-Cultural Design in Product Development

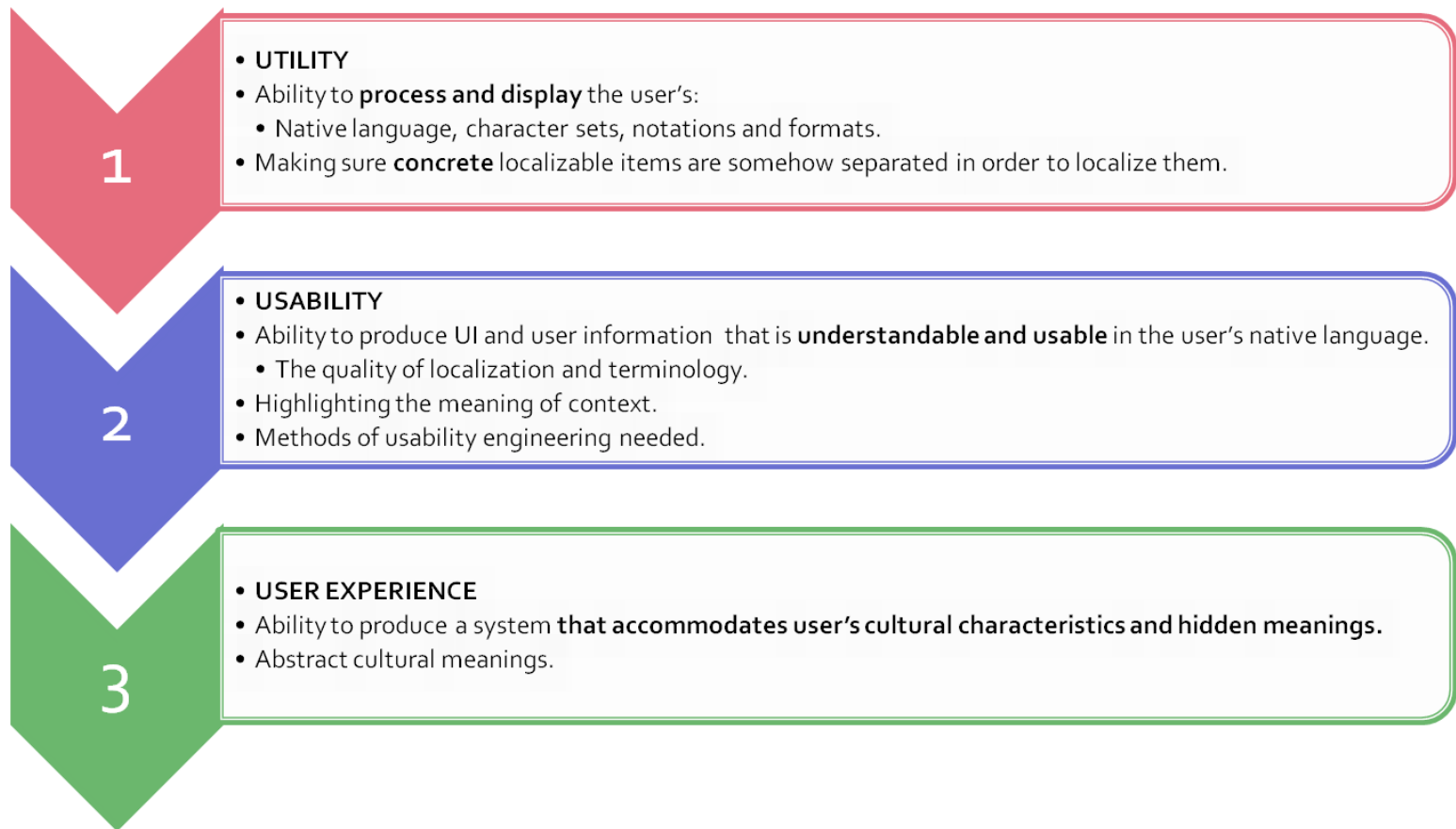


Globalization Process

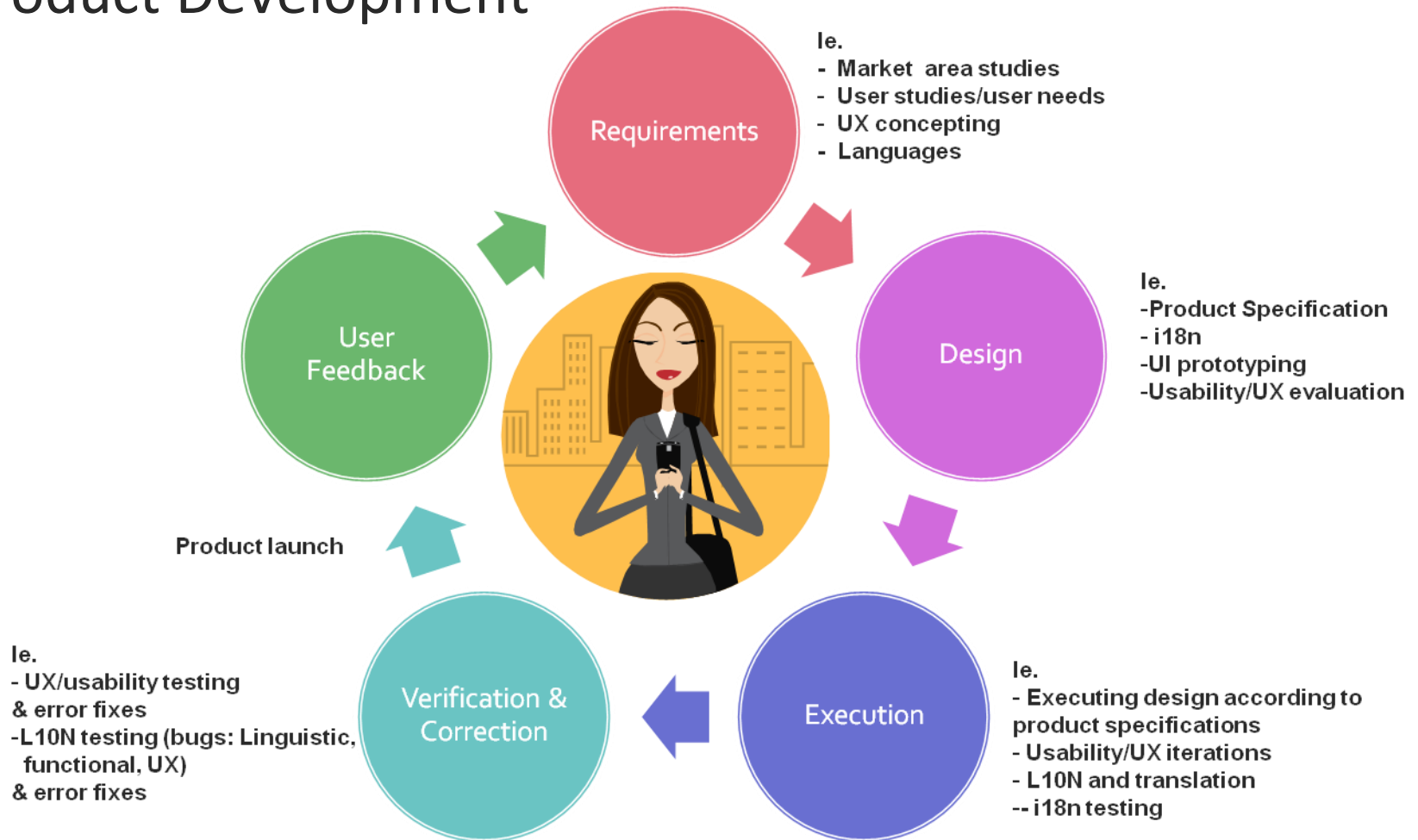
- Globalization
 - Transformation of business and processes to support customers around the world, in whatever language, country, or culture they require. The technical processes of internationalization and localization make globalization possible.
- Internationalization (i18n)
 - Ensuring that products are designed and developed free of any culture-specific attributes, so they can be easily localized.
- Localization (L10N)
 - Making the necessary design changes so that products are culturally and technically suited for the target culture.



Example: UI Localization and UX

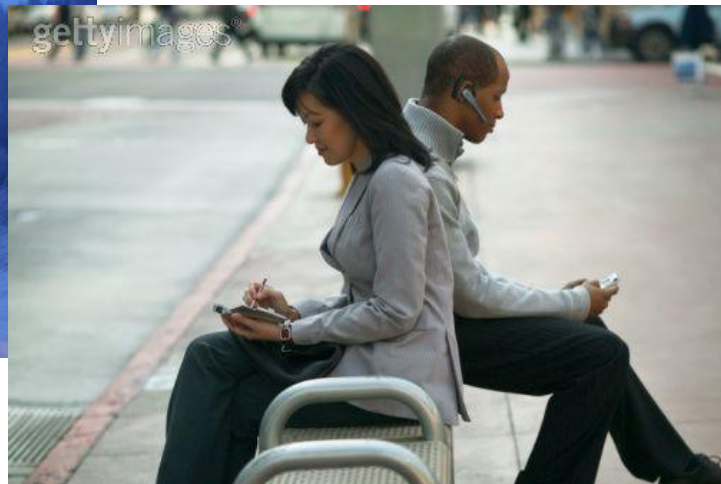


Product Development



Culture & User Experience

- User experience attributes are culturally bound
- Culture influences human-product interaction
- How to study culture? How to gather useful data, compare it and apply it in a sensible way to your product's design and implementation?
- There is no simple agreement on a specific definition of culture



Cultural Metamodels

The Iceberg Model



The Pyramid Model



Culture: Objective & Subjective

- **Objective** (social and material)
 - Society's political and economic system
 - Customs
 - Art, architecture, and institutions
- **Subjective** (psychological)
 - Society's values, expectations, theories of action, and patterns of thinking



Culture: Things to investigate

1. Cultural metamodels (ie. Iceberg, Pyramid):

- Help to understand different layers of culture.

2. International Variables:

- Objective (ie. Writing system) or subjective (ie. Humor)

3. Cultural model for your own needs:

- Helps to design better for different cultures .
- Can be used for identifying global information for i18n, cultural bias, metaphors, assessing the degree of localization, avoiding cultural mistakes that can be offending or misleading, evaluating the quality of an international product.

• Cultural Dimensions, eg. Geert Hofstede



Example of using existing theories- Hofstede's five cultural dimensions

- Power distance
- Individualism vs. collectivism
- Masculinity vs. femininity
- Uncertainty avoidance
- Long vs. short-term time orientation



High power distance; Malaysia

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About Us

- VC's Message
- The University
- Client's Charter

News

Prof. Dr. Mustafa appointed the new UUM Deputy Vice-Chancellor (Academic & International).....Read more...

Announcements

- Graduates Tracer Study (Follow-Up)
- Successful Applicants For First Semester 2009/2010 Session
- Post-Graduate Admission Application Status

Google Search:

Design tips

- Focus on expertise, leaders and authority
- Importance of certifications, awards & logos
- Social roles to organize information
- Structured, guided access to information



Low Power Distance; Netherlands



- Studiekeizer >
- Student >
- Medewerker >
- Alumnus >
- Ondernemen >
- Pers >

Nieuws

Meer nieuws

Einde aan energieslurpende gebouwen

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Gebouwen kunnen zuiniger. Daartoe moeten bouwkundigen installatietechniek gaan meenemen in het integrale ontwerp. Daarom begint maandag 7 september aan de TU/e ir. Elphi Nelissen als 'fellow' Installatietechnologie. Zij gaat studenten bouwkunde al in hun eerste jaar voorzien van de nieuwste kennis op het gebied van installaties en bouwphysica.

Lees meer >

Agenda

- SEP 07 **Opening International Center for Sustainable Excellence** >
Locatie: de Witte Dame Eindhoven
- SEP 07 **Zin en onzin van de ruimtevaart** >
- SEP 07 **Opening Academisch Jaar 2009-2010** >
- SEP 09 **De Dag van de Duurzaamheid** >
Locatie: zaal 16, Auditorium
- SEP 16 **A lesson of Belarussian, Wit-Rusland** >
Locatie: TU/e, Zwarte Doos

Design tips

- Youthfulness
- Less structured access to information fine
- Emphasize people in images

Mexicaanse griep

Informatie over de Mexicaanse griep (nieuwe influenza A)

High uncertainty avoidance; Belgium

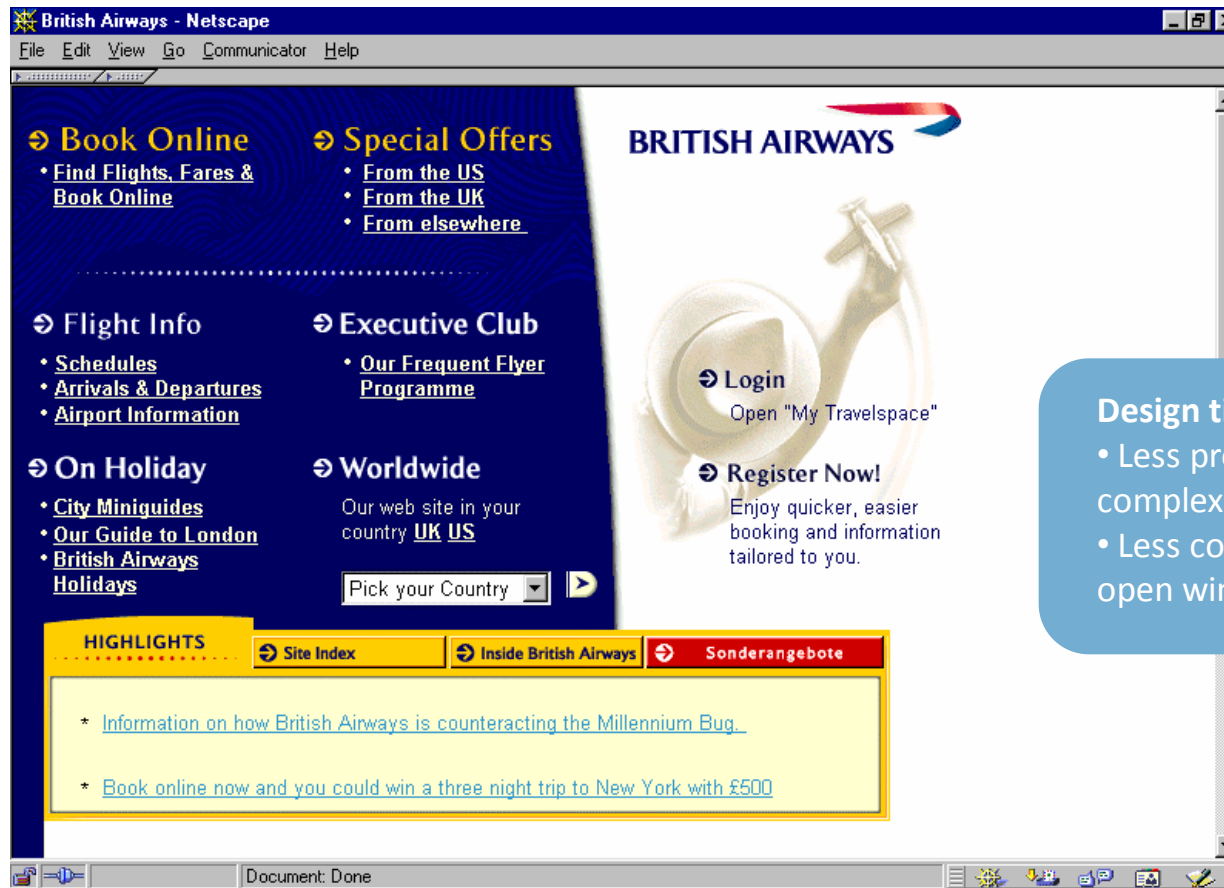


Design tips

- Reveal results of actions
- Use task animations to reduce user error
- Encode meaning through multiple cues
- Keep it simple



Low uncertainty avoidance; UK



Design tips

- Less protection from failure; complexity and risks more valued
- Less controlled navigation; links may open windows



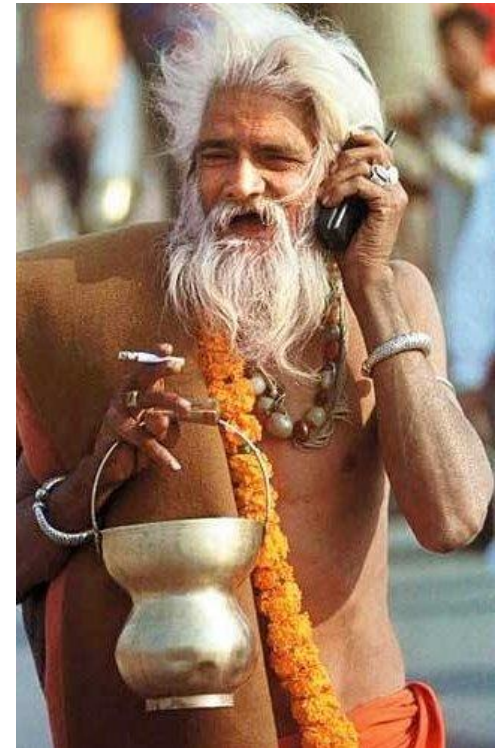
Pros and cons of the approaches

- Using existing cultural dimensions (e.g. uncertainty avoidance)
 - Reinforce stereotypical views?
 - Cultures are continuously developing
 - Quick and dirty, cost-efficient
- User-centered design in the specific culture and countries
 - On site
 - Provides the most reliable information
 - Expensive and demanding time
 - Remotely
 - Cost-efficient, but not many methods exist yet
 - E.g. questionnaires, diary studies and remote usability tests



Conclusions

- Cross-cultural design is ensuring usability and user experience across cultural boundaries
- Cross-cultural design requires understanding of cultural differences and application of user-centered design methods in target cultures



More information

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Thank you!

