



A user centered design approach for Earth architecture in Chad, Africa

HAKYOUNG SONG/ hakyounng.song@gmail.com



Appropriate technology?



WakaWater

Designed to be "appropriate" to the context of its use



Including the environmental, ethical, cultural, social, political, and economical context.



Socket



Q drum

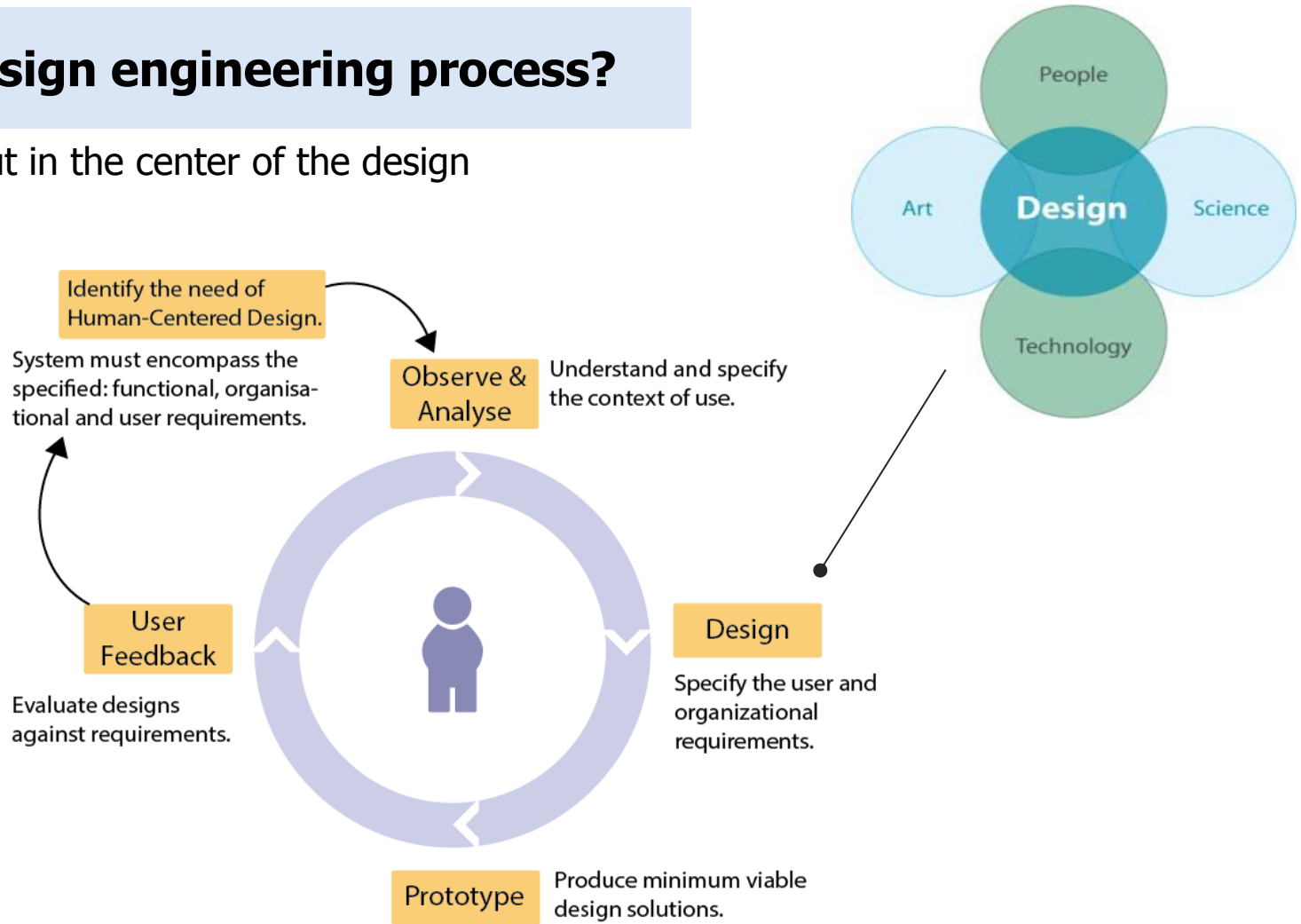
Conditions of appropriate technology



(인용 및 발췌: <적정기술이란 무엇인가?>, 김정태, 홍성욱 지음)

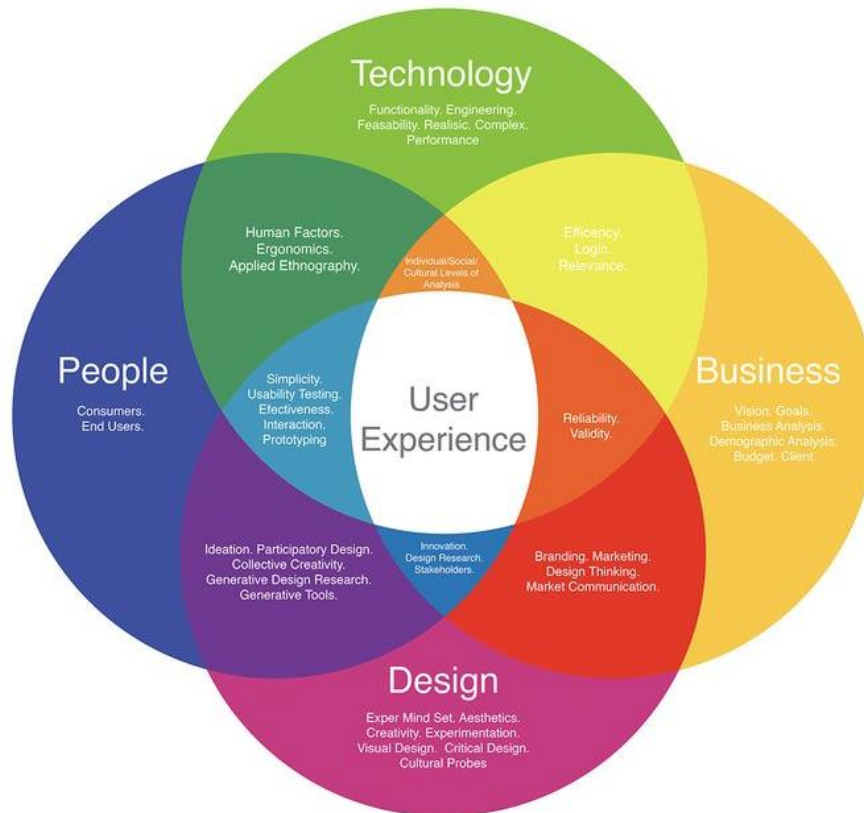
What is Design engineering process?

- The user is put in the center of the design



What is User Centered Design?

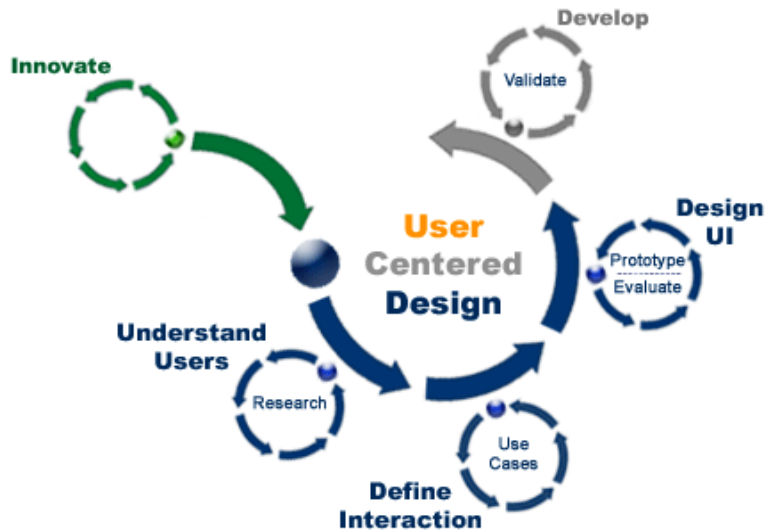
- User Experience is the sum experience of a user interacting with a product.



• Principles of human-centered design?

- Active involvement of users
- Appropriate allocation of function between user and system
- Iteration of design solutions
- Multidisciplinary design teams

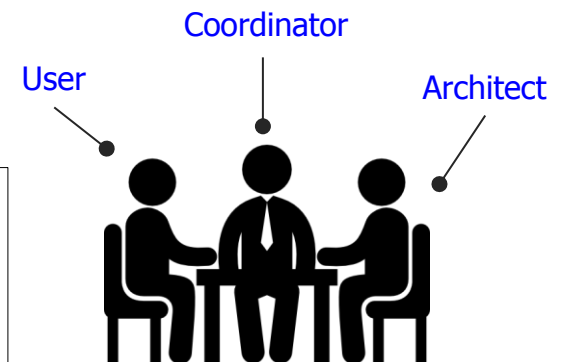
What is User Centered Design?



- **Essential activities in User-centered design:**
 - Understand and specify the context of use
 - Specify the user and organizational requirements
 - Produce design solutions (prototypes)
 - Evaluate designs with users against requirements



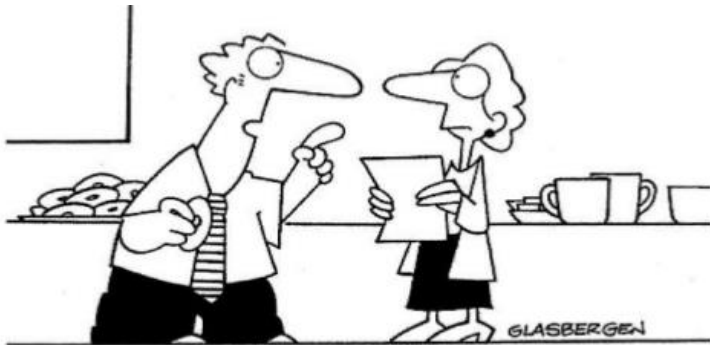
- User definition
- What is our requirement from each organization?
- What is additional consideration in our prototype?



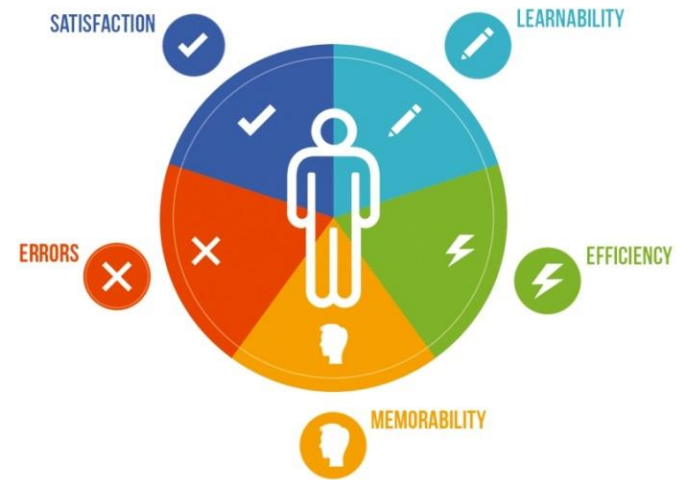
Why User Centered Design approach ?

• Why UCD?

- Increased customer satisfaction
- Increased user productivity/efficiency/accuracy
- Increased service/site usage and adoption
- Decreased support and training costs
- Reduced development time and costs
- Reduced maintenance costs



"I'm a manager and I'm in the business for 20 years. I know what the user needs."
3



• What are 'needs'?

- Users rarely know what is possible
- Users can't tell you what they 'need' to help them achieve their goals

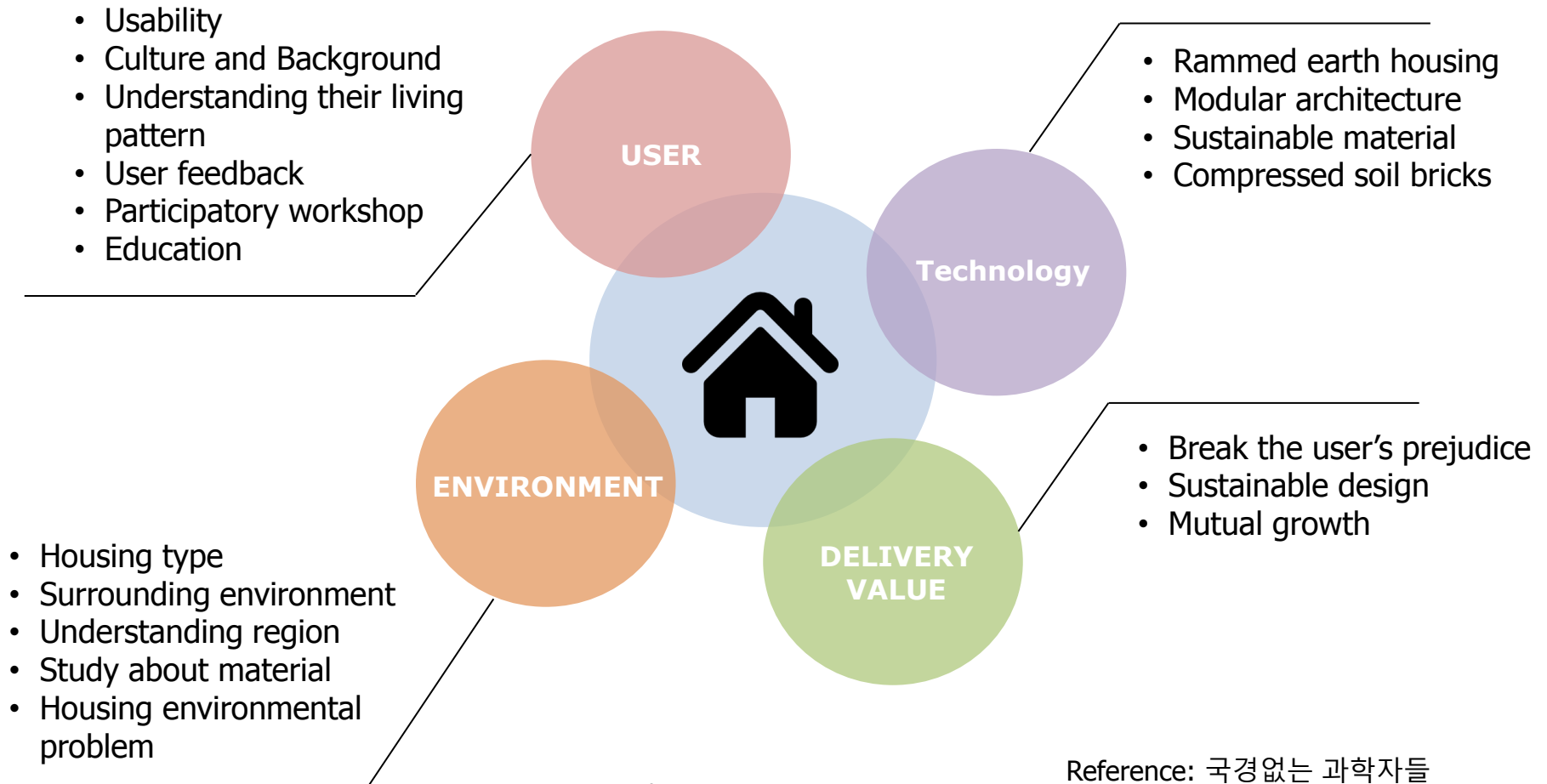
Why User Centered Design approach ?

- **User needs assessment**

- Surveys
- Interviews
- Observation
 1. Field studies
 2. Contextual inquiries
 3. Ethnography



• **Consideration for earth architecture in case study?**





HAKYOUNG SONG/ hakyounng.song@gmail.com



Laboratoire
**Conception
Produits
Innovation**



**ARTS
ET MÉTIERS**
ParisTech