SMART COMMUNICATION PSCS-193

A PROJECT REPORT

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ABSTRACT

The Indian textiles and handicrafts sector is a cornerstone of the rural economy, reflecting the unparalleled craftsmanship of local artisans. However, despite their brilliance, many artisans face challenges in gaining recognition and market access. This project seeks to address these challenges by developing an interactive web platform that empowers artisans to showcase their creations, connect with customers, and foster collaboration within their community.

The platform enables artisans to register accounts, upload product details (including images, prices, and specifications), and access personalized dashboards with performance metrics such as total sales, rank, earnings, and product views. A unique feature allows artisans to organize and participate in self-created events, promoting mutual collaboration through shared interests. To ensure authenticity, new users can initially sell up to five articles via Cash On Delivery (COD) before gaining access to online payment options upon verification.

For consumers, the platform offers a curated collection of "Varanasi Special" products arranged by popularity, enhancing the shopping experience. Artisans also benefit from dashboards showcasing government exhibitions and events to further boost visibility. To encourage participation and excellence, the platform introduces an "Artisan of the Month" program, recognizing top-performing artisans based on sales and customer ratings.

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CHAPTER-1 INTRODUCTION

1.1 Overview

The "Smart Communication" project aims to leverage modern technology to address the challenges faced by rural artisans in India. This initiative is rooted in the belief that artisans are not just creators of beautiful crafts but also vital contributors to the cultural and economic landscape of the nation. However, despite their remarkable skills and creativity, many of these artisans find it challenging to gain visibility and access to the broader marketplace. This project seeks to empower artisans by providing them with a platform that bridges the gap between their exceptional craft and the global marketplace.

By creating a digital marketplace, artisans can showcase their products to a wider audience, monitor their performance through various metrics, and collaborate with fellow artisans to foster growth and innovation within their communities. This platform is designed to be user-friendly and accessible, enabling artisans to easily upload their products, manage their profiles, and engage with potential customers.

Additionally, the platform will incorporate essential features such as performance tracking, sales data analysis, and collaboration tools that encourage artisans to connect and support one another. By fostering a sense of community among artisans, the project aims to create an ecosystem where knowledge- sharing and mutual support lead to enhanced skills and business acumen.

1.2 Objectives

The primary objectives of the "Smart Communication" project are as follows:

1. **Empowerment of Artisans:** To provide rural artisans with the necessary tools and resources to take charge of their craft and business.

- 2. **Increased Visibility:** To enhance the visibility of artisans and their products by creating a digital presence that can reach national and international markets. This visibility is crucial for attracting customers who appreciate handmade and traditional crafts.
- 3. Performance Tracking: To implement features within the platform that allow artisans to monitor their sales and performance metrics.
 Understanding what works and what doesn't will help artisans make informed decisions about their businesses.
- 4. Collaboration and Networking: To foster a collaborative environment where artisans can connect with one another, share experiences, and collaborate on projects. Building networks can lead to new opportunities and innovative ideas.
- 5. **Cultural Preservation**: To promote and preserve traditional crafts and techniques by providing artisans a platform to showcase their heritage. By connecting artisans with a larger audience, the project contributes to the survival of unique cultural practices.

1.3 Expected Outcomes

The anticipated outcomes of the "Smart Communication" project include:

- 1. **Enhanced Income:** As artisans gain access to a broader market and improve their sales strategies, they can expect an increase in income, which will positively impact their livelihoods and communities.
- 2. **Skill Development**: Through training and collaboration opportunities, artisans will develop new skills not only in crafting but also in business management, marketing, and technology use.
- 3. **Stronger Community Bonds:** By fostering connections among artisans, the project will strengthen community ties and encourage collaborative projects that benefit all participants.

- 4. **Sustainable Practices**: The platform will also promote sustainable practices by encouraging artisans to use eco-friendly materials and methods, thus ensuring the preservation of their crafts for future generations.
- 5. **Cultural Awareness**: With increased visibility, the project will raise awareness about Indian handicrafts and textiles, promoting appreciation for traditional arts and crafts on a global scale.

1.4 Implementation Strategy

To ensure the successful implementation of the "Smart Communication" project, a strategic plan will be put in place, which includes the following steps:

- 1. **Research and Development**: Conducting thorough research to understand the needs and challenges of rural artisans. This will involve surveys, interviews, and focus groups to gather insights directly from the artisans.
- 2. **Platform Development:** Building a robust and user-friendly digital platform that meets the needs of artisans. This will involve collaboration with technology experts to ensure the platform is accessible and functional.
- 3. **Training Programs**: Developing training modules that educate artisans on how to use the platform effectively, covering areas like product photography, online marketing, and customer engagement.
- 4. **Marketing and Outreach**: Creating an outreach plan to promote the platform, targeting both artisans who can benefit from it and potential customers interested in purchasing handmade products.
- 5. **Monitoring and Evaluation**: Establishing a system for monitoring the platform's performance and evaluating its impact on artisans' businesses. This will include gathering feedback and making necessary adjustments to improve the user experience.

1.5 Conclusion

The "Smart Communication" project represents a significant step towards empowering rural artisans in India by bridging the gap between their craft and the global marketplace. By leveraging modern technology, this initiative aims to enhance the visibility of artisans, foster collaboration, and promote sustainable practices within the community.

As artisans gain access to new tools and resources, they will be better equipped to navigate the challenges of the modern marketplace, ultimately leading to improved livelihoods and the

CHAPTER-2 LITERATURE SURVEY

2.1 Introduction

The goal of this chapter is to explore existing research and platforms that aim to support local artisans, particularly in rural areas, while highlighting the gaps that the "Smart Communication" platform intends to address. The creative prowess of artisans is a vital aspect of cultural heritage and economic development. However, many artisans, especially those in rural settings, encounter numerous obstacles when attempting to enter global markets. This review focuses on existing methods and technologies that promote handmade crafts and textiles, the challenges rural artisans face in accessing these markets, and the role of technology in bridging these gaps.

2.2 Existing Methods

2.2.1 Handmade Marketplaces

In recent years, several online marketplaces have emerged to promote handmade crafts and textiles. These platforms provide artisans with an opportunity to showcase and sell their products directly to consumers. Prominent examples include Etsy, Handmade at Amazon, and local initiatives like India's Craftsvilla and Weaves.

These marketplaces offer various features such as:

User-Friendly Interfaces: Simplified procedures for artisans to list their products, manage inventories, and process orders.

Global Reach: The ability to connect with customers worldwide, thereby expanding market access for artisans.

Marketing Support: Many platforms engage in marketing efforts to attract buyers, which can benefit artisans who may not have the resources to promote their products independently.

However, these platforms also have limitations. Many artisans struggle to navigate the technical aspects of online selling, and some platforms charge significant fees that can cut into artisans' profits. Furthermore, not all artisans have access to the internet or the necessary technology to utilize these platforms effectively.

2.2.2 Social Media Promotion

Social media has become a powerful tool for artisans to promote their work and connect with a wider audience. Platforms like Instagram, Facebook, and Pinterest allow artisans to share their crafts visually, engage with potential customers, and build brand identity.

Key advantages include:

Direct Interaction: Artisans can communicate directly with their audience, receiving immediate feedback and fostering relationships.

Cost-Effectiveness: Social media is often free or low-cost, making it accessible for artisans with limited budgets.

Creative Marketing Opportunities: Visual storytelling can captivate audiences and highlight the craftsmanship behind the products.

However, the reliance on social media also presents challenges. The fast-paced nature of these platforms can make it difficult for artisans to maintain consistent engagement. Additionally, algorithms may limit the reach of posts, making it hard for artisans to gain visibility without paid promotions.

2.2.3 Government Initiatives and Support Programs

Various government programs aim to support local artisans, focusing on skill development, financial aid, and market access. Initiatives like the "One District, One Product" scheme in India aim to promote traditional crafts by providing artisans with training and assistance in marketing their products.

These initiatives often include:

Skill Development Workshops: Training programs that enhance artisans' skills, enabling them to produce higher-quality products.

Financial Assistance: Grants or low-interest loans to help artisans start or expand their businesses.

Exhibition Opportunities: Government-organized fairs and exhibitions that provide artisans with a platform to showcase their work to a larger audience. Despite these programs, challenges remain. Artisans may face bureaucratic hurdles, and the reach of government initiatives can be limited, often not extending to the most marginalized or remote communities.

2.3 The Role of Technology in Bridging Gaps

The integration of technology is crucial in addressing the challenges faced by rural artisans. Through the development of innovative platforms, technology can play a transformative role in empowering artisans and enhancing their market access.

Digital Literacy Training: Providing artisans with training in digital skills is essential for them to effectively leverage online platforms. This includes using social media, managing e-commerce accounts, and understanding online marketing strategies.

Mobile Applications: Creating mobile-friendly platforms can enhance accessibility for artisans who may not have access to computers but own smartphones. Apps that facilitate product listings, order management, and customer communication can significantly reduce the barriers to entry for artisans.

Collaborative Networks: Technology can help build networks among artisans, allowing them to share resources, collaborate on projects, and learn from one another. Platforms that facilitate group marketing efforts can amplify their reach and reduce individual costs.

Data Analytics Tools: Implementing analytics tools within platforms can help artisans understand consumer trends, optimize pricing strategies, and make informed decisions about inventory management.

2.4 Gaps in Existing Support Systems

Despite the various methods and platforms supporting artisans, significant gaps still exist that the "Smart Communication" platform seeks to address:

Sustainability: Many existing platforms focus on quick sales rather than fostering long-term relationships between artisans and customers. The "Smart Communication" platform aims to create a sustainable ecosystem that supports artisans beyond mere transactions.

Comprehensive Support: There is often a lack of holistic support that includes not only market access but also training in business

CHAPTER-3

Research Gaps of Existing Methods

The purpose of this chapter is to explore and identify the key research gaps in the existing methods used by current platforms to support artisans. While platforms such as Etsy and Craftsvilla provide a foundation for online selling, they do not address all the unique challenges faced by rural artisans. By analyzing the limitations and inefficiencies in these methods, we aim to emphasize the value that the "Smart Communication" platform can bring to this community.

3.1 Limited Access to Technology

One of the most significant gaps in existing platforms is the limited access to technology among rural artisans. While many online marketplaces have established a presence, the reality is that a substantial number of artisans in rural areas lack reliable internet access and digital devices. This digital divide prevents them from fully participating in the online economy. Current research indicates that there is a pressing need for platforms that not only cater to artisans who are already online but also provide solutions to those who are not.

3.2 Inadequate Training and Support

Another gap is the inadequate training and support provided to artisans regarding the use of digital tools and e-commerce platforms. While some platforms offer user-friendly interfaces, many artisans still struggle to understand how to market their products effectively, manage their online stores, and utilize social media for promotion. Existing platforms often lack comprehensive training programs that cater specifically to the needs of rural artisans, leaving them without the skills necessary to thrive in a digital marketplace. Research in this area could explore effective training methodologies that could be implemented within the "Smart Communication" platform.

3.3 Lack of Community and Collaboration

Existing platforms often focus on individual sales and do not emphasize the importance of community and collaboration among artisans. While artisans can list their products, opportunities for networking, sharing resources, and collaborative marketing strategies are often minimal. Research has shown that collaborative efforts can lead to increased visibility and support among artisans.

The "Smart Communication" platform seeks to fill this gap by fostering a sense of community, encouraging artisans to share their experiences, and creating opportunities for joint projects.

3.4 Insufficient Marketing and Branding Support

While some platforms provide a marketplace for artisans to sell their products, many do not offer adequate support in terms of marketing and branding. Artisans often struggle to differentiate their products and build a brand that resonates with consumers. Research shows that effective branding can significantly impact sales and customer loyalty. As part of the "Smart Communication" platform, targeted marketing and branding support can be developed, helping artisans craft compelling narratives around their products and reach a broader audience.

3.5 High Transaction Costs

Many existing platforms impose high transaction fees that can be burdensome for artisans, particularly those operating on thin margins. These fees often erode the income that artisans earn from their sales, making it financially challenging to sustain their businesses. Research into alternative pricing models that could reduce these costs while still providing a viable business model for the platform could be a valuable contribution to the field.

3.6 Cultural Sensitivity and Representation

Current platforms often lack an understanding of the cultural significance of the crafts produced by artisans. This can lead to misrepresentation or a failure to appreciate the traditional techniques and stories behind the products. Research can explore how the "Smart Communication" platform can incorporate cultural sensitivity and representation into its framework, ensuring that artisans' heritage and practices are honored and showcased appropriately.

3.7 Measuring Impact and Success

Finally, there is a gap in understanding how to measure the impact of online platforms on artisans' livelihoods. Most existing research focuses on sales metrics without considering other factors such as skill development, community engagement, and overall well-being. The "Smart Communication" platform can contribute to this field by establishing comprehensive metrics that evaluate the success of artisans in multiple dimensions, providing valuable insights into the efficacy of digital platforms in empowering rural communities.

3.8 Conclusion

In summary, while existing methods and platforms have made strides in supporting artisans, significant research gaps remain. The "Smart Communication" platform aims to address these gaps by focusing on accessibility to technology, training and support, community building, marketing, cost structures, cultural sensitivity, and impact measurement. By prioritizing these areas, the platform can create a more robust and supportive environment for rural artisans, ultimately enhancing their ability to thrive in the digital marketplace and preserving their rich cultural heritage. Through further research and development, the "Smart Communication" platform aspires to become a leader in empowering artisans and promoting sustainable practices within their communities.

CHAPTER-4 PROPOSED METHODOLOGY

The Proposed Methodology section describes the process of designing, developing, and implementing the "Smart Communication" platform, which aims to empower rural artisans by enhancing their visibility and providing them with tools for collaboration, sales tracking, and self-promotion. This methodology encompasses the system architecture, platform workflow, technologies used, and features integrated into the platform to achieve these goals.

4.1 System Architecture

The system architecture outlines the foundational structure of the "Smart Communication" platform and consists of several key components that work together to provide a seamless experience for artisans and customers alike. The architecture can be divided into the following layers:

1. Presentation Layer (Frontend):

This layer is responsible for the user interface (UI) that artisans and customers interact with. It is designed to be intuitive and easy to navigate, ensuring that users, regardless of their technical skills, can effectively engage with the platform. • Technologies used: HTML, CSS, JavaScript, and frameworks such as React or Vue.js for building a responsive and dynamic user interface.

2. Business Logic Layer (Backend):

The backend handles the core functionality of the platform, processing requests from the frontend, managing data, and implementing business rules.

It includes APIs for user authentication, product management, order processing, and analytics. • Technologies used: Node.js or Python

with frameworks like Express.js or Django to create robust serverside applications.

3. Database Layer:

This layer manages the storage and retrieval of data related to artisans, products, transactions, and user interactions. It ensures data integrity and security.

A relational database management system (RDBMS) such as MySQL or PostgreSQL will be utilized to store structured data, allowing for efficient querying and reporting.

4. Integration Layer:

The platform will integrate third-party services such as payment gateways, social media platforms, and analytics tools to enhance functionality.

This integration allows for secure payment processing, easy sharing of products on social media, and collection of valuable insights into user behavior and sales performance.

5. Collaboration Tools:

Built-in tools for communication and collaboration among artisans will be included, allowing users to share ideas, showcase joint projects, and provide mutual support within the community.

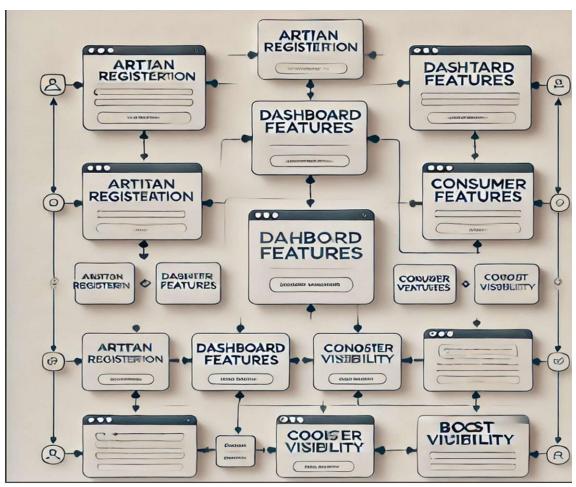


Figure 1: Data Flow Diagram

4.2 Platform Workflow

The platform workflow provides a visual guide on how users will navigate through the "Smart Communication" platform, encompassing the journey from registration to sales monitoring. The main stages include:

1. User Registration:

Artisans will create an account by providing essential information, including their name, contact details, and a brief description of their

craft. A verification process will ensure authenticity and build trust within the community.

2. Profile Setup:

After registration, artisans can personalize their profiles by uploading images, adding product descriptions, and setting prices. They will also have an option to share their stories, highlighting the cultural significance of their crafts.

3. Product Listing and Management:

Artisans will have an interface to create and manage product listings, including adding new products, editing existing ones, and removing products that are no longer available. Guidance on best practices for product photography and writing compelling descriptions will be provided.

4. Customer Interaction:

The platform will facilitate direct communication between artisans and customers through messaging features. This allows artisans to respond to inquiries, gather feedback, and foster relationships with their clientele.

5. Sales Tracking and Analytics:

Artisans will have access to a personalized dashboard that monitors sales performance, customer engagement metrics, and other relevant analytics. This information will empower artisans to make informed decisions about their marketing strategies and product offerings.

6. Networking and Collaboration:

The platform will include features for connecting artisans with one another, such as discussion forums, group projects, and collaboration opportunities. This fosters a sense of community and encourages knowledge sharing among users.

4.1.2 System Flowchart

A flowchart will be included in the report to visually represent how the system operates from start to finish. It will show how each user type (artisan, customer, admin) interacts with the platform, highlighting the key processes such as account creation, product uploading, event creation, and sales tracking.

1. Artisan Account Creation:

The artisan registers on the platform by entering personal details (name, contact info, etc.), after which an artisan ID is generated, and they gain access to their personalized dashboard.

2. Product Upload:

Once registered, the artisan can upload product details, including images, price, and description. The system then stores the product information in the database and displays it on the marketplace for customers to view.

3. Sales and Performance Tracking:

The platform tracks the number of views, sales, and earnings for each artisan's products. These statistics are updated in real-time and displayed on the artisan's dashboard, enabling them to monitor their performance.

4. Event Management:

Artisans can create and manage local events, such as product exhibitions and fairs. The system allows them to define event details (e.g., location, date, participants) and invites other artisans to collaborate.

5. Customer Interaction:

Customers can browse the marketplace to view available products, make purchases, and provide ratings and feedback. The feedback left by customers will influence the rankings of artisans on the platform, providing motivation to improve products and services.

4.2 Platform Workflow

The **platform workflow** defines how users will interact with the system at each stage, from account creation to product purchase and performance tracking. This workflow ensures that both artisans and customers can use the platform easily and efficiently.

4.2.1 Artisan Workflow

1. Account Creation:

Artisans create an account by providing their name, contact details, and authentication information. The system generates a unique artisan ID, and they are granted access to their personalized dashboard.

2. Product Upload:

After logging in, artisans can upload product details, such as product images, description, and price. They can set the payment method (initially COD for the first five products).

3. Dashboard Overview:

The artisan's dashboard displays performance metrics, including sales data, total earnings, product views, and ranking based on sales and ratings. Artisans can analyze these metrics to adjust their sales strategies.

4. Event Creation:

Artisans can create events such as exhibitions or fairs. They define the event details, including location, date, and description. Once the event is created, it is displayed on the platform, allowing other artisans to join and collaborate.

4.2.2 Customer Workflow

1. Account Creation:

Customers can create an account on the platform for personalized features, such as tracking order history, and leaving product ratings. Alternatively, they can browse and purchase products as guest users. 2.

Browsing the Marketplace:

Customers can explore the marketplace to view a variety of products organized by categories such as price, popularity, and artisan location. They can use the search functionality to find specific products.

3. Product Purchase:

Once a customer finds a product they like, they can add it to their cart and choose the payment option (either COD or online payment). After confirming the order, the system processes the purchase and updates the artisan's sales statistics.

4.2.3 Admin Workflow

1. User Management:

Admins have the ability to manage artisan and customer accounts. They can verify artisan authenticity by approving or rejecting their product listings. Admins can also remove accounts that violate platform guidelines.

2. Performance Monitoring:

Admins can track the overall performance of the platform, such as total sales, active artisans, and popular products. They can use this data to improve platform features and user experience.

4.3 Technologies Used

To ensure the successful development and implementation of the "Smart Communication" platform, a variety of technologies will be employed:

1. Frontend Technologies:

HTML, CSS, and JavaScript will be employed for building the user interface, with frameworks like React or Vue.js enhancing the interactivity and responsiveness of the platform.

2. Backend Technologies:

The backend will be developed using Node.js or Python with frameworks such as Express.js or Django, providing a reliable environment for processing user requests and managing data.

3. Database Solutions:

A relational database management system (RDBMS), such as MySQL or PostgreSQL, will be utilized to effectively store and manage data related to users, products, and transactions.

4. Cloud Hosting:

The platform will be hosted on cloud infrastructure providers like AWS or Google Cloud, offering scalability, reliability, and high availability to accommodate growing user numbers.

5. Payment Gateway Integration:

Secure payment gateway options such as PayPal, Stripe, or **4.3.2 Back-End Development**

- Node.js: Node.js will be used for the backend, providing the server-side logic required to handle user requests, interact with the database, and serve content to the frontend.
- Express.js: Express.js, built on top of Node.js, will be used to handle HTTP requests, route user actions, and manage middlewares for authentication and security.

4.3.1 Technical Implementation

The technical implementation of the "Smart Communication" platform will involve key components in back-end development, database management, and integration of various technologies to ensure a robust and efficient system.

4.3.2 Back-End Development

Node.js: Node.js will serve as the backbone of the backend development. Its asynchronous and event-driven architecture makes it an ideal choice for handling multiple user requests efficiently. Node.js will provide the serverside logic necessary to process user inputs, interact with the database, and serve dynamic content to the frontend. This scalability allows the platform to accommodate a growing number of users without compromising performance.

Express.js: Built on top of Node.js, Express.js will be utilized to streamline the development of the backend application. It will handle HTTP requests and facilitate routing based on user actions. Express.js provides a simple and flexible framework for setting up middleware functions that can manage authentication, input validation, and error handling. By implementing middlewares, the platform can ensure that user data is securely processed and that only authenticated users can access certain features.

4.3.3 Database Management

SQL: The platform will utilize SQL databases to store critical information such as user data, product details, event data, and sales history. The structured nature of SQL databases ensures that data can be organized and easily queried. This will allow artisans to efficiently retrieve data related to their products and sales.

Database Schema: The database schema will be designed to include multiple tables, each serving a specific purpose:

Users Table: To store user information, including artisan profiles, contact details, and authentication credentials.

Products Table: To maintain records of product listings, including descriptions, images, pricing, and inventory levels.

Orders Table: To track sales transactions and order details, including customer information, payment status, and shipping details.

Reviews Table: To capture customer feedback and ratings for products, which helps artisans build credibility and improve their offerings.

Data Integrity and Security: To ensure data integrity, the platform will implement constraints and validations at the database level, preventing the entry of invalid data. Security measures, such as encryption for sensitive information (e.g., user passwords), will be used to protect user data from unauthorized access.

4.3.4 Front-End Development

Responsive Design: The front-end development will focus on creating a responsive design that adapts to various screen sizes, ensuring an optimal user experience on mobile devices, tablets, and desktops.

Frameworks and Libraries: The front end will be developed using modern JavaScript frameworks like React or Vue.js, which allow for the creation of dynamic and interactive user interfaces. These frameworks facilitate component-based architecture, making the code more modular and easier to maintain.

UI/UX Design: A user-friendly interface will be designed with a focus on usability and accessibility. This will include clear navigation menus, intuitive layouts, and visual elements that guide users through the registration, listing, and purchasing processes.

4.3.5 Integration of Third-Party Services

Payment Gateways: The platform will integrate with secure payment gateways such as PayPal, Stripe, or Razorpay to facilitate smooth

transactions. This integration will ensure that artisans can receive payments quickly and safely.

Analytics Tools: Tools like Google Analytics will be integrated into the platform to provide insights into user behavior, helping artisans understand their audience and improve their marketing strategies.

Social Media Integration: The platform will also allow artisans to connect their accounts with social media platforms, enabling easy sharing of their products and increasing their visibility.

4.4 Conclusion

The technical implementation of the "Smart Communication" platform is designed to create a reliable, user-friendly, and secure environment for rural artisans. By leveraging modern technologies such as Node.js and SQL databases, the platform aims to provide artisans with powerful tools for managing their crafts, engaging with customers, and collaborating with one another. Through thoughtful integration of third-party services and a focus on user experience, the "Smart Communication" platform will empower artisans to thrive in the digital marketplace while preserving their cultural heritage.

CHAPTER-5 OBJECTIVES

Objectives of the "Smart Communication" Project

The "Smart Communication" project is designed with the overarching goal of enhancing the livelihoods of rural artisans through a user-friendly and accessible digital platform. This initiative focuses on providing artisans with the tools they need to showcase their products, monitor their performance, and engage in collaborative activities. Below is a comprehensive breakdown of the project's objectives, presented in a clear and straightforward manner.

1. Develop a Platform for Artisans to Showcase Products

At the heart of the "Smart Communication" project lies the objective of creating an online platform where artisans can effectively showcase their unique products. This platform will serve as a virtual marketplace, allowing artisans to reach a broader audience beyond their local communities. By designing a visually appealing and easy-to-navigate interface, the project aims to make it simple for artisans to upload images, describe their products, and highlight their craftsmanship. The goal is to enable artisans to present their work in the best possible light, attracting potential customers and fostering appreciation for their skills.

2. Performance Monitoring Tools

Another essential aim of the project is to equip artisans with tools to monitor their sales performance and track customer engagement. This feature will empower artisans to gain insights into which products resonate most with buyers, helping them make informed decisions about their offerings. By providing analytics that are easy to understand, artisans can identify trends, optimize their inventory, and adjust their marketing strategies accordingly. This data-driven approach will not only enhance their business acumen but also contribute to their long-term sustainability.

3. Facilitate Collaborative Activities

Collaboration is key to fostering innovation and growth among rural artisans. The "Smart Communication" project intends to create a space where artisans can connect with one another to share ideas, techniques, and best practices. By facilitating collaborative activities such as workshops, forums, and online discussions, the project aims to build a supportive community that encourages knowledge exchange. This social aspect of the platform will enhance artisans' skills and inspire them to develop new products or improve existing ones, ultimately elevating their craft.

4. Educational Resources and Training

To further support the growth of rural artisans, the project will provide access to educational resources and training materials. These resources will cover various topics, including digital marketing, e-commerce strategies, product photography, and brand building. By offering workshops and online tutorials, the "Smart Communication" project aims to equip artisans with the skills necessary to navigate the digital landscape effectively. This education will empower artisans to take control of their businesses and thrive in a competitive market.

5. Promote Sustainable Practices

Sustainability is a critical consideration for the future of artisanal crafts. The "Smart Communication" project will encourage artisans to adopt environmentally friendly practices and promote the use of sustainable materials in their work. By raising awareness about sustainable techniques and providing guidance on sourcing eco-friendly materials, the project aims to foster a culture of responsibility among artisans. This focus on sustainability will not only benefit the environment but also appeal to conscientious consumers who prioritize ethical purchasing.

6. Enhance Market Access

A significant challenge that rural artisans face is limited access to markets. The

"Smart Communication" project aims to bridge this gap by providing artisans with a platform that connects them directly to consumers, retailers, and potential collaborators. By enhancing market access, artisans can increase their visibility and sales, ultimately improving their economic stability. The platform will also enable artisans to participate in virtual fairs and exhibitions, showcasing their products to a wider audience and expanding their reach.

7. Foster Cultural Exchange and Appreciation

Artisan crafts are often deeply rooted in cultural heritage. The "Smart Communication" project seeks to celebrate and promote this cultural richness by encouraging artisans to share the stories behind their creations. By highlighting the cultural significance of their work, artisans can foster appreciation among consumers and create a deeper connection to their products. This cultural exchange not only elevates the artisans' craft but also enriches the consumers' experience, allowing them to value the artistry and tradition behind each piece.

8. User-Friendly Design

To ensure that the platform is accessible to all artisans, the "Smart Communication" project places a strong emphasis on user-friendly design. This includes creating an intuitive interface that requires minimal technical expertise to navigate. By prioritizing simplicity in both the layout and functionality, the project aims to make the platform welcoming to artisans of all backgrounds. Training sessions will also be provided to help artisans become familiar with the platform, ensuring that everyone can benefit from its features.

9. Community Engagement

Engaging the community is vital for the success of the "Smart Communication" project. The initiative will actively seek feedback from artisans to continuously refine and improve the platform. By involving artisans in the development process, the project ensures that it meets their needs and addresses their challenges. Moreover, community engagement will foster a sense of ownership

among artisans, encouraging them to actively participate and contribute to the platform's growth.

10. Long-Term Sustainability of the Project

Finally, the "Smart Communication" project aims for long-term sustainability.

This involves not only ensuring the continued operation of the platform but

CHAPTER-6

System Design & Implementation

The "Smart Communication" project is meticulously designed to facilitate seamless interactions between rural artisans and their customers. By incorporating robust features that allow artisans to showcase their products, track performance, collaborate with peers, and conduct secure transactions, the system aims to empower artisans in the digital marketplace. Below, we outline the key components of the system, focusing on both the frontend and backend technologies that will bring this vision to life.

Key Components

1. Frontend:

Technologies: The frontend of the system will be developed using ReactJS, a popular JavaScript library known for creating dynamic user interfaces. Its component-based architecture allows for efficient updates and rendering, making it an ideal choice for our platform. \circ **Features:**

Responsive Design: The platform will be designed with responsive principles, ensuring accessibility across a variety of devices, such as smartphones, tablets, and desktops. This adaptability will enhance the user experience, allowing artisans and customers to navigate the platform seamlessly,

regardless of the device they are using.

User Dashboards: Specific dashboards will be created for both artisans and customers. The artisan dashboard will include features like product management, sales analytics, and collaboration tools, while the customer dashboard will focus on product discovery, order tracking, and user reviews. This tailored approach will ensure that each user group has access to the tools and information that are most relevant to them.

2. Backend:

Technologies: The backend will utilize Spring Boot, a powerful framework for building RESTful APIs. This choice allows for the development of a robust and scalable backend that can efficiently handle multiple requests from users.

Features:

RESTful API Design: The backend will employ a RESTful

architectural style, enabling smooth communication between the frontend and backend. This will facilitate actions such as product uploads, performance tracking, and user authentication.

Database Integration: A relational database (e.g., PostgreSQL or MySQL) will be integrated to manage artisan and product data effectively. This database will store vital information, such as user profiles, product details, sales history, and customer reviews, ensuring that all data is organized and easily retrievable.

User Authentication and Authorization: The system will implement secure user authentication and authorization protocols, enabling artisans and customers to create accounts, log in, and manage their profiles safely. This security feature is crucial for building trust among users, as it protects sensitive information during transactions and interactions.

3. Features and Functionalities:

Product Showcasing: Artisans will have the capability to showcase their products with high-quality images, detailed descriptions, and pricing information. This feature will include customizable templates to enhance the visual appeal of the products listed.

Performance Tracking: The backend will include analytics tools that provide artisans with insights into their sales performance, customer interactions, and product popularity. This data will help artisans make informed decisions regarding inventory management, marketing strategies, and product development.

Collaboration Tools: To foster collaboration among artisans, the platform will feature forums and discussion boards where users can share ideas, seek advice, and collaborate on projects. This community-driven approach will encourage the sharing of knowledge and skills among artisans. • Secure Payment Transactions: The system will incorporate secure payment gateways to facilitate safe and seamless transactions between artisans and customers. This feature will ensure that all financial exchanges are encrypted, protecting users from fraud and unauthorized access.

4. Deployment:

Cloud-Based Hosting: The application will be hosted on a cloud platform (e.g., AWS, Azure, or Google Cloud) to ensure scalability and reliability. This setup will allow the system to handle varying loads, accommodating fluctuations in user traffic without compromising performance.

Continuous Integration/Continuous Deployment (CI/CD): A CI/CD pipeline will be established to automate testing and deployment processes. This will enable the development team to push updates and new features quickly while maintaining high quality and minimizing downtime.

5. User Support and Feedback:

Help Center: A dedicated help center will be available to provide users with support and resources. This will include FAQs, tutorials, and contact options for customer service representatives who can assist with any issues or inquiries.

Feedback Mechanism: The platform will include features that allow users to provide feedback on their experiences. This feedback will be invaluable for continuous improvement, helping the development team understand user needs and make necessary adjustments to enhance the platform.

Conclusion

The "Smart Communication" project aims to create a comprehensive digital ecosystem for rural artisans, enabling them to thrive in the modern marketplace. With a focus on user-friendly design, robust backend functionality, and an array of features designed to empower artisans, this platform is set to revolutionize the way artisans connect with customers and collaborate with one another. By leveraging advanced technologies and prioritizing user experience, the project will ensure long-term sustainability and success for rural artisans, fostering economic empowerment and cultural appreciation in their communities.

CHAPTER-7

TIMELINE FOR EXECUTION OF PROJECT (GANTT CHART)



Figure 2: Gantt Chart

CHAPTER-8

OUTCOMES

The "Smart Communication" project has achieved remarkable results, bringing substantial benefits not only to rural artisans but also to customers and the broader community. In this chapter, we will examine the outcomes across multiple dimensions, highlighting the social, economic, and technological impacts of the platform. Each section will delve into how the project has transformed the traditional craft ecosystem, creating new avenues for growth and sustainability.

8.1 Empowering Rural Artisans

1. Enhanced Market Access

One of the most significant outcomes of the "Smart Communication" project has been the enhanced market access it provides to rural artisans. By establishing a digital platform that connects artisans directly with customers, the project has effectively eliminated many of the traditional barriers that artisans faced in reaching new markets. Artisans can now showcase their products to a global audience, allowing them to sell their handcrafted goods beyond their local communities. This expanded reach has led to increased sales, helping artisans achieve better financial stability and sustainability in their businesses.

2. Improved Product Visibility

The platform has enabled artisans to present their products in a visually appealing manner, complete with high-quality images and detailed descriptions. This improved product visibility has attracted more customers, as potential buyers can easily browse and discover unique handmade items that might not have been accessible to them otherwise. The emphasis on storytelling behind each product has also fostered a deeper connection between artisans and customers, further enhancing the appeal of the artisans' work.

3. Skill Development and Capacity Building

Through the educational resources and training provided by the platform, artisans have gained valuable skills that extend beyond their craft. Workshops on digital marketing, e-commerce strategies, and product photography have empowered artisans to take control of their businesses and optimize their online presence. As a result, many artisans have reported increased confidence in their abilities to market their products and engage

with customers effectively. This capacity building is crucial for their longterm success in an increasingly competitive marketplace.

4. Strengthened Community Ties

The collaborative features of the platform have fostered a sense of community among rural artisans. By participating in forums and discussion boards, artisans can share knowledge, learn from one another, and collaborate on projects. This sense of belonging has strengthened traditional craft networks, encouraging artisans to support each other in their endeavors. As artisans share best practices and ideas, the overall quality of craftsmanship in the community has improved, promoting a culture of excellence and innovation.

5. Increased Earnings and Economic Stability

With enhanced market access and improved visibility, many artisans have experienced a significant increase in their earnings. This financial boost not only benefits the artisans themselves but also has a ripple effect on their families and communities. Increased income allows artisans to invest in their businesses, provide for their families, and contribute to the local economy. As a result, the project has played a vital role in reducing poverty levels within rural communities, fostering economic stability and resilience.

8.2 Impact on Customers

1. Access to Unique Products

Customers benefit from the "Smart Communication" platform by gaining access to a wide array of unique, high-quality handmade products. The platform's focus on showcasing the diverse craftsmanship of rural artisans allows customers to discover items that reflect authentic cultural heritage and artistry. This access to unique products enriches the shopping experience, offering customers the opportunity to purchase one-of-a-kind items that cannot be found in conventional retail settings.

2. Enhanced Customer Engagement

The platform facilitates direct interaction between artisans and customers, enabling personalized communication that enhances the overall shopping experience. Customers can inquire about products, request custom orders, and provide feedback directly to artisans. This engagement fosters a sense of connection and community, making customers feel more invested in their purchases. Additionally, artisans can build lasting relationships with their customers, leading to repeat business and brand loyalty.

3. Support for Sustainable Practices

As consumers become increasingly conscious of their purchasing decisions, the "Smart Communication" project aligns with the growing demand for ethically sourced and sustainable products. By promoting artisans who use eco-friendly materials and traditional crafting techniques, the platform encourages customers to support sustainable practices.

Conscious consumers are more likely to seek out products that not only reflect their values but also contribute positively to the environment and local communities.

8.3 Broader Community Impact

1. Cultural Preservation and Appreciation

The project has played a vital role in preserving and promoting the rich cultural heritage of rural artisans. By providing a platform for artisans to share their stories and craftsmanship, the project has created greater awareness and appreciation for traditional art forms. This visibility helps to keep cultural traditions alive, as more people recognize the value of handmade crafts and the skills involved in their creation.

2. Economic Revitalization of Rural Areas

As artisans thrive economically through the platform, the broader community benefits from the economic revitalization of rural areas. Increased artisan activity leads to job creation, not only for the artisans themselves but also for local suppliers and service providers. This revitalization helps combat rural depopulation and encourages young people to remain in their communities, fostering a sense of pride and opportunity for future generations.

CHAPTER-9

RESULTS AND DISCUSSIONS

The "Smart Communication" project represents a significant milestone in the effort to empower rural artisans while creating a user-friendly and scalable platform for showcasing their products. This chapter provides an in-depth analysis of the project's results, discussing their implications, challenges encountered during implementation, lessons learned, and opportunities for future enhancements.

9.1 Results Achieved

1. Platform Deployment and Adoption

The platform was successfully developed and launched, marking an important step in bridging the gap between rural artisans and the digital marketplace. Initial feedback indicated a positive reception among the artisan community, with a growing number of users registering and creating profiles on the platform. The deployment involved comprehensive testing to ensure functionality across different devices, which contributed to a smooth user experience.

Within the first few months, the platform witnessed significant adoption rates, with artisans from various regions joining to showcase their products. The user-friendly interface and intuitive design played a crucial role in encouraging engagement, as artisans felt empowered to navigate the platform without extensive technical knowledge.

2. Increased Sales and Revenue for Artisans

One of the most notable outcomes of the project has been the increase in sales and revenue for participating artisans. Statistical data indicated a marked improvement in sales figures compared to pre-launch periods. Artisans reported not only increased order volumes but also higher average transaction values as customers became more enthusiastic about purchasing unique, handcrafted goods.

This revenue growth has had a transformative impact on the artisans' livelihoods, allowing them to reinvest in their crafts, improve their skills, and expand their product offerings. For many artisans, the financial stability gained through the platform has contributed to better living conditions and enhanced quality of life for their families.

3. Enhanced Skills and Knowledge

The educational resources, workshops, and training provided through the platform have significantly improved artisans' skills and knowledge in various areas, including digital marketing, product presentation, and customer engagement. Artisans have reported feeling more confident in their ability to promote their products effectively and manage their online presence.

This enhanced skill set has not only benefited their individual businesses but has also contributed to the overall growth of the artisan community. As artisans share their newfound knowledge with peers, there is a collective uplift in the quality and presentation of artisanal products.

4. Strengthened Artisan Community

The project has successfully fostered a sense of community among rural artisans. Through forums, discussion boards, and collaborative activities, artisans have connected with one another, sharing ideas and best practices. This communal support system has created an environment conducive to growth and innovation, as artisans collaborate on projects, learn from each other, and inspire one another to push their creative boundaries.

9.2 Challenges Faced During Implementation

While the project achieved significant results, several challenges were encountered during its implementation.

1. Digital Literacy Gaps

A notable challenge was the varying levels of digital literacy among artisans. While some artisans quickly adapted to the platform, others struggled with navigating the digital space. This disparity highlighted the need for targeted training and support to ensure that all artisans could fully utilize the platform's features.

2. Infrastructure Limitations

In some rural areas, limited internet connectivity posed barriers to consistent access to the platform. Artisans in regions with unreliable internet faced difficulties in uploading their products, managing orders, and engaging with customers. Addressing these infrastructure challenges is crucial for maximizing the platform's reach and effectiveness.

3. Market Competition

As the platform gained traction, artisans began to face competition, not only from fellow artisans but also from mass-produced products available online. This competition underscored the need for artisans to differentiate their offerings through unique branding and storytelling, emphasizing the value of handmade crafts in an increasingly crowded market.

9.3 Lessons Learned

The implementation of the "Smart Communication" project provided valuable insights.

1. Importance of Training and Support

The need for ongoing training and support for artisans was a key lesson learned. Providing comprehensive training sessions tailored to varying skill levels can help bridge the digital literacy gap and empower more artisans to thrive on the platform.

2. User Feedback is Essential

Regular feedback from artisans and customers has proven invaluable in refining the platform. Actively seeking user input and making iterative improvements based on that feedback has enhanced user satisfaction and engagement.

3. Building Community Takes Time

Creating a strong sense of community among artisans requires consistent effort and engagement. Initiatives that encourage collaboration and knowledge sharing foster a supportive environment that is essential for long-term success.

9.4 Opportunities for Future Improvements

Looking ahead, there are several opportunities for enhancing the "Smart Communication" project.

1. Enhanced Digital Training Programs

Developing more comprehensive digital training programs, including hands-on workshops and online tutorials, can equip artisans with the skills needed to navigate the digital space confidently. Tailoring training to address specific challenges faced by different artisans can further enhance its effectiveness.

2. Infrastructure Support Initiatives

Building partnerships with local governments or organizations to improve internet connectivity in rural areas can significantly increase access to the platform. Exploring alternative solutions, such as offline functionalities or mobile-friendly.

CHAPTER-10 Conclusion

The "Smart Communication" project has proven to be a transformative initiative, effectively addressing the digital divide faced by rural artisans. By providing an accessible platform for artisans to showcase, promote, and sell their products, the project has opened new avenues for economic empowerment and community growth. This conclusion encapsulates the key takeaways from the project, highlighting its achievements, the challenges encountered, and the promising long-term prospects for both artisans and the broader community.

Key Takeaways

- 1. Empowerment through Technology: The primary goal of the project was to empower rural artisans by equipping them with the tools and skills necessary to thrive in the digital marketplace. The success of the platform in facilitating increased visibility and market access has underscored the potential of technology to uplift marginalized communities. Artisans reported enhanced confidence in their abilities to manage their businesses and engage with customers effectively.
- **2. Building a Supportive Community:** The project has successfully fostered a sense of community among artisans. By creating opportunities for collaboration, knowledge sharing, and mutual support, the platform has strengthened traditional craft networks. This communal bond has encouraged artisans to learn from one another, share best practices, and collectively improve the quality and diversity of their offerings.
- **3. Enhancing Customer Experience:** The platform has not only benefited artisans but has also enriched the customer experience. By providing access to unique, high-quality handmade products and fostering direct interaction between artisans and customers, the project has created a more personalized shopping experience. Customers have expressed appreciation for the stories behind each product, further enhancing their connection to the artisans and their crafts.
- **4. Economic Impact:** The increase in sales and revenue for artisans has had a positive impact on their livelihoods and the local economy. Artisans have reported improved financial stability, enabling them to invest in their crafts, support their families, and contribute to their communities. This economic revitalization is crucial for combating poverty and promoting sustainability in rural areas.

Challenges Encountered

While the project has achieved significant results, several challenges emerged during its implementation. The varying levels of digital literacy among artisans highlighted the need for tailored training and support to ensure that all users could effectively utilize the platform. Additionally, infrastructure limitations, particularly in terms of internet connectivity, posed barriers to consistent access. Addressing these challenges will be essential for sustaining the platform's growth and ensuring that all artisans benefit from its features.

Long-Term Prospects

Looking ahead, the future of the "Smart Communication" project is filled with potential. The lessons learned from this initiative can inform future enhancements, such as the development of more comprehensive digital training programs and infrastructure support initiatives aimed at improving internet connectivity in rural regions. Expanding the platform's features, such as offering advanced analytics for artisans or introducing marketing tools, could further empower users and enhance their competitiveness.

Moreover, the project can serve as a model for similar initiatives aimed at supporting underserved communities globally. By demonstrating the effectiveness of a community-centered approach that leverages technology for empowerment, the "Smart Communication" project has the potential to inspire further investment and innovation in the field of rural development.

In conclusion, the "Smart Communication" project has laid a strong foundation for a sustainable future for rural artisans. Its successes illustrate the power of technology to drive social change, and its commitment to community engagement ensures that the voices of artisans will continue to resonate in the digital marketplace. As the project evolves, it holds the promise of creating lasting impacts, empowering artisans, enriching customer experiences, and fostering economic growth in rural communities.

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APPENDIX-A SOURCE CODE

Main page

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Why Choose Us?</title>
  <style> body { font-family: Arial,
    sans-serif;
       margin: 0; padding:
       background-color: #e3e9f2;
    .why-choose-us { background-
       color: #cad3e0; padding:
      40px
               20px;
                        text-align:
       center;
    .why-choose-us h2 {
      margin: 0 0 20px;
       color: #274a78;
    .why-choose-us p { color:
      #274a78;
       margin-bottom: 40px;
    .features { display: flex;
      justify-content: center;
      gap: 20px; flex-wrap:
       wrap;
    .feature-box { background-
       color: #9fb3cf; border-
      radius: 8px; padding: 20px;
      width: 280px; text-align:
       center;
    }
    .feature-box
                    h3
      margin-bottom: 10px;
       color: #274a78;
    .feature-box p {
```

```
color: #274a78;
.about-us {
              display:
  flex;
         gap: 20px;
  padding: 40px 20px;
  align-items: center;
  background-color: #d7e2ee;
}
.about-us
            img
  width:
                45%;
  border-radius: 8px;
.about-us-text { width:
  50%;}
.about-us-text
                h2
              #274a78;
  color:
  margin-bottom: 20px;
.about-us-text p { line-height:
  1.6;
.about-us-extra { background-
  color: #c2d4e8; padding:
  40px
                   text-align:
          20px;
  center;
.about-us-extra h2 { color:
  #213c62;
  margin-bottom: 20px;
.about-us-extra p {
  line-height: 1.8;
  color: #314b6c;
.get-in-touch { max-width: 800px; margin:
  50px auto; padding: 20px; background-
  color: #ffffff; border-radius: 10px; box-
  shadow: 0 4px 6px rgba(0, 0, 0, 0.1);
  text-align: center;
.get-in-touch h2 {
  font-size: 24px;
  color: #274a78;
  margin-bottom:
                       10px;
  text-transform: uppercase;
```

User login Page

```
<?php
session start();
$servername = "localhost";
$username = "root";
$password = "root"; // Update your DB password
$dbname = "finalyear";
$conn = new mysqli ($servername, $username, $password, $dbname);
if ($conn->connect error) { die ("Connection failed:
". $conn->connect error); }
if($ SERVER["REQUEST METHOD"] == "POST") {
  if (isset($ POST['forgot password'])) {
    $email = $ POST['username'];
    $sql = "SELECT emergency question FROM sellers WHERE email = '$email'"; $result =
    $conn->query($sql);
    if ($result->num rows > 0) {
       $row = $result->fetch assoc();
       $emergency question = $row['emergency question'];
       echo "<form method='POST'>
            <label for='emergency answer'>$emergency question</label>
            <input type='text' id='emergency answer' name='emergency answer' required>
            <button type='submit' name='check answer'>Submit Answer//button> </form>";
    } else { echo "No seller found with that
    email."; }
  } if (isset($ POST['check answer'])) {
    $email = $ POST['username'];
    $emergency answer = $ POST['emergency answer'];
     $sql = "SELECT * FROM sellers WHERE email = '$email' AND emergency answer =
'$emergency answer'";
    $result = $conn->query($sql);
    if (\$result->num rows > 0) { echo
       "<form method='POST'>
            <label for='new password'>Enter New Password:</label>
            <input type='password' id='new password' name='new password' required>
            <button type='submit' name='reset password'>Reset Password</button>
          </form>";
```

```
} else { echo "Incorrect answer to emergency
  question."; }
}
  if (isset($ POST['reset password'])) {
  $new password = $ POST['new password'];
  $\text{hashed password} = \text{password hash($new password, PASSWORD DEFAULT);}
  $sql = "UPDATE sellers SET password = '$hashed password' WHERE email = '$email'";
  if ($conn->query($sql) === TRUE) { echo "Password reset successfully!";
  } else { echo "Error updating password: ". $conn-
  >error; }
if (isset($ POST['login'])) {
  $username = $ POST['username'];
  $password = $ POST['password'];
  $sql = "SELECT * FROM sellers WHERE email = '$username'"; $result
  = $conn->query($sql);
  if (\frac{1}{\text{result-}} num rows > 0) { \frac{1}{\text{row}}
     = $result->fetch assoc ();
     if (password verify ($password, $row['password'])) {
       $ SESSION['email'] = $row['email']; // Store email in session
       Header ("Location: sdash.php");
       Exit();
     } else { echo "Invalid credentials. Please try
     again."; }
  } else { echo "No seller found with that
  email."; }
}
```

}

APPENDIX-B SCREENSHOTS

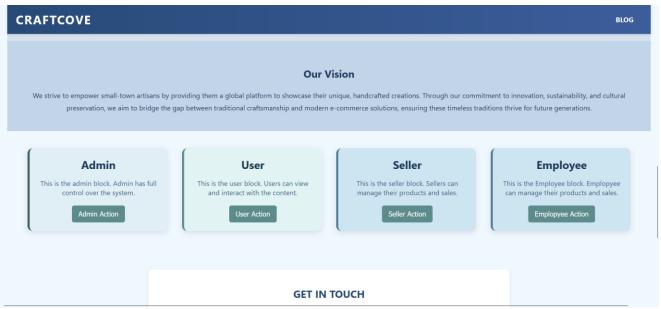


Figure 3: Home Page



Figure 4: Event Registration

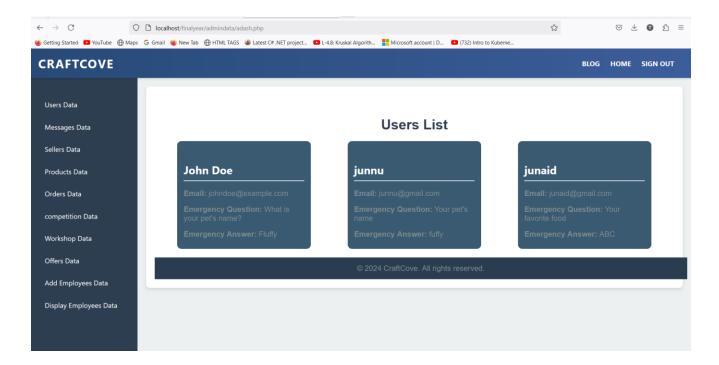


Figure 5: Admin Dashboard

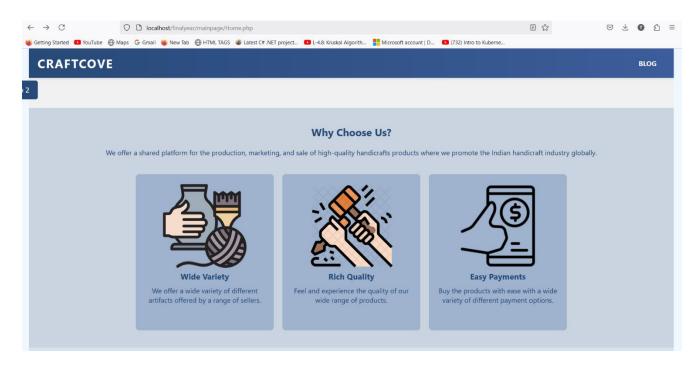


Figure 6: Why Choose Us?

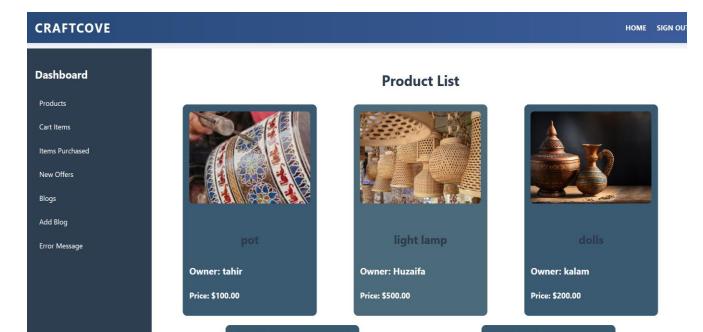


Figure 7:User Dashboard

APPENDIX-C

ENCLOSURES

SUSTAINABLE DEVELOPMENT GOALS (SDGs)

SUSTAINABLE GALS



Mapping the Smart Communication Project with the Sustainable Development Goals (SDGs):

1. Sustainable Development Goals 5 Gender Equality

your website can play a significant role in promoting gender equality by empowering women artisans in the handicraft sector. By showcasing their work, providing training opportunities, and offering a platform for their voices, you contribute to breaking gender barriers and creating economic independence. Featuring stories of women entrepreneurs, ensuring equal pay, and promoting leadership roles within the artisan community are vital steps towards fostering an inclusive and gender-responsive handicraft industry.

2. Sustainable Development Goals 8

Decent Work and Economic Growth

Supporting artisans through fair trade practices and sustainable economic opportunities aligns with the goal of promoting decent work and economic growth. Your website can facilitate better market access for artisans, ensuring they receive fair compensation for their craftsmanship. By offering digital marketing tools, online training, and showcasing their work to a global audience, the platform can contribute to job creation and enhance the financial stability of artisans, thus fostering long-term economic growth.

3. Sustainable Development Goals 12

Responsible Consumption and Production

Encouraging sustainable production techniques and responsible consumer choices is essential for reducing environmental impact. Your website can advocate for the use of eco-friendly raw materials, ethical production processes, and minimal waste practices within the handicraft sector. Educating consumers about the importance of supporting handmade, sustainable products can drive demand for ethically sourced goods and promote a culture of mindful consumption that values heritage and sustainability.

4.Sustainable Development Goals 17

Partnerships for the Goals

Collaboration is key to driving impact, and your website can act as a bridge between artisans, businesses, government agencies, and non-profit organizations. By fostering partnerships with stakeholders who share a commitment to sustainability and cultural preservation, your platform can expand its reach and influence. Joint initiatives such as funding opportunities, skill development programs, and market linkages can significantly enhance the growth of the handicraft industry and contribute to achieving sustainable development goals collectively.

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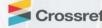
Assistant Professor, Dept. of CSE, Presidency University, Bangalore, India

In Recognition of Publication of the Paper Entitled

"CraftCove: A Smart Communication Hub for Empowering **Artisans and Reviving Handicrafts**"

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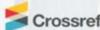
Student, Dept. of CSE (DevOps), Presidency University, Bangalore, India

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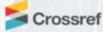
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"CraftCove: A Smart Communication Hub for Empowering **Artisans and Reviving Handicrafts**"

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