
Preliminary Work on Understanding the Static Persona

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- Background
- Problem
- Goal
- User Inclusive Design Processes Considered
- Potential Frameworks to Develop a Dynamic Persona
- Conclusions
- Next Steps

- Success and adaption rate of engineering and design for global development projects are low.
- Sustainability – ability to be maintained – is dependent upon.
 1. Economic factors
 2. Social factors
 3. Environmental factors
- The social factor of sustainability has been addressed in design/engineering for global development with more user inclusive approaches, improving adoption.
- Use of personas or end user data enables designers to develop user requirements empathetically.
 - Snapshot in time
 - Oftentimes, final designs have transformative impacts in global development

- Design and engineering for global development specific to developing communities, does not provide design solutions that are adopted or sustainable long term.
- **Hypothesized reason as to why:**
 - The methods used to gather user requirements capture a snapshot of data on the end users culture, so shifts in culture will directly affect the sustainability of a product.
 - Locally specific design in frontier contexts alters the culture of the end users. The persona, capturing the attitudes, behaviors, etc. used to develop user requirements changes post deployment.
 - Dynamics of end users needs are not fully understood.

- Understand how designs intended as a solution for a set of user needs and requirements influence new user needs and requirements to emerge that are outside the original solution space and impact long term adoption of the product.
- Understand how personas (user profiles, behaviors, attitudes, culture, actions) are encouraged or discouraged to change post design deployment.
- **Initial Approach:**
 - Literature review of design studies that were user inclusive and/or utilized personas that examined the

User Inclusive Design

Approaches

- Participatory Infrastructure Projects (PIP)
- Human-Centered Design (HCD)
- Persona Design
- Appropriate Technology (AT)

Methods

- Interviews
 - Telephone
 - Ethnographic
- Surveys
- Participation
 - Stakeholders

1. Pre-deployment

- Capture user needs prior to involvement in the design process.

2. Mid-deployment

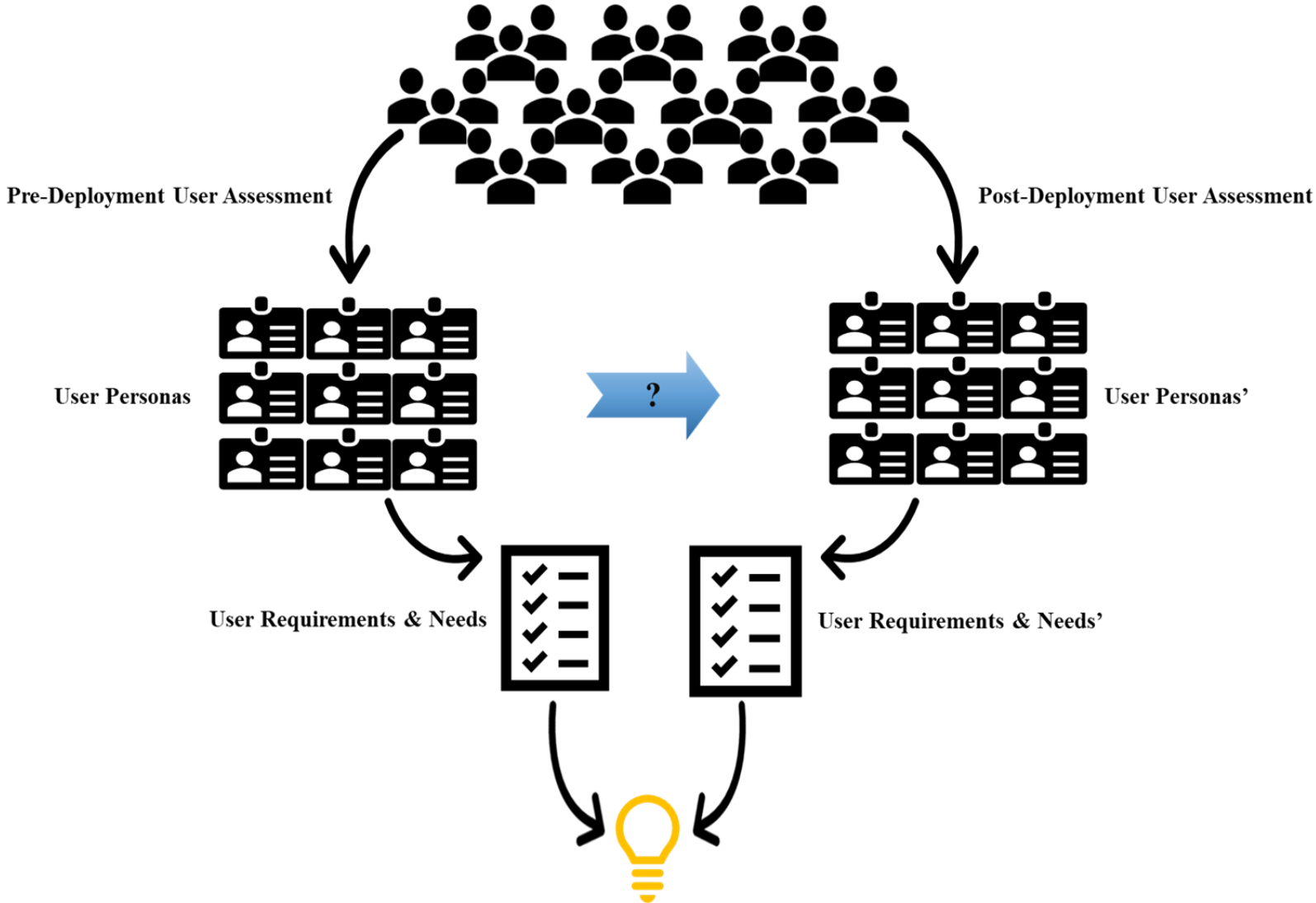
- Assess why users lean towards certain products and uncover the influences behind it.

3. Post-deployment

- Assess user's needs after the use of the product.

Potential Frameworks to Develop Dynamic Persona

- Ethnographic Interviews
- Transtheoretical Model of Change
 - Precontemplation, Contemplation, Determination, Action, Relapse/Maintenance
- Contextual Needs Assessment
 - Dr. Green of LeTourneau University developed a methods to capture contextual needs in Humanitarian Applications
- VALS (Values and Lifestyles)
 - Innovator, Thinkers, Believers, Achievers, Strivers, Experiencers, Makers, Survivors
- Triple Bottom Line
 - Social
 - Environmental
 - Economic



- There is a need for dynamic personas to decrease abandonment of design for global development efforts.
- The goal of future works seeks to understand how designs intended as a solution for a set of user needs and requirements influence emergence of new user needs and requirements that are outside the original solutions space, as well as understand how personas change post design deployment.
- Develop experimental methods to measure change in user requirements at the 3 stages
 - Pre-deployment
 - Mid-deployment
 - Post-deployment

- Develop experiments to pinpoint and understand the major factors that influence the generation of new needs.
- System thinking approach to develop an influence model/diagram.
- Understand what influences persona on an individual level and a community level.
 - Explore the potential use of ABM to simulate how personas change

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Questions ?