DESIGN RESEARCH

Iis Tussyadiah, PhD
Guest Lecture at
Hong Kong Polytechnic University
Background: Experience design

Definition: Design, designing and design research

Conceptualization: Experience design in tourism

Design research methods
- Explorative
- Generative
- Evaluative

Design research exercise: Mobile-mediated tourism experience
EXPERIENCE DESIGN

Emphasis on quality tourism experience

- Experience economy
- Entertainment economy

Unique, differentiated products and services lead to memorable experiences.

Values and meanings can be designed through contextual elements within tourism services and experiences.
Design consciousness
- Design as value added factor

Design thinking
- Design as a methodology for innovation and enablement

Development of experience-centric services
- orchestrate all contextual elements, tangible and intangible, of service experience
“Design is to design a design to produce a design.”

Heskett, 2005
WHAT IS “DESIGN”?  

“Design is to design a design to produce a design.”

Heskett, 2005
WHAT IS “DESIGN”?  

“Design is to design a design to produce a design.”  
Heskett, 2005
WHAT IS “DESIGN”?  

“Design is to design a design to produce a design.”

Heskett, 2005
“Design is to design a design to produce a design.”

Heskett, 2005
“A design is the basis for, and precursor to, the making of an artifact.”

Love, 2002
“Designing is a human activity leading to the production of a design.”

Love, 2002
Design research:
- A variety of practice-based or applied research,
- Research activities conducted as a part of designing process.

Design research are activities that are distinct but inseparable from designing.
DESIGN, DESIGNING & DESIGN RESEARCH
IN TOURISM & HOSPITALITY

Iis Tussyadiah, PhD
Hong Kong Polytechnic University
“Designing services that are useful, usable and desirable from the user perspective, and efficient, effective and different from the provider perspective.”

Mager & Sung, 2011
EXPERIENCE DESIGN

“A practice of designing products, services, processes, events, and environments with a focus on the quality of the user experiences.”

Shedroff, 2001
A fundamentally ethical approach to designing with an emphasis on understanding users’ experience with services to design/redesign services that enhance user experiences.

“...In response, we must anticipate & demonstrate how our design decisions lead to better outcomes.”
EXPERIENCE DESIGN

Three conceptual foundations:
- Human-centeredness
- Iterative process
- Holistic experience concept
HUMAN-CENTEREDNESS

“Designing with an extensive attention to needs, wants, expectations and limitations of the end users (human).”

Goal: making a direct connection between users’ internal state, design characteristics and the contexts of interactions between users and design.
ITERATIVE PROCESS

“Designing follows a cyclical process of several iterations within which the results of recent iteration are implemented to change and refine the design.”

**Goal:** Improving the quality and functionality of design by encouraging adaptive learning and rapid responses to change throughout the design cycle.
HOLISTIC CONCEPT

“Designing for human experiences as a complex interaction between design attributes and socio-cultural contexts where meanings and values emerge.”

Goal: Capturing the complexity and richness of experience in order to generate and develop a holistic concept that bridges experience in the customers’ minds and the strategic directions of organizations.
EXPERIENCE DESIGN

Four fundamentals:
- Participatory design
- Naturalistic inquiry
- Integrative research
- Multidisciplinary
PARTICIPATORY DESIGN

Co-designing

Involving users at every stage of the designing process.
NATURALISTIC INQUIRY

Gather information and observe user behavior in natural experience settings and real use situations.
Step 1: Deep dive into the world of truck drivers

* Collecting insights
  - Likes & Dislikes
  - Pride & Joy
  - Aspirations & Ambitions
  - How they view fuel efficient driving
INTEGRATIVE RESEARCH

Explorative, generative and evaluative research processes are essential parts of the entire designing process.
MULTIDISCIPLINARY

The integration of theories and concepts from multiple disciplines that are relevant to the tourism experience contexts.
THE "DOUBLE DIAMOND" APPROACH
Dubberly, 2010
EXPLORATIVE RESEARCH

Capture and understand tourists’ experiences from the tourists’ perspective as a basis/foundation for designing.

Target: experience narrative, emotion, satisfaction

Tools/Methods:
- Researcher – user interaction (naturalistic inquiry)
- User empowerment – Auto-ethnography
- Empathic design
EXPLORATIVE RESEARCH

What to look for:

- Experience narratives – stories
- Emotion
- Satisfaction
EXPLORATIVE RESEARCH

Experience narratives:

- The dynamic, experiential quality of tourism, leisure, hospitality

- The experiential attributes across space and time – the “journey”
EXPLORATIVE RESEARCH

Four areas of emotion research:

- The subjective (i.e., feelings)
- The psychological (i.e., activation of the systematic nervous system)
- The expressive (e.g., facial expression)
- The behavioral (i.e., attitude resulted from a certain emotion)
EXPLORATIVE RESEARCH

Three dimensions of emotion:
- Pleasure/Valence (positive – negative)
- Arousal (high – low)
- Dominance/Power (high – low)

(Mehrabian & Russel)
EXPLORATIVE RESEARCH

Three dimensions of satisfaction:
- Object of satisfaction
- Scope of satisfaction (whole vs. aspects)
- Ways of appraisal (cognitive vs. affective)

Discrepancies:
- Personal characteristics
- Socio-cultural characteristics
EXPLORATIVE RESEARCH

Capturing satisfaction:
- Calculated contentment: Mental calculus
  Overall Satisfaction = summation of aspect-satisfactions

- Inferred from affect
People think they are satisfied when they feel good
EXPLORATIVE RESEARCH

Tools with Researcher – User interactions:
- Participant observation
- User shadowing
- In-depth interview
- Focus group discussion
- Field experiments
- Mobile ethnography
EXPLORATIVE RESEARCH

Tools that empower users/auto-ethnography:
- User diaries
- Photo elicitation
- Mobile auto-ethnography (GPS tracking and check-ins)
- Video/audio recording
- Experience-based survey
EXPLORATIVE RESEARCH

**Empathic design** methods suggest researchers to step into users’ life in an attempt to conceive and reflect on user experiences beyond their personal experiences and knowledge.

Tools with empathic design:

- **Embodiment** – researchers utilize their own body as a research tool (e.g., walking experience)
- **Service safari** – researchers being service consumers
EXPLORATIVE RESEARCH

Service Design Tools: Service Safari

- Considerations:
  - Different stages which make up the service
  - People involved in delivering the service and what they do
  - What objects you use or interact with
  - What spaces the service takes place in
  - What information is available to people
  - How people involved in delivering the service contribute to the experience.
EXAMPLE: SERVICE SAFARI (Attachment)
EXPLORATIVE RESEARCH

Service Design Tools: Customer Journey Map
- Elements of customer journey through services
- Service “touchpoints” – “moments of truth”
- “Pain Points” and “Magic Moments”
- Consumer needs and requirements; service performance.

Analytics:
- Situations: processes that need improvement
- Recommendation: design elements
Customer is online checking options

Too many options to choose from

Competitor site is more clear and has online support

Asks for feedback online (key influencers)

Commits to changing provider

Customer service online chat offers support until phone support is ready

Long wait in phone line. Process is more involved than first thought

Change over is painful and riddled with problems

Sent out customer feedback form and follow-up call made

Accessible via social media for any questions

---

**Situation**
Customer decides to research alternate service providers. Elements to consider: cost savings, service add-ons, customer support, ease of transferring networks, can we keep the same numbers?

**Recommendations**
- Buy adwords and redirect customers to specific page with comparison tool
- Offer call-back service if customer wants to speak directly to CSR
- Include clear call-to-action with obvious price points
- Include real customer stories.

**Situation**
Having done the research the customer is looking for word-of-mouth feedback and considering other pricing options to see if changing service provider actually makes financial sense.

**Recommendations**
- Offer real-time assistance
- Include an online calculator to help compare prices against competitors
- Meet your customer where they hang-out online and provide a service above and beyond your normal offering i.e. youtube videos, competitions, community forum etc.

**Situation**
Customer makes the big call to change to a new service provider, but now things start to get tricky. The process of providing detailed information is complex and repetitive.

**Recommendations**
- Reduce the amount of information required and improve form fields
- Allow customers to save and come back to areas that may need clarification
- Ensure your customer has an ID number so previous history is logged and repetition of steps is avoided
- Train CSR’s to behave like ‘real’ people.

**Situation**
Changing numbers may seem simple enough however testing to see if the correct numbers are assigned had to be done by the customer. There were mix ups that took an extended period of time to fix.

**Recommendations**
- Set expectations of next steps
- Confirm a time to contact the customer and test the numbers
- Send out an information pack
- Establish an online FAQ’s, encourage customers to add their feedback or check in with any problems
- Stay in touch with customers via social media channels.
EXPLORATIVE RESEARCH

**Service Design Tools: User Personas**
- User profiles beyond traditional, personal characteristics
- The “Heroes” in customer journey maps
- Include:
  - Experience goals
  - Patterns/styles
  - Expectation
  - Motivation
  - Roles, responsibilities
  - Limitations, disabilities
GENERATIVE RESEARCH

Determine “what is meaningful.”

**Target**: Design ideas, solutions for design problems.

**2 Steps:**
- Projective research: expressive exercises
- Constructive research: concept ideation
PROJECTIVE RESEARCH

Exercises that help people to express emotions, ideas, and desires around service experience.

Participatory design activities allowing participants to communicate ideas using sketches, collages, diagrams, clay models, etc.
CONSTRUCTIVE RESEARCH

Exercises designed to validate reactions to specific design concepts, flows, and evidence.

Collaborations between designers and users in activities that promote creativity and conversations:

- Co-creative sketching and public prototyping;
- Flexible modeling, storyboarding, simulation exercises, etc.
Service Design Tools:
Service Blueprinting

Physical Evidence

Consumer Actions

On-stage contact employee actions

Backstage contact employee actions

Support Processes

Line of interaction

Line of visibility

Line of internal interaction
Service Blueprint: Overnight Hotel Stay

PHYSICAL EVIDENCE
- Hotel Exterior
- Parking
- Desk
- Registration Papers
- Lobby
- Elevators
- Hallways
- Room
- Amenities
- Bath
- Menu
- Delivery Tray
- Food Appearance
- Food
- Bill
- Desk
- Lobby
- Hotel Exterior
- Parking

CUSTOMER ACTIONS
- Arrive at hotel
- Give bags to Bellperson
- Check In
- Go to room
- Receive bags
- Sleep
- Shower
- Call room service
- Receive food
- Eat
- Check out
- Leave

EMPLOYEE ONSTAGE ACTIONS
- Greet and take bags
- Process registration
- Deliver bags
- Deliver food
- Process check out

CONTACT BACKSTAGE ACTIONS
- Take bags to room
- Take food order
- Prepare food

SUPPORT PROCESSES
- Registration system
- Registration system
CONSTRUCTIVE RESEARCH

Empathic design from theater studies:
- Using detailed scenarios for future situation based upon credible characters and narrative;
- Allows for more detailed touchpoints and appropriate design.

Examples:
- Bodystorming: a type of brainstorming situated in physical experiences;
- Role-playing: acting a service script or scenario.
- Service scripts.
EVALUATIVE RESEARCH

To validate whether the needs and requirements of service experience actually met by the design elements.

- To evaluate, refine and produce design concepts:
  - Experiments, heuristic evaluation, and focus group discussions.
- To monitor the quality of the designed systems and the experiences they allow for.
EXPERIENCE CONCEPT

**Backstaging – Meta-concept**

- The strategic, meaning-evoking tourism experience propositions transformed into the core and peripheral experiences, supported by the storytelling of these experiences.
EXPERIENCE CONCEPT

Frontstaging – Operational concept

- A careful application of design principles in the creation and management of experience-facilitating systems and environments.

- Interactivity; control, mediation
- Triggers; signs, language of services, etc.
“DESIGN” RESEARCH EXERCISE!