

A FRAMEWORK FOR
**CULTURALLY ADAPTIVE
HUMAN-CENTRED DESIGN**

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INTRODUCTION

Human-Centred Design (HCD) prioritizes understanding the people for whom we design, focusing on solving the right problems by placing humans at the center of development.

Although HCD principles are universally intended, they often reflect a Western cultural perspective. This can lead to disconnects in non-Western contexts, resulting in products and services that don't align with global user behaviors and expectations. The one-size-fits-all assumption in HCD can exclude or misinterpret the needs of diverse populations, reducing the effectiveness and acceptance of solutions.

There is an urgent need to extend HCD's empathy to encompass global cultural diversity. Failing to adapt HCD methods for cultural specificities can result in less effective and potentially insensitive designs.

This white paper critically examines the cultural assumptions in traditional HCD methodologies and advocates for a more inclusive design process. It proposes a culturally inclusive framework that respects and incorporates diverse values to create a more globally inclusive HCD practice.

ADAPTING HCD METHODOLOGIES

To create globally inclusive and culturally sensitive HCD methodologies, we need to address biases in traditional design thinking approaches.

While HCD and design thinking drive innovation and user-centric solutions, they are rooted in Anglo-Saxon cultural contexts, values, and norms.

The emphasis on individualism, linear problem-solving, and specific collaboration forms in traditional HCD may not align with diverse global cultures. Anglo-Saxon cultures prioritize direct communication, efficiency, and tangible outcomes, reflected in rapid prototyping and iterative cycles. This focus on speed and efficiency may not resonate with cultures valuing consensus-building, relational harmony, or holistic problem understanding.

To ensure global inclusivity and cultural sensitivity in HCD, we must adapt these methodologies to meet diverse user needs. Embracing a more inclusive approach fosters innovative, culturally resonant, and accessible solutions, enhancing user experiences and contributing to more equitable design outcomes worldwide.

Key considerations

To ensure HCD methodologies are globally inclusive and culturally sensitive, we need to consider these key points:

Recognize and Embrace Cultural Diversity

Acknowledge the Western bias in traditional HCD practices and educate design teams about diverse cultural norms, values, and perspectives to foster a globally inclusive environment.

Prioritize In-depth Cultural Research:

Conduct thorough research to understand the specific needs, values, and behaviors of the target user base, leveraging insights from local cultural experts to ground the design process in authentic user experiences.

Adopt a Multidisciplinary and Empathetic Approach:

Incorporate psychological insights, cross-cultural design principles, and effective multicultural team interactions to create designs that resonate emotionally, functionally, and culturally with users from various backgrounds.

Implement Flexible Communication Strategies:

Adapt communication styles and feedback mechanisms to cater to diverse user groups, ensuring culturally appropriate methods are used to gather insights and avoid imposing Western norms.

Encourage Adaptability and Inclusivity in Design:

Design for both individual and collective needs, values, and experiences, while maintaining flexibility in methodologies to accommodate diverse cultural attitudes towards time, risk, and failure.

Cultural differences impacting HCD

To address the cultural assumptions embedded within HCD methods and techniques, we need to identify and understand the foundational beliefs and values that these approaches often implicitly carry.

These assumptions primarily originate from Western, particularly Anglo-Saxon, cultural values, which may not universally apply or resonate with diverse cultural contexts. By examining various cultural dimensions and communication norms, we can delineate the key cultural assumptions underpinning HCD methods.

These assumptions fall into three categories:

- Communication and interaction style
- Decision-making and problem-solving approaches
- Risk management and time perception

Communication and interaction style

- **Individualism vs. Collectivism:** HCD focuses on individual needs, while collectivist cultures prioritize communal goals. This can lead to designs that don't resonate with collectivist users or address their unique needs.
- **Low-context vs. High-context Communication:** HCD relies on explicit communication, whereas high-context cultures use implicit cues and non-verbal communication. This can cause misunderstandings and hinder collaboration among diverse teams.
- **Power Distance:** HCD encourages open dialogue and equal input, but high power distance cultures rely on authority and may hesitate to critique ideas openly. This can impact team dynamics, feedback, and the design process.

Decision-making and problem-solving approaches

- **Linear/Analytic Thinking vs. Holistic/Relational Thinking:** HCD uses a linear, step-by-step approach, while some cultures think holistically, considering broader contexts and interconnections. This can lead to designs that overlook users' complexities and cultural nuances.
- **Task vs. Relationship Orientation:** HCD prioritizes task completion and efficiency, whereas relationship-oriented cultures value strong interpersonal connections. This can result in designs that emphasize functionality over emotional and social aspects, potentially alienating users.
- **Universalism vs. Particularism:** HCD aims for broadly applicable solutions, but particularistic cultures prefer tailored, localized solutions. This can lead to designs lacking cultural relevance or failing to address unique local needs.

Risk management and time perception

- **Uncertainty Avoidance:** HCD embraces ambiguity and learning through failure, while high uncertainty avoidance cultures prefer clear structures and risk avoidance. This can cause discomfort during the design process and hinder innovation.
- **Linear Time vs. Polychronic Time:** HCD's iterative cycles follow a linear time perception with schedules and deadlines. Polychronic cultures prioritize flexibility and relational aspects over strict timelines, potentially leading to project management conflicts.
- **Emphasis on Rapid Prototyping and Iteration vs. Long-term Orientation:** HCD focuses on rapid prototyping and tangible results, aligning with task-oriented approaches. Relationship-oriented cultures may prioritize strong interpersonal connections, requiring adjustments in team interactions and project timelines

PROPOSAL FOR A CULTURALLY INCLUSIVE DESIGN FRAMEWORK

This framework addresses cultural biases in conventional HCD methodologies and fosters more inclusive, effective, and resonant design solutions for a diverse global user base.

The framework is grounded in insights from cross-cultural psychology, cross-cultural design, and intercultural communication. It offers a comprehensive approach to understanding and addressing the complex interplay of cultural factors in the design process. By adopting this framework, we can navigate cultural diversity more effectively, leading to more inclusive, equitable, resonant, and successful design outcomes.

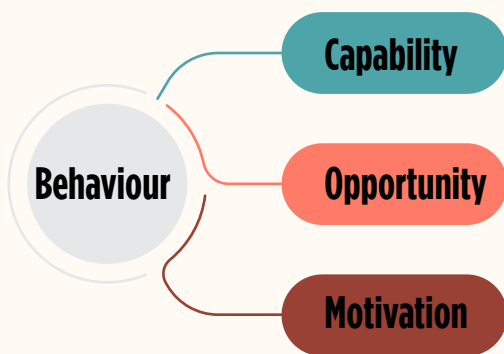
The framework emphasizes the five principles:

- 1. Cultural Awareness & Sensitivity:** Acknowledge and educate designers about Western biases in traditional HCD methods. Foster cultural sensitivity and integrate this awareness into all design stages, from research to implementation.
- 2. Deep Cultural Integration:** Incorporate cultural context deeply into the design process by understanding and integrating cultural nuances, values, norms, and behaviors. Expand design strategies to include collectivist perspectives, promoting communal goals and shared experiences.
- 3. Adaptive Communication & Feedback:** Adjust communication and feedback mechanisms to align with the cultural norms of user groups. This adaptability ensures an inclusive and respectful design dialogue, accurately capturing user insights.
- 4. Holistic Design Approach:** Adopt a multidisciplinary approach, combining psychological insights, practical design applications, and effective intercultural communication. Address the cognitive, emotional, aesthetic, and functional needs of diverse users for deeply resonant experiences.
- 5. Flexibility and Empathy in Design:** Encourage flexibility in methodologies and foster cultural empathy among designers. Provide guidance on accommodating various cultural attitudes towards time management, deadlines, uncertainty, and failure, ensuring a sensitive and inclusive approach.

CULTURAL BRIEFS AS A SOLUTION

Cultural briefs could serve as a comprehensive tool for weaving the nuances of a target culture into the HCD process.

Cultural briefs structured through the **COM-B** model can provide a comprehensive understanding of a culture's demographics, practices, values, communication styles, and technological landscape.



By systematically incorporating these insights into every stage of the HCD process from research to ideation, prototyping, and testing this new paradigm ensures that the end product aligns with users' capabilities, opportunities, and motivations. This results in deeper engagement and more meaningful experiences for users across diverse cultural contexts.

Capability mapping

Physical and Psychological Abilities:

Cultural briefs could include detailed capability mapping to understand both the physical and psychological abilities of different cultural groups. This will help address variations in cognitive patterns like holistic vs analytical processing tendencies and their impact on attention processes.

Language and Communication:

The briefs can provide insights into language use and communication styles prevalent within the culture, thus aiding designers in creating solutions that respect low-context or high-context communication preferences.

Opportunity mapping

Physical Environment:

By understanding the physical environment through cultural briefs, designers can consider the impact of urban versus rural settings, climate, and material resources on the interaction with products/services.

Social Norms and Structures:

Cultural briefs will offer a deep dive into the social norms, family dynamics, gender roles, and religious influences, enabling designs that are sensitive to high power distance cultures and collective decision-making processes.

Motivation mapping

Cultural Values and Mindsets:

By mapping values and mindsets, designers can appreciate the collective goals of a society, moving beyond the individualistic focus of traditional HCD.

Beliefs and Attitudes:

Reflective motivations, such as self-efficacy, goals, and attitudes, will be documented in the cultural briefs, aiding in creating processes and designs that match the cultural identity and long-term orientation of the target users.

Using cultural briefs for design strategy

Cultural briefs should inform every stage of the design process, from ideation to prototyping to final implementation.

They help designers understand not just the "what" but the "why" behind behaviours, preferences, and needs, allowing for the development of solutions that are not only functional but deeply resonant with the target user group:

- **Inform Ideation Sessions:** Provide insights into processing approaches and communication norms to guide ideation, ensuring cultural relevance.
- **Refine Project Timelines:** Adjust timelines to accommodate polychronic cultures, aligning with their flexible practices.
- **Create Clear Structures:** Establish frameworks to reduce discomfort with ambiguity and risk in high uncertainty avoidance cultures, fostering inclusivity.
- **Early Stages (Research and Ideation):** Use cultural briefs to guide research and ensure culturally informed ideation.
- **Design and Prototyping:** Tailor design elements and content using cultural insights to align with cultural practices.
- **Testing and Iteration:** Use cultural briefs to interpret feedback and iterate designs sensitively.
- **Implementation:** Ensure strategies respect and leverage the cultural context for resonant solutions.

CONCLUSION

To create globally inclusive and culturally sensitive HCD methodologies, it is crucial to recognize and address biases in traditional design thinking.

This framework, grounded in cross-cultural psychology, design, and communication, emphasizes cultural assessment tools, adaptive design practices, and strategies for integrating cultural diversity throughout the design process.

It is anchored in five core principles:

1. Cultural Awareness and Sensitivity
2. Deep Cultural Integration
3. Adaptive Communication and Feedback
4. Holistic Design Approach
5. Flexibility and Empathy in Design

Cultural briefs, structured using the COM-B model, serve as a comprehensive tool for integrating cultural nuances into HCD, ensuring inclusive and resonant design outcomes. Embracing cultural diversity enhances user experiences and contributes to more equitable design outcomes worldwide.

By incorporating this adaptive methodology and cultural briefs, designers can create products and services that truly cater to the unique needs of a diverse user base, fostering meaningful and resonant designs.

APPENDIX: FICTIONAL CASE STUDIES

These fictional examples have been created with a specially prompted custom GPT designed with guidelines from this document for the purpose of illustrating the assumptions and principles discussed in this document.

Example 1: Fintech App Development in Nigeria

Background:

A fintech startup, "FinConnect," based in the UK, decides to launch a mobile banking app in Nigeria, aiming to offer microloans, savings accounts, and payment services tailored for the Nigerian market. The app's development was guided by HCD methodologies that were successful in European contexts.

Cultural Assumptions Embedded in HCD Methodologies:

- **User Feedback and Iteration:** Assumes users are willing and able to provide direct and critical feedback in individual testing sessions.
- **Design Thinking Workshops:** Relies on the assumption that participants are comfortable with rapid ideation and open sharing of ideas in group settings.
- **Prototype Testing:** Assumes a level of familiarity and comfort with digital apps and the concept of using prototypes that may not fully function yet.

Challenges Due to Cultural Misalignment:

- **Collectivist Decision-Making:** In many Nigerian communities, financial decisions are often made collectively rather than individually. The HCD process, which frequently solicits individual feedback, might miss broader community needs or concerns.
- **High-Context Communication:** Nigerian communication styles may be more indirect or high-context compared to the direct feedback mechanisms assumed effective by HCD. This can lead to misunderstandings or underreporting of issues with the app in user testing sessions.
- **Access and Familiarity with Technology:** While there is a growing digital engagement in Nigeria, varying levels of access to technology and internet connectivity mean that prototype testing might not accurately reflect real-world use, especially in rural areas or among populations with limited digital literacy.

Example 1: Fintech App Development in Nigeria

Reflection:

This scenario illustrates how directly transplanting HCD methods without adaptation to the cultural and technological context of Nigeria could hinder the app's development and adoption. Key insights and feedback might be missed if the design process does not account for collective decision-making practices, high-context communication styles, and the technological landscape.

To address these challenges, FinConnect would need to adapt its HCD approach by:

- Incorporating community engagement sessions to understand collective needs and preferences.
- Modifying user feedback mechanisms to be more aligned with indirect communication styles, possibly through mediated feedback sessions or using community liaisons.
- Ensuring prototype testing accounts for varying levels of digital literacy and access to technology, perhaps by using more tangible or simplified prototypes in initial stages.

Example 2: A maternal health education program in Nigeria

Background:

HealthBridge Global aims to launch a maternal health education program in Nigeria, designed to increase awareness and knowledge about prenatal care, nutrition, and safe childbirth practices. The program includes a mobile app providing educational content, reminders for prenatal checkups, and a platform for asking questions to healthcare professionals.

Cultural Assumptions Embedded in HCD Methodologies:

- **User Engagement and Feedback:** Assumes pregnant women and their families are willing to engage directly with digital tools for health education and provide feedback on content and usability.
- **Individualized Health Plans:** Focuses on providing personalized health advice and plans through the app, assuming a preference for individualized care management.
- **Digital Literacy:** Assumes a baseline level of digital literacy among users, enabling them to navigate the app effectively for information and communication.

Challenges Due to Cultural Misalignment:

- **Community Trust and Traditional Practices:** In many Nigerian communities, traditional practices and advice from elders or community leaders play a significant role in maternal health. An app that doesn't integrate these perspectives might lack credibility or be viewed with scepticism.
- **Access to Technology:** While mobile phone usage is widespread in Nigeria, access to smartphones capable of running complex apps, along with reliable internet access, can be limited in rural areas, making it difficult for a significant portion of the target audience to engage with the digital program.
- **Collective Decision-Making:** Decisions regarding health and pregnancy care often involve the extended family or community, not just the individual. A program focusing solely on the pregnant woman may overlook the influence and support of these broader social networks.

Example 2: A maternal health education program in Nigeria

Reflection

This scenario demonstrates the potential pitfalls of applying HCD methods in a public health context without adequately considering the cultural and infrastructural context of Nigeria. The program's effectiveness could be compromised by not addressing the pivotal role of community trust, traditional practices, and the collective nature of health decision-making in Nigerian society.


To mitigate these challenges, HealthBridge Global could:

- Incorporate local health traditions and knowledge into the app's content, possibly through collaboration with local health workers and community leaders.
- Use a mixed-media approach to reach a broader audience, combining digital tools with community meetings, radio programs, or printed materials that can be shared within families and communities.
- Design features that facilitate shared decision-making and support from family and community members, such as information sharing options or community discussion forums.

By adapting the HCD process to reflect the cultural, social, and technological realities in Nigeria, the maternal health education program could achieve greater relevance, acceptance, and impact, ultimately contributing to better health outcomes.

THANK YOU!

Thank you for taking the time to read this white paper. If you have any questions or would like to discuss further, please don't hesitate to reach out to me.

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