

Promoting Crafts and Cultural Heritage of the Himalayan State of Uttarakhand (India) through a Mobile App

Mobile Application in Community Participation: Method, Needs and Implementation

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Keywords: *Craft — Cultural Heritage — India — Mobile Application — Community Participation*

CHNT Reference: Saraswat, S., Pandey, S., Verma, H. and Kulkarni, U. (2022). 'Promoting Crafts and Cultural Heritage of the Himalayan State of Uttarakhand (India) through a Mobile App', in CHNT Editorial board. *Proceedings of the 27th International Conference on Cultural Heritage and New Technologies, November 2022*. Heidelberg: Propylaeum.

DOI: xxxxxxxx.

Abstract

About the Idea

India is known for its cultural heritage and crafts. Uttarakhand is a Himalayan state, which is historically rich; culturally vibrant; popular in terms of tourism; and, has a vast repository of arts, crafts and indigenous architectural styles. It is a cultural hub, and is home to unique and exquisite crafts such as *aepan* (ceremonial floor and wall paintings), *tamta* (copper craft), *ringaal kaam* (bamboo craft), *likhai kaam* (wooden carvings), stone craft, wood craft, natural fibres, textiles and candle making. This state has been identified as an area of priority and intervention under several current initiatives taken up by the government, be it the smart city project, tourism development or cultural dissemination. Therefore, it is selected in the initial phase of this initiative. Most of the crafts are seen in the spaces inhabited by the users, but they are rarely discussed in terms of space-making potential, due to disciplinary boundaries. Many of these crafts are either languishing or have a low earning potential. They can be promoted and revived using digital tools, technologies and applications. Currently, referring to the domain of crafts, there is no such platform where people can personalize and customize their needs by visualizing interior spaces, based on applications of traditional Indian crafts and their contemporary expressions, especially in the context of Uttarakhand. This gap is addressed through the design of a mobile application, which helps visualise applications of crafts in interior spaces, and eventually facilitates e-commerce, either through suggested design templates

or through custom design interventions by the users, simultaneously disseminating information about diverse crafts and craftspersons.

This mobile application is proposed as a one-stop solution for all the information on crafts of Uttarakhand, promoting them through visualization and experiencing them through personalisation and customisation. Users can explore varied crafts and design their own spaces, take inspiration, and order according to requirements. The idea is to promote and revive crafts; create an ecosystem involving different stakeholders; achieve designs which demonstrate the economic potential of these crafts by linking them to space-making; and, develop a digital platform which showcases the crafts and cultural heritage as popular and not elite, eventually leading to outreach and sales. This application shall expand later, and act as an ever-growing digital encyclopaedia on crafts of India and e-commerce platform to visualise crafts in interior spaces and make purchases.

The Existing Platforms

Currently, the existing platforms focus either on the dissemination and awareness of crafts and designs, or the commercialization and marketing of the end products. None of them are specifically focused on the crafts of Uttarakhand, specifically engaging the users to conceptualize their own built environment and spaces through AR, and custom design with the available skills and makers.

Consumers are more likely to have faith in AR to use technology appropriately and successfully because of its greater capacity to foster customer confidence. Customers can virtually visit the state of Uttarakhand; explore the crafts in augmented reality; learn about their applications in interior spaces; and, custom design their own environments and experiences.

The USP of the Proposed Mobile Application: Community Participation

The App highlights the importance of craft and culture in a way that will benefit the community of craftspersons associated with the crafts and bring more opportunities in terms of livelihood. People will not only know about the crafts but also will be able to customize and visualize spaces for better decision-making and personalization, through this mobile app, which also acts as a platform to connect diverse users with craftspersons. Key features of this mobile application are dissemination of crafts and cultural heritage of Uttarakhand; visualization of interior spaces; augmented reality; customization and personalization; 3D visualization; informative and interactive interface. The demand for such an application is evident especially during the events like the pandemic COVID 19, and in the post COVID world, where the users and customers crave for all kinds of experiences, sitting at their homes, and just at a click away. The unique aspect is that the app acts both as a knowledge partner and an industry partner, as it not only creates awareness about crafts and craftspersons, but also aids in customisation and personalisation through craft-design collaborations, as well as facilitates e-commerce and livelihoods for the community of craftspersons.

After conducting the ground research on the crafts of Uttarakhand and doing the survey of existing digital platforms, the gaps are identified. While prototyping, the card sorting method is adopted to classify widgets and segregate the components that the user might require in the digital application. The information architecture for the mobile application is designed and developed, which helps to navigate, after that wireframes are created (Fig. 1).

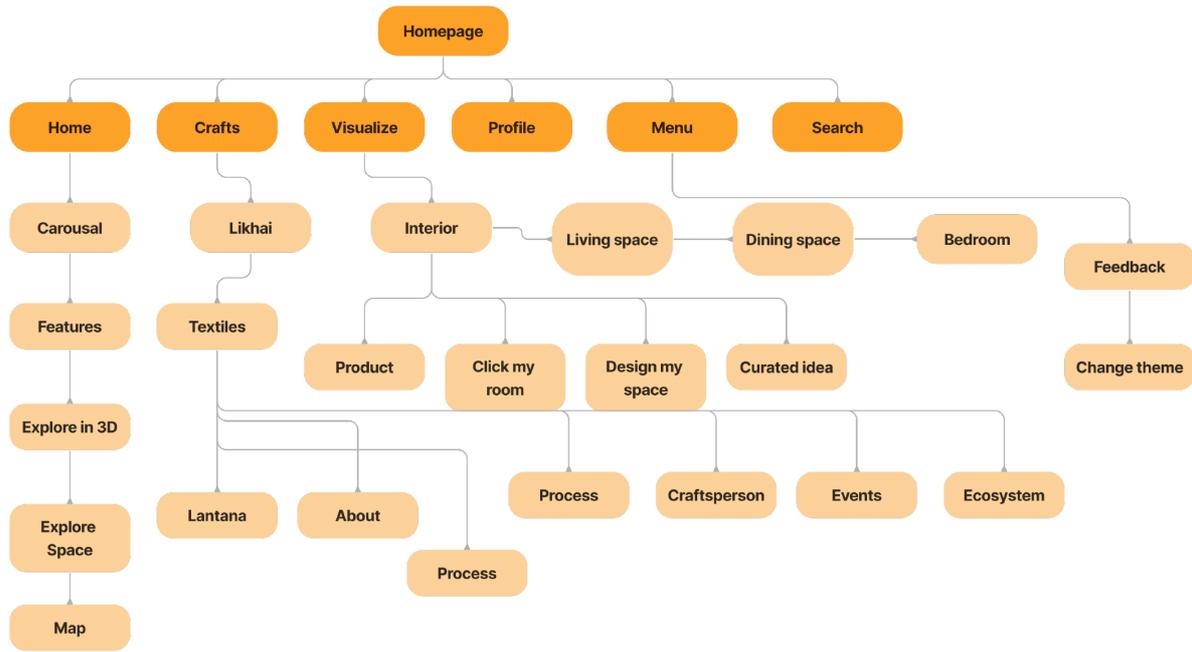


Fig. 1. Information Architecture of the Mobile application (Source: Authors)

User Participation and Personalization

This Mobile App is especially useful for the people, who are buying or constructing residences in tier 1 and tier 2 cities. The survey conducted by the authors highlights that there is a growing demand for information on crafts and how could they be integrated while designing and decorating homes and other interior spaces. This App is also an attempt to bridge the gap between craftspersons and Users, since it acts as a bridge between the users and the craftspersons. From knowing about crafts, events, and the process of designing their own spaces, the users can interactively and playfully use this app (Fig. 2).

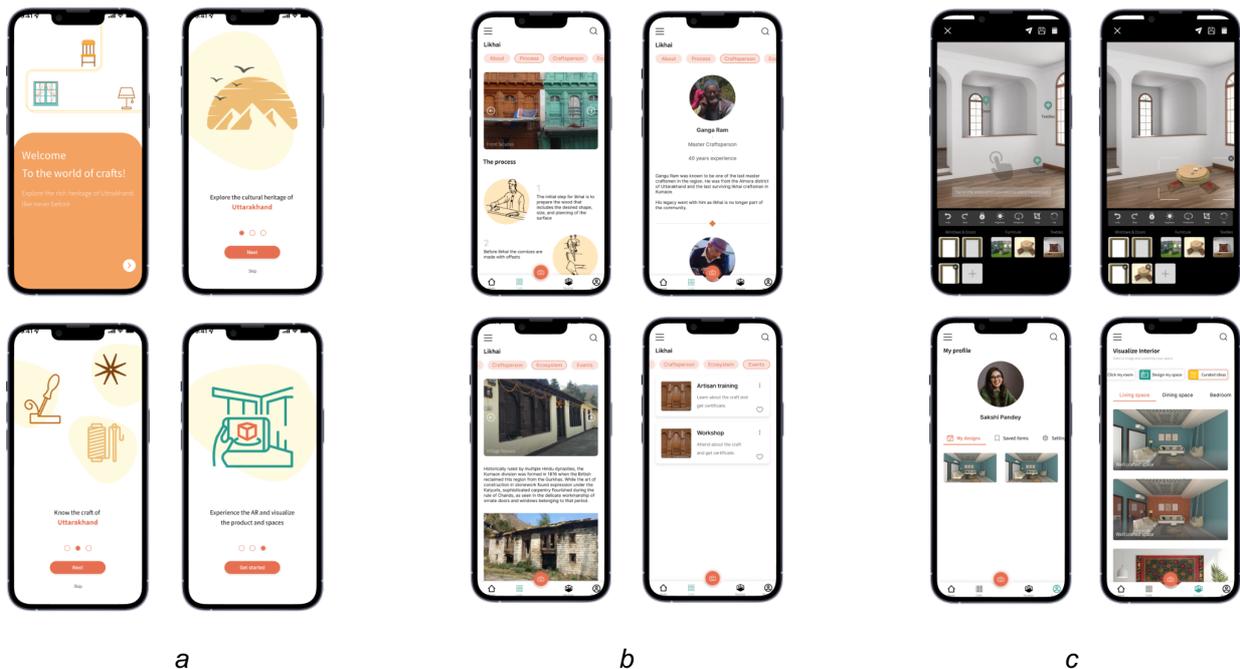


Fig. 2. High fidelity of mobile application a) onboarding process introducing features of the app; b) Craft page has been divided into five categories of About, Process, Craftsperson, Ecosystem, Events; c) screen for customization and curated options (Source: Authors)

Sustainable Solution – Method, Needs and Implementation

Since this is a Mobile Application, it is economical and affordable for users. The number of mobile users is increasing day by day. The assets that the application has, are going to be digitally produced using appropriate software. Hence, commercialization is also affordable and not difficult to implement. The App design is itself a promotion of the crafts and cultural heritage of Uttarakhand in the form of a sustainable platform, where all the assets are created digitally (Fig. 3). Carbon footprint can also be reduced by the Application by not engaging in emails, deleting old files permanently, keeping only required data, etc. Hence, this App is sustainable for every user. Moreover, it also ensures sustainable livelihoods and better quality of life to the community of craftsmen, initially focusing on Uttarakhand, and later expanding to different parts of the country and diverse craft forms. This mobile application is very much needed, because such an application has not been explored, in the context of Uttarakhand. The unique methodology involved, where user participation and community involvement become crucial, paves way in the implementation of a novel idea that eventually leads to e-commerce.

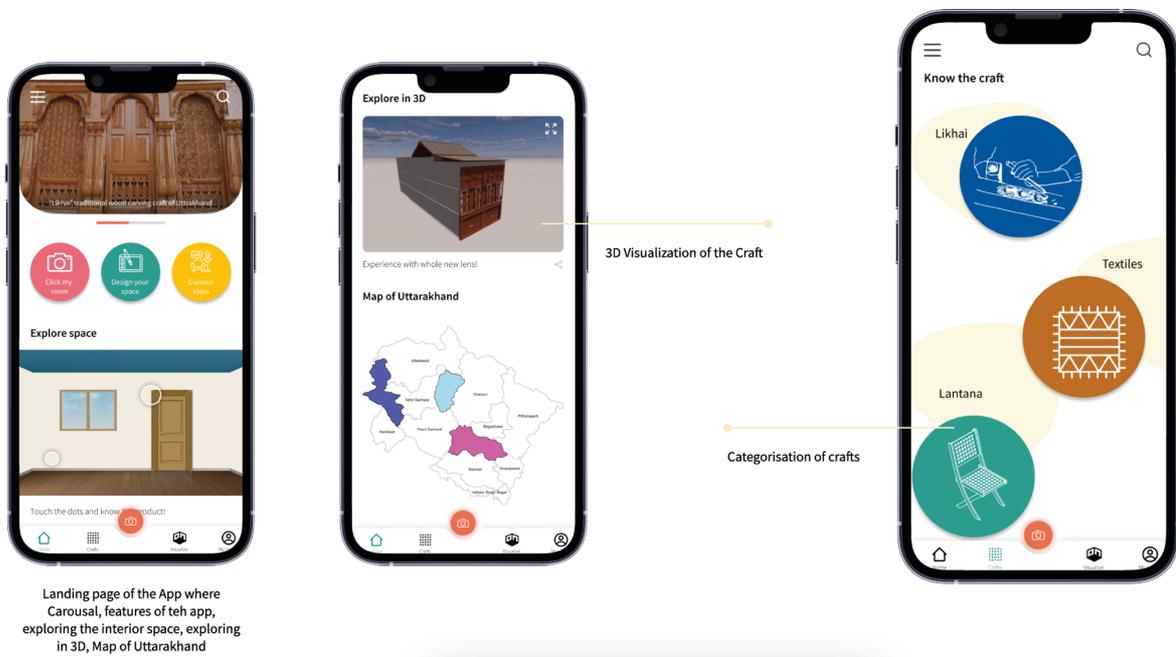


Fig. 3. High fidelity Screens on the landing page of the App (Source: Authors)

Funding

This project has not received any funding so far.

Conflict of Interests Disclosure

There are no conflicts of interests.

Author Contributions

A list of contributions of the project participants is presented below:

Conceptualization: <Smriti Saraswat>

Data curation: <Sakshi Pandey, Smriti Saraswat>
Formal Analysis: <Smriti Saraswat, Sakshi Pandey>
Funding acquisition: <na>
Investigation: <Smriti Saraswat, Sakshi Pandey, Harsha Verma, Utkarsha Kulkarni>
Methodology: <Smriti Saraswat, Sakshi Pandey>
Project Administration: <Smriti Saraswat, Gaurav Raheja>
Resources: <Harsha Verma, Utkarsha Kulkarni, Janani, Smriti Saraswat>
Software: <Aero, Adobe>
Supervision: <Smriti Saraswat, Gaurav Raheja>
Validation: <Smriti Saraswat, Gaurav Raheja>
Visualization: <Sakshi Pandey, Utkarsha Kulkarni, Harsha Verma, Janani>
Writing – original draft: <Harsha Verma>
Writing – review & editing: <Smriti Saraswat>

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