 <b>Marwadi University</b> Marwadi Chandarana Group	<b>Marwadi University</b> <b>Faculty of Engineering and Technology</b> <b>Department of Information and Communication Technology</b>	
<b>Subject: CP</b>	<b>Aim: Project Definition</b>	
	<b>Date: 25-09-2025</b>	<b>Enrolment No: 92310133015</b>

**SareeVerse** – modern, “universe of sarees.”

## 1. Introduction

The Indian handloom sector represents both cultural heritage and significant economic potential. Jetpur, a prominent textile hub in Gujarat, is widely recognized for its sarees and ethnic wear. However, artisans and manufacturers face barriers in global visibility, digital adoption, and effective buyer engagement. Most available digital platforms are **direct e-commerce portals**, which do not align with the **inquiry-based and bulk order system** prevalent in textile trade.

This project proposes the development of an **inquiry-driven web application** to showcase Jetpur sarees, manufacturers, artisans, and export opportunities. The platform enables buyers to explore collections, request quotes, and directly connect with artisans and exporters, thereby bridging the gap between heritage craftsmanship and modern ICT-enabled solutions.

## 2. Problem Statement

Despite the increasing demand for authentic Indian handloom sarees, artisans and manufacturers in Jetpur face several challenges:


- Lack of **dedicated digital platforms** supporting inquiry-based and bulk ordering models.
- Limited online representation of **artisans’ craftsmanship and stories**.
- Inadequate digital tools for **secure buyer–manufacturer communication**.
- Low global visibility despite significant cultural and economic value.

This gap highlights the need for an ICT-based platform that emphasizes cultural preservation, digital empowerment, and effective buyer–seller interaction.

## 3. Objectives

The project will achieve the following SMART objectives:

1. **Develop** a fully functional inquiry-based web application using **Next.js (TypeScript)** and **Supabase** within the project timeline of one semester.
2. **Enable** seamless buyer engagement by integrating inquiry forms, manufacturer profiles, and export quote requests with a **functional Supabase database** by the end of Phase II development.

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3. **Improve** user experience with a **responsive UI/UX** powered by Tailwind CSS, ensuring accessibility across mobile and desktop devices.
4. **Promote** artisans and manufacturers by creating **dedicated profile pages** enriched with heritage visuals and details.
5. **Ensure** secure and reliable authentication and form handling with Supabase, reducing failure rate to **less than 5% during testing**.

## 4. Relevance to ICT Domain

The project is directly aligned with the **ICT domain of web application development and cloud-backed database systems**. It incorporates modern technologies such as:

- **Web Development (Next.js, TypeScript, Tailwind CSS)** – trending frameworks ensuring maintainability and scalability.
- **Cloud & Backend-as-a-Service (Supabase)** – providing authentication, database, and storage services without heavy infrastructure costs.
- **ICT in Cultural Heritage Digitization** – applying ICT to promote traditional industries in a global market.


This aligns with current ICT trends such as **cloud-native development, serverless backends, and user-centric web platforms**, making the project both technically and socially relevant.

## 5. Feasibility Analysis

### 5.1 Technical Feasibility

- **Frontend:** Next.js with TypeScript ensures robust and scalable development.
- **Styling:** Tailwind CSS for responsive UI.
- **Backend:** Supabase for authentication, PostgreSQL database, and storage.
- **Deployment:** Vercel for hosting with CI/CD integration.  
The chosen stack is modern, developer-friendly, and well-documented, ensuring smooth implementation.

### 5.2 Economic Feasibility

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- Supabase free tier: sufficient for academic prototype.
  - Vercel free hosting: no deployment cost.
  - Tools (VS Code, GitHub, Figma): free to use.
- The project is cost-effective, requiring **zero additional financial investment** beyond existing resources.

### 5.3 Ethical Considerations

- **Data Privacy:** User inquiries stored securely with Supabase authentication.
- **Consent:** Explicit consent for form submissions.
- **Societal Impact:** Promotes cultural heritage and empowers artisans.  
Ethical risks are minimal and manageable with secure coding and transparent policies.

## 6. Market/User Needs Analysis


The project targets three primary user groups:

1. **Global Buyers:** Seeking authentic Jetpur sarees for retail and wholesale.
2. **Artisans/Manufacturers:** Requiring digital representation and inquiry management.
3. **Exporters:** Looking to connect with international markets through requests-for-quotes.

### Supporting Evidence (Credible Sources):

- Ministry of Textiles Report on Handloom Sector (Govt. of India, 2024).
- “Digital Platforms for Handloom Marketing in India” – *IEEE Xplore*, 2023.
- “Cloud-Native Web Application Development for SMEs” – *ACM Digital Library*, 2022.
- “Adoption of ICT in Cultural Heritage Promotion” – *Springer*, 2022.
- “Empowering Artisans through ICT-based Market Platforms” – *Industry Whitepaper, NASSCOM*, 2023.

These sources confirm strong market demand for ICT-enabled inquiry platforms supporting small-scale industries.

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## 7. Novelty and Literature Review

Existing textile websites primarily focus on **direct e-commerce models**, which are not ideal for bulk/custom orders common in Jetpur's saree trade. Literature shows ICT adoption in cultural industries is growing, but there is a lack of **localized, inquiry-first digital platforms**.

This project introduces novelty by:

- Shifting from **transaction-based** models to **inquiry-driven B2B engagement**.
- Combining **heritage promotion** with modern ICT frameworks.
- Using **Supabase** for a secure, scalable, and low-cost backend.

Compared to existing solutions, this approach is **more aligned with the real-world functioning of the saree industry**, making it both innovative and practical.

## 8. Conclusion

The Jetpur Sarees Inquiry Website will serve as a **scalable ICT solution** addressing visibility, communication, and digitization challenges in the textile industry. The project is technically feasible, economically viable, and ethically sound. It directly aligns with ICT trends in **web applications, cloud services, and cultural digitization**, while offering originality through its inquiry-first model.