H.U.B

Handicrafts under Blockchain

Pitch

Pitch

Scale
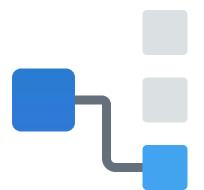
7 M

regional artisans in Indian Handicrafts Industry.

$3.53 B

worth of handicrafts exported from India in 2019-20.

35+

unique Handicrafts of India that are traded in substantial quantities
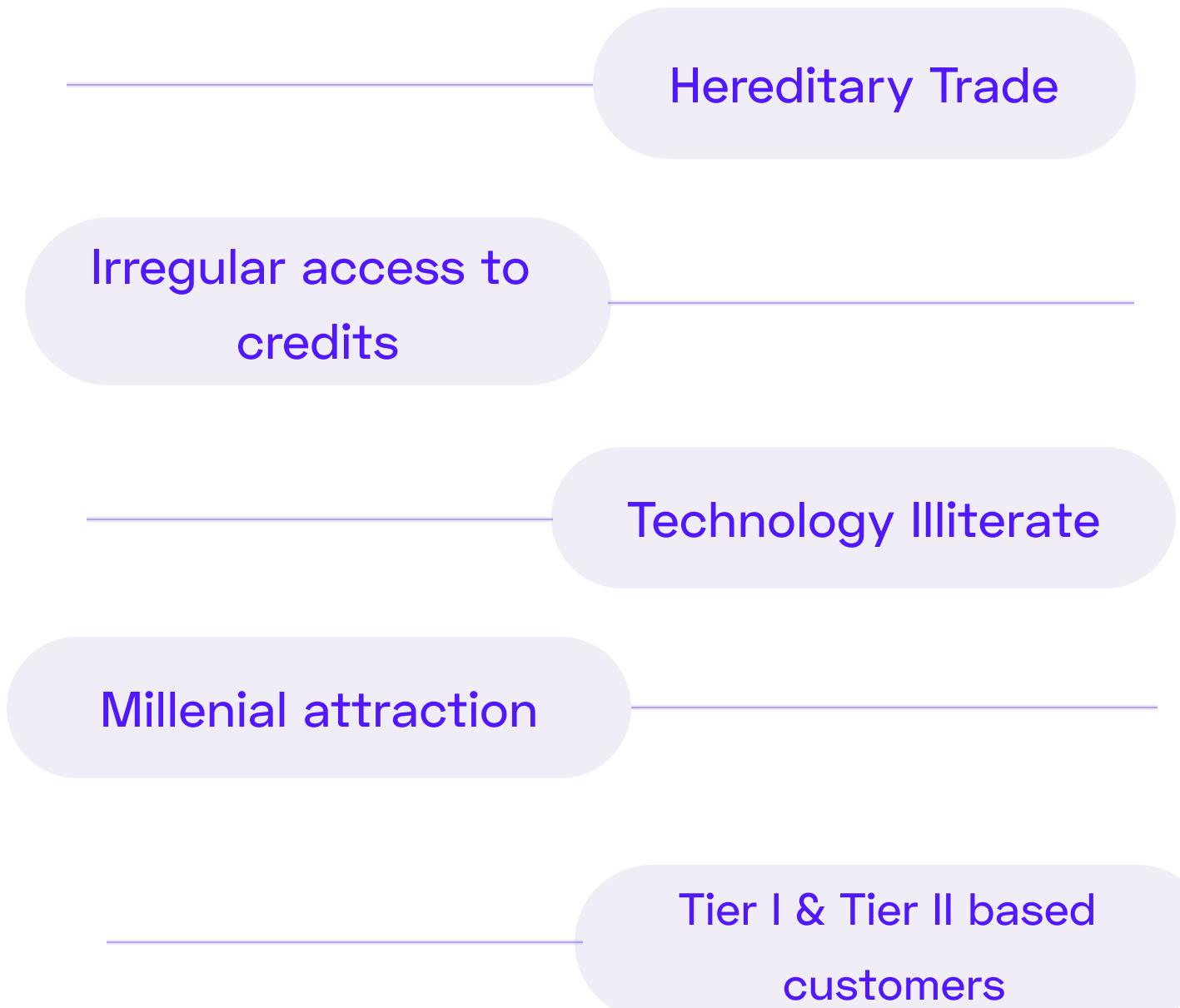
Problem

IDENTIFYING AND VALIDATING AN ISSUE

Market Features

Hereditary Trade

Irregular access to credits

Technology Illiterate

Millenial attraction
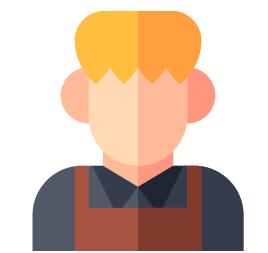
Tier I & Tier II based customers

Customer Profiles:

1. Artisan Profile

2. End consumer Profile

Market Features

India
2

China
17

Rest
81

Share of Handicraft Exports in the International Market

Lower remuneration due to inaccessibility to the highest paying market

Poor economies of scale occur in two forms:

1. **High cost of access to markets for raw material**
2. **High cost of access to output markets**
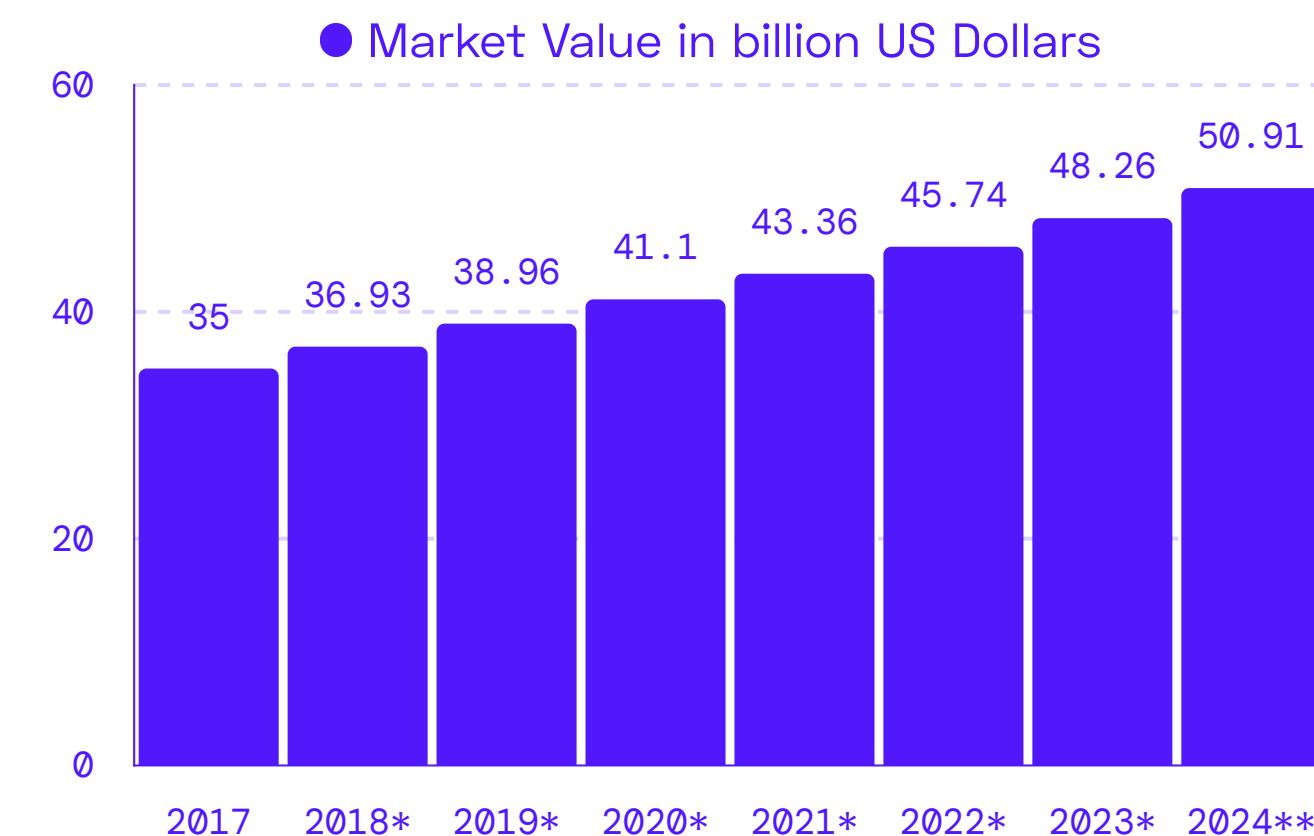
Trends in Indian Handicraft Market

INDIAN HANDICRAFT MARKET

● Export Value in Indian Rupees (Crores)

GLOBAL HANDICRAFT MARKET

● Market Value in billion US Dollars

35, 36.93, 38.96, 41.1, 43.36, 45.74, 48.26, 50.91

2017, 2018*, 2019*, 2020*, 2021*, 2022*, 2023*, 2024**

2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020

Pitch

7

Problems

AUTHENTICITY

Issues about quality

30.1%
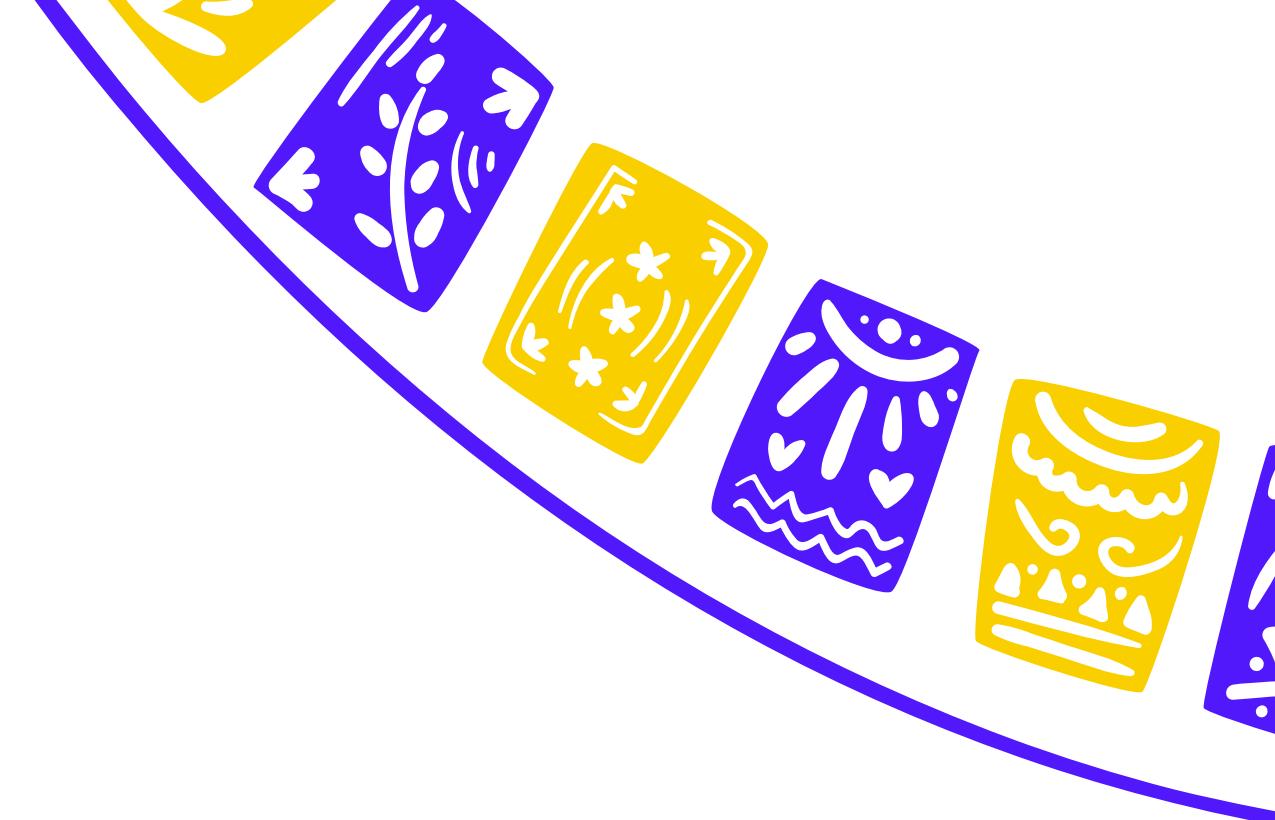
People are apprehensive about the quality of the product.

25.8%

People are unsure about the authenticity.

Replicas and Imports

Availability of cheap knockoffs and finished goods (eg. imports from China).

Problems

MARKETABILITY

Availability of products

34.8%

percentage of people found availabilty of products to be a major issue.

Lack of Awareness

Only 214

handicrafts have received GI tags to date

Lack of Identity

35%

artisans consider inadequate publicly to be a major challenge.

Lack of Knowledge about Consumer Preferences
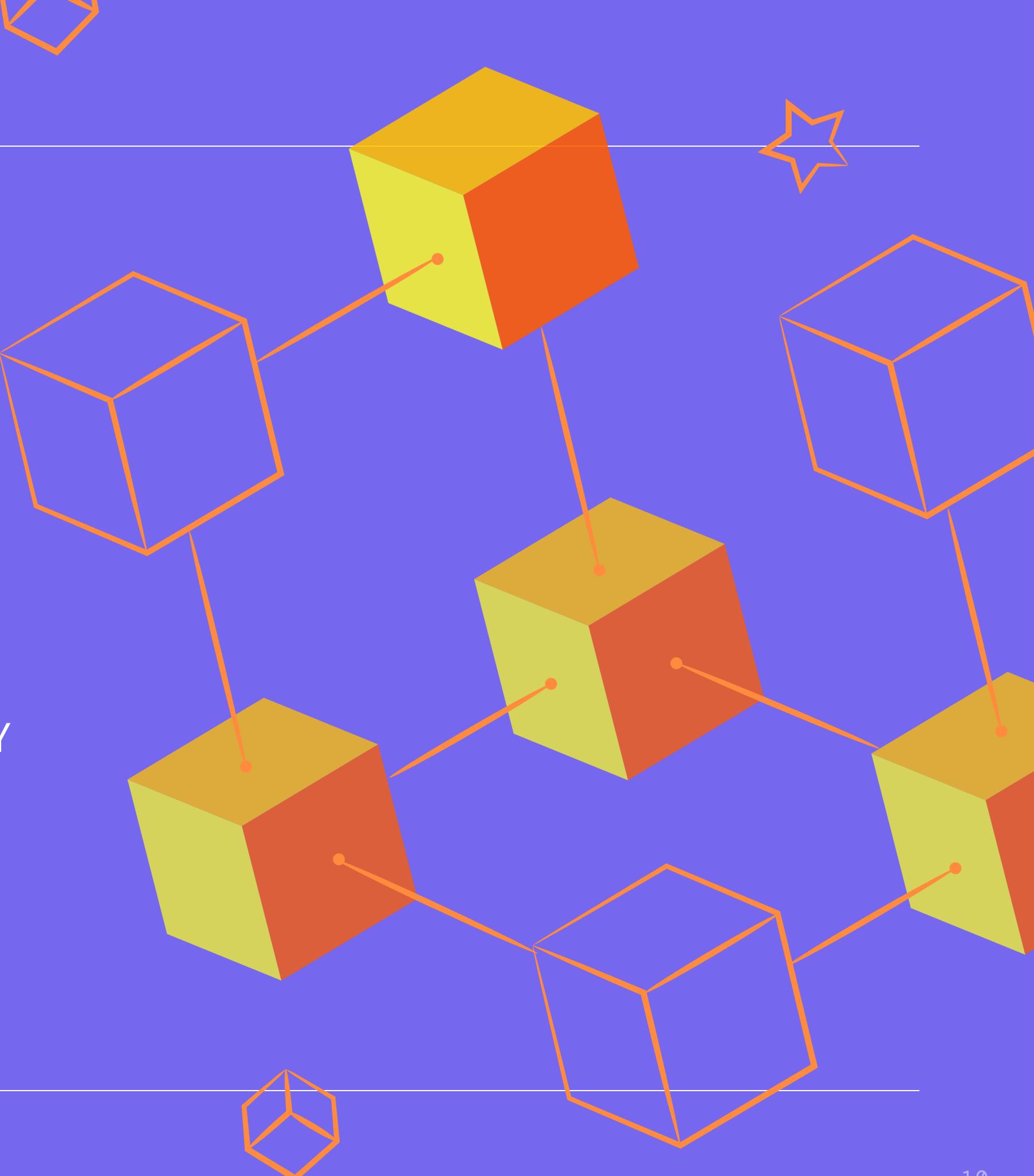
31%

artisans have been impacted due to lack of knowledge about consumer tastes.

Pitch

Product

ADDRESSING THE ISSUE USING TECHNOLOGY

Pitch
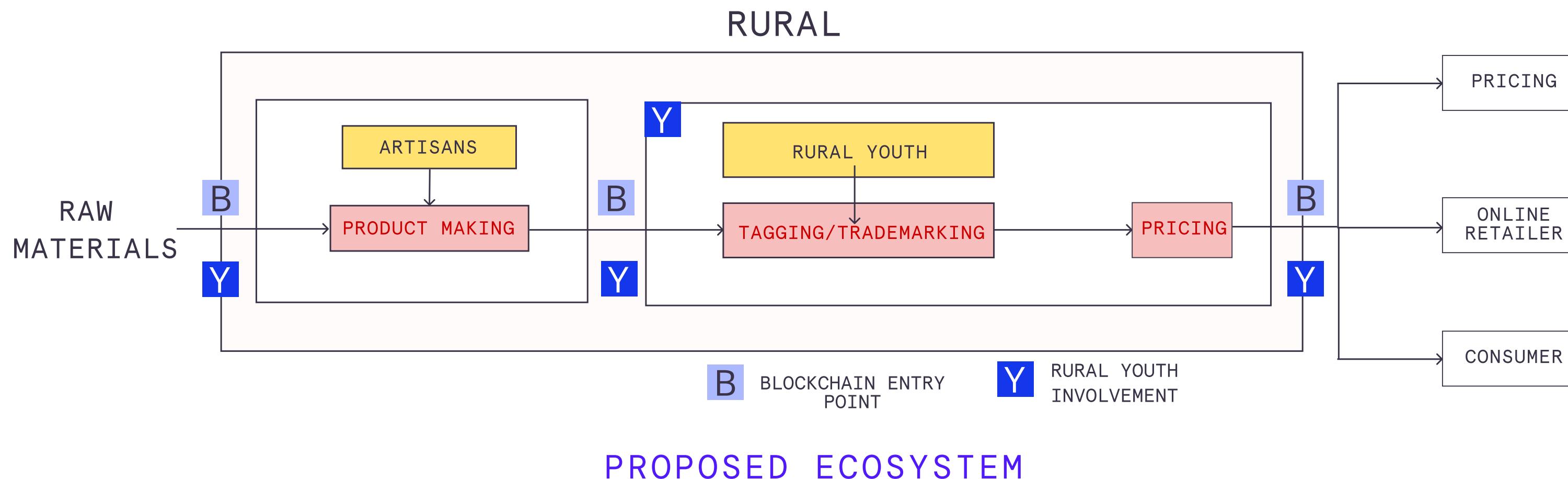
Proposed Solution
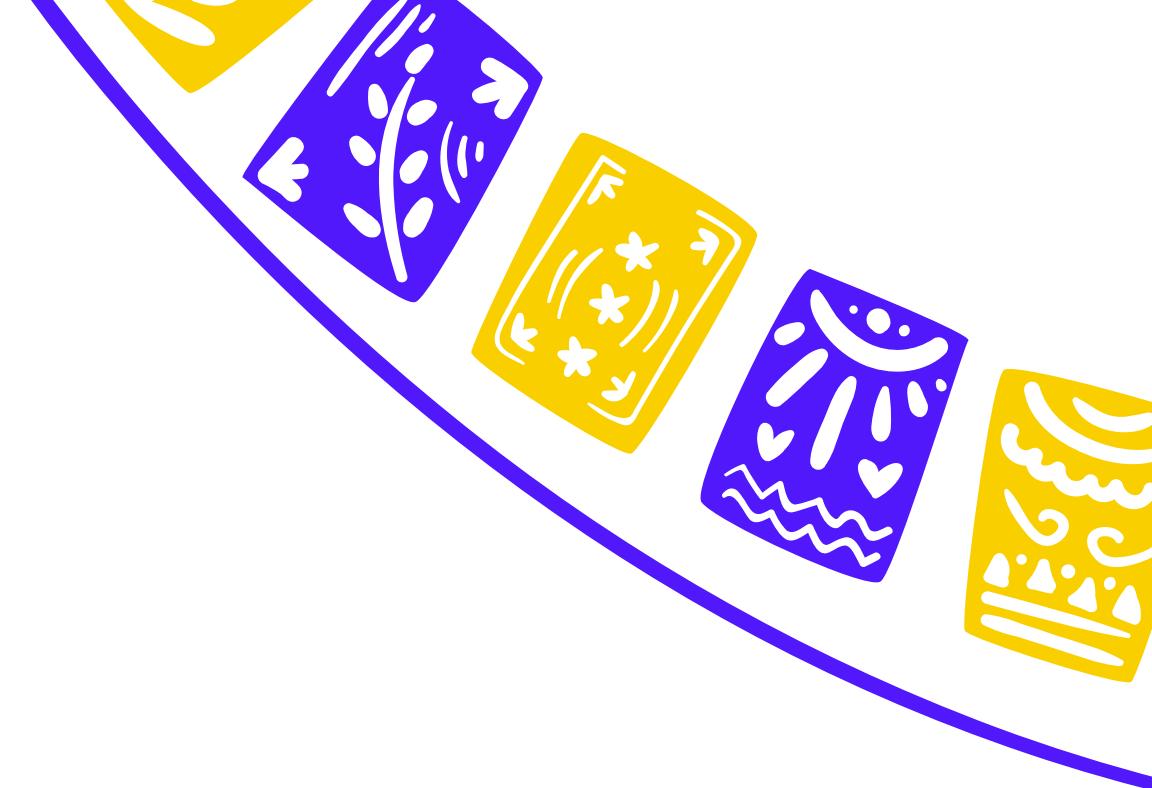
An **ecosystem** centered around a **blockchain-enabled platform,**
tracking the goods at each point in the supply chain to introduce
traceability and improve **marketability.**
Provides a **hallmark** for the **end-user** to trust.

RURAL

RAW
MATERIALS

B

Y

ARTISANS

PRODUCT MAKING

B

Y

Y

RURAL YOUTH

TAGGING/TRADEMARKING

PRICING

B

Y

PRICING

ONLINE
RETAILER

CONSUMER

B BLOCKCHAIN ENTRY
POINT

Y RURAL YOUTH
INVOLVEMENT

PROPOSED ECOSYSTEM
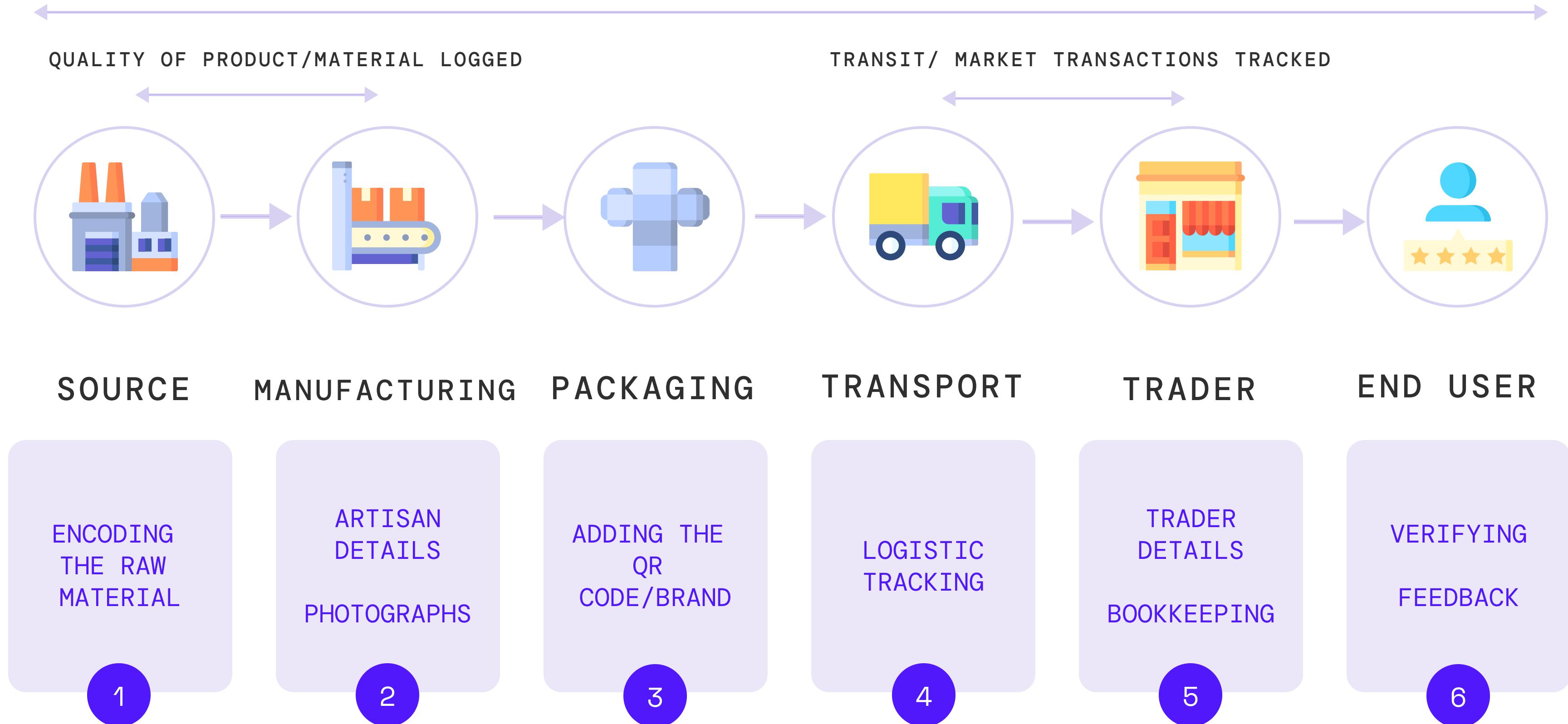
Product Flow

INFORMATION FLOW IS BIDIRECTIONAL
ARTISANS CAN TOO ACCESS BUSINESS ANALYTICS

QUALITY OF PRODUCT/MATERIAL LOGGED

TRANSIT/ MARKET TRANSACTIONS TRACKED

SOURCE   MANUFACTURING   PACKAGING   TRANSPORT   TRADER   END USER

SOURCE	MANUFACTURING	PACKAGING	TRANSPORT	TRADER	END USER
ENCODING THE RAW MATERIAL	ARTISAN DETAILS PHOTOGRAPHS	ADDING THE QR CODE/BRAND	LOGISTIC TRACKING	TRADER DETAILS BOOKKEEPING	VERIFYING FEEDBACK
1	2	3	4	5	6

Product Features

Traceablity
Add traceability to their product

Marketability
Depict the product journey with the customers

Feedback - Business Analytics & Rating System
Help artisans brand and market their product better with changing cultural needs

Pitch

14
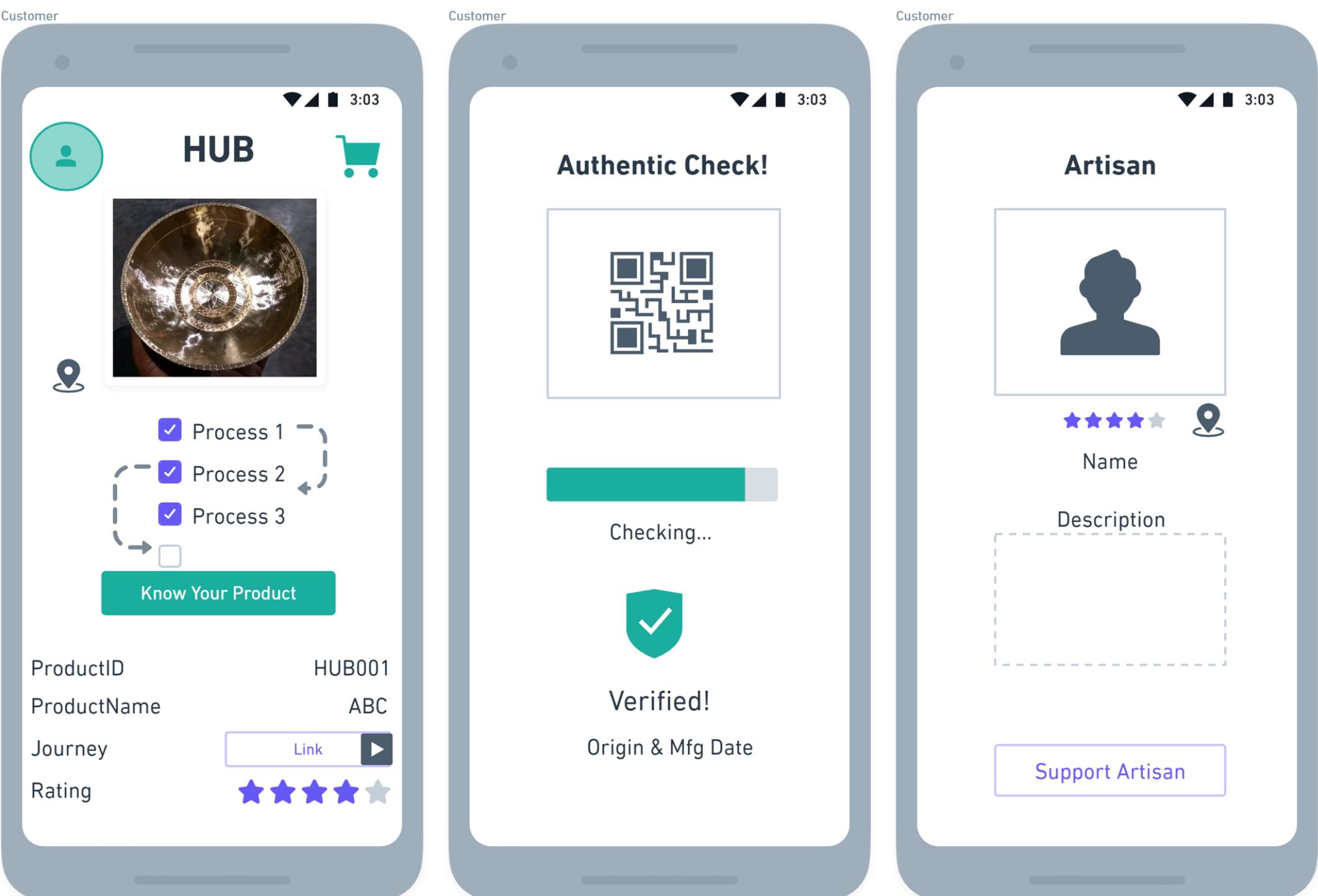
Technical Details

Blockchain based identification & tracking of handicrafts

Private & Permissioned Blockchain with Smart Contracts (Hyperledger)

BLOCK

Block ID
Product ID
Timestamp
Numerical Stat (Used for QC)
Image ID

Feasibilty

Technical

1. Basic Internet Access Required.
2. Initial Investment

Skill

1. Necessary Upskilling for Technical operations
2. Approaching unconventional markets

Adoption

1. Less friction from artisans/traders
2. Niche market who purchase authentic goods/handicraft fairs.

Financial

1. Cost to setup & run network:
2. Goods are highly-priced, there is margin for this product

Flexibilty

Craft	Geographic location	Internet penetration	Rural Youth Literacy	Artisan population	Problem
Pashmina Shawl	Kashmir	3G & 4G	63.18%	**2.50 lakh**	Authenticity, Middlemen takes huge profits
Silver Filigree	Odisha(Cuttack)	4G	83.47%	**1500**	Low quality raw materials -> Low quality products.
Channapatna Toys	Karnataka	3G & 4G	84.7%	**5000-6000**	Chinese Import toys
Puppetry	Rajasthan	2G & 3G	67%	**5000**	Skill
Phulkari	Punjab and Haryana	3G	65-80%	**10,000+**	Middlemen takes huge profits Marketability

Pitch
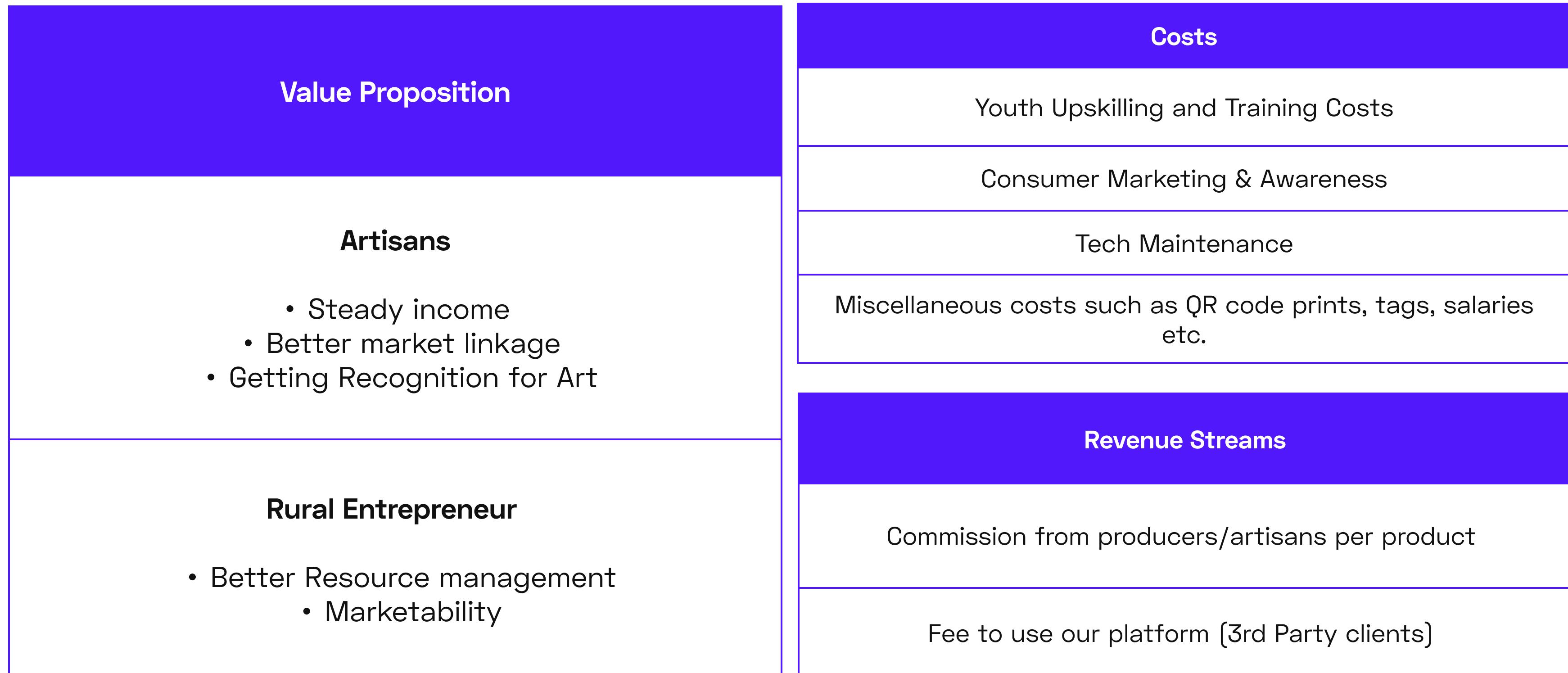
Business

MAKING OUR SOLUTION SCALABLE AND VIABLE

Business Model

Value Proposition
Artisans
• Steady income • Better market linkage • Getting Recognition for Art
Rural Entrepreneur
• Better Resource management • Marketability

Costs
Youth Upskilling and Training Costs
Consumer Marketing & Awareness
Tech Maintenance
Miscellaneous costs such as QR code prints, tags, salaries etc.

Revenue Streams
Commission from producers/artisans per product
Fee to use our platform (3rd Party clients)

Implementation Roadmap

Implementation Roadmap	**Community**	Dialogue with community leaders	Shortlisting among prospective identified SPOC candidates	Techno-management training	Pilot testing, Evaluation & final selection	Continued Support services for SPOCs
		Introducing our solution to the community	Spreading awareness and tech-knowhow among artisans			
	Retailers/ Traders	Identification of traders and retailers	Evangelize to adopt the platform			
	End User					Spreading awareness through handicraft Fairs etc. Cashbacks and other rewards on verifying products

Financials

BELL METAL PRICING MODEL

Bell Metal Goods MRP	2200 INR
Average Labour Cost	800 INR
Third Party Commission	700 INR

HUB COST MODEL

One Time Setup	1 Desktop + 1 Mobile + 1 Printer	40000 INR
Blockchain Transaction	350 Products Per Day (5 transaction per product)	24000 INR Per Month
Rural Youth Employees (8)	10000 Per Person	80000 INR Per Month

Financials

| Number of Units	350 Units Per Day	10500 Units Per Month
Commission	20 Rupees Per Unit	210000 INR Per Month
Adjusted Revenue	210000-104000	**106000 INR Per Month (51%)**

REVENUE MODEL

Less than 1% Commission for each unit sold
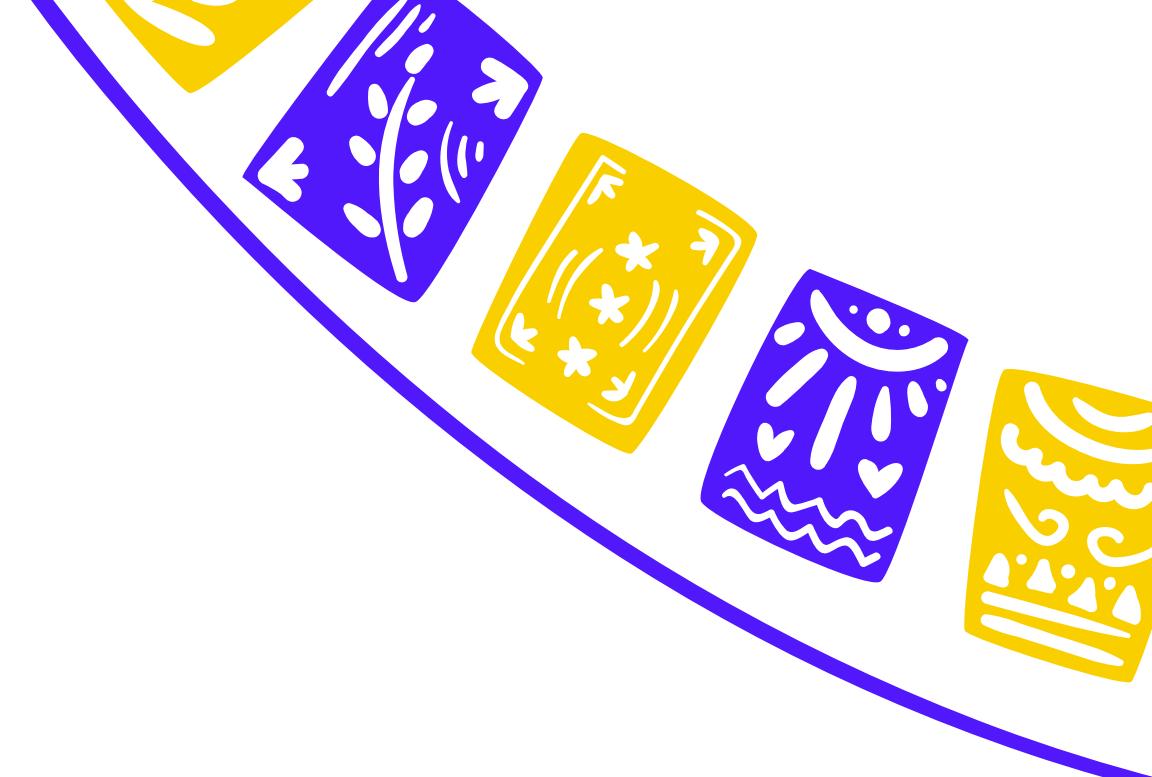
Impact

CREATING AN IMPACT ON THE COMMUNITY AND MAKING THE BUSINESS SUSTAINABLE

Pitch

Social Impact

4-Is to generate Impact

Social Impact

4-IS TO GENERATE IMPACT

Income

1. Increasing Volume of Sales
2. Improving Livelihood

Identity

1. Distinct cultural identity for Community
2. Identity for geography and utility

Independence

1. Brand development
2. New market linkages
3. Ownership of their products
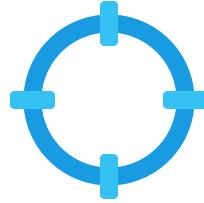
Inclusivity

1. Sense of cultural and business inclusivity
2. Artisan community recognition

Challenges

Niche

Sustainability

Awareness

Synergy
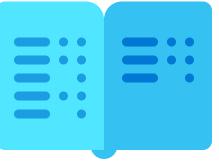
Future Aspects

Tourism

Upskilling
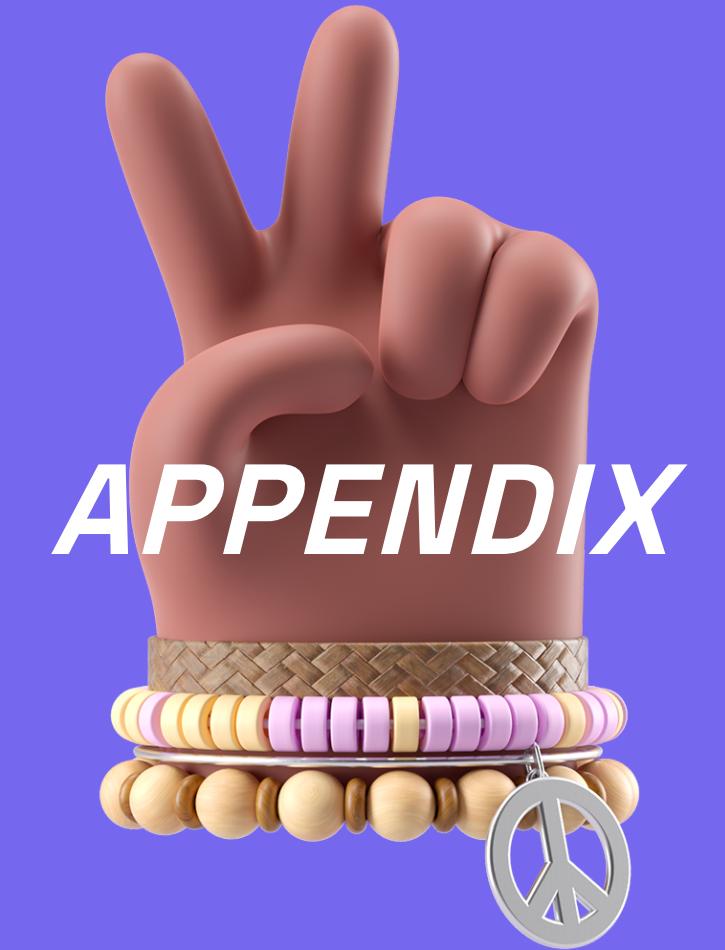
Customization

New Designs

THE END

APPENDIX

Primary Research

ENTREPRENEUR

Marketability

1. Unaware of the process behind making the brand.
2. Ineffective branding through the Facebook page
3. His market in states other than Assam has grown.

Logistics

1. Unavailability of Courier Services in Sarthebari.

Primary Research

ARTISANS

Earning

Six to Seven members together earn Rs. 20k to Rs. 30k.

Capital

Increased in price of raw materials and fuels used in the furnace.

Recognition

Government hasn't recognized their society formed in 2019 and no funds have been recieved.

Child Labor
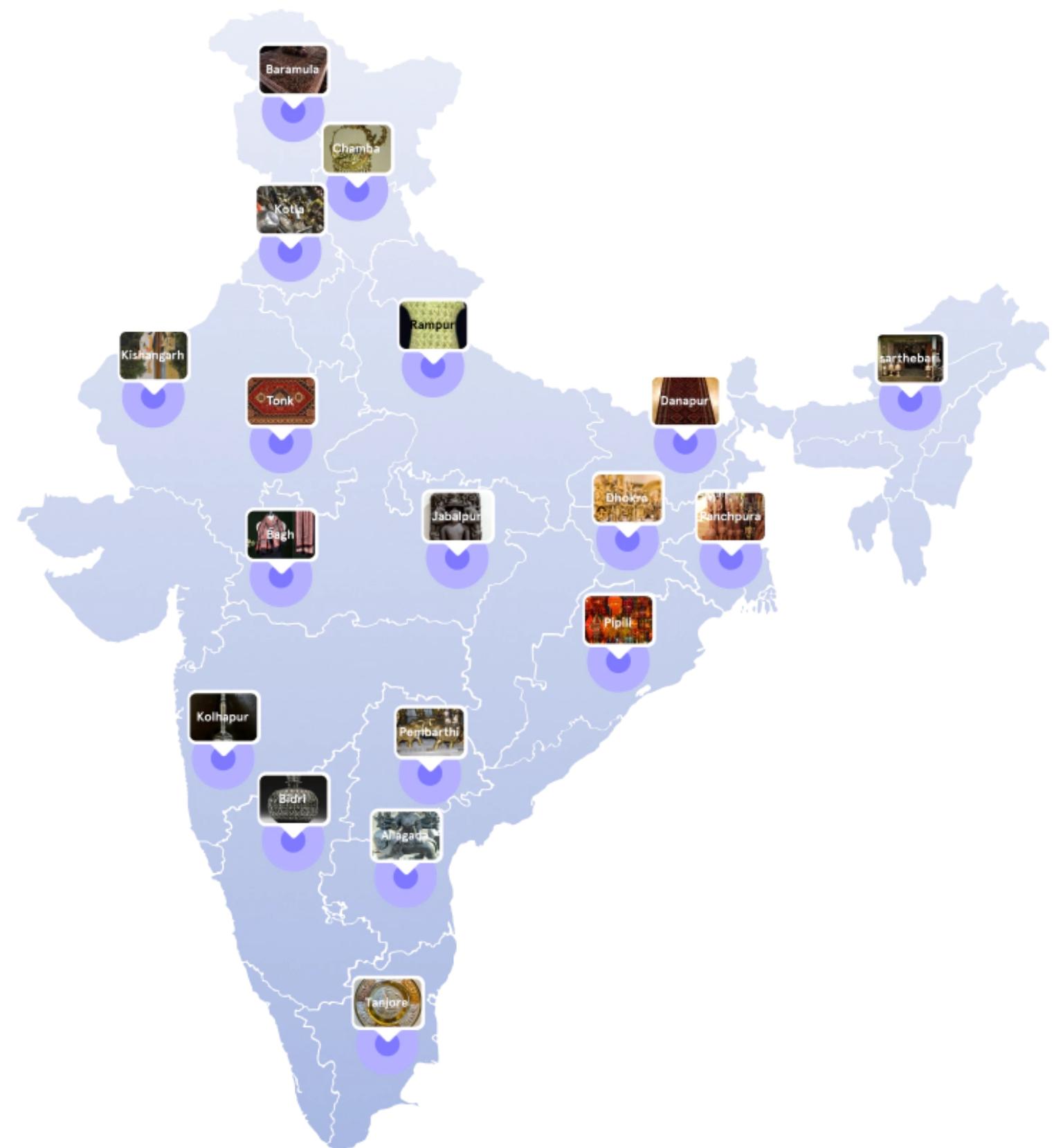
Some children leave middle school to help their family in the bell-metal business

Competition

Facing stiff competition from machine produced bell-metal products, and their profits have been slowly declining.

Health Hazards

Eyesight and Backbone problems are prominent with a lot of older artisans. There have also been a few cases of neurological disorder.
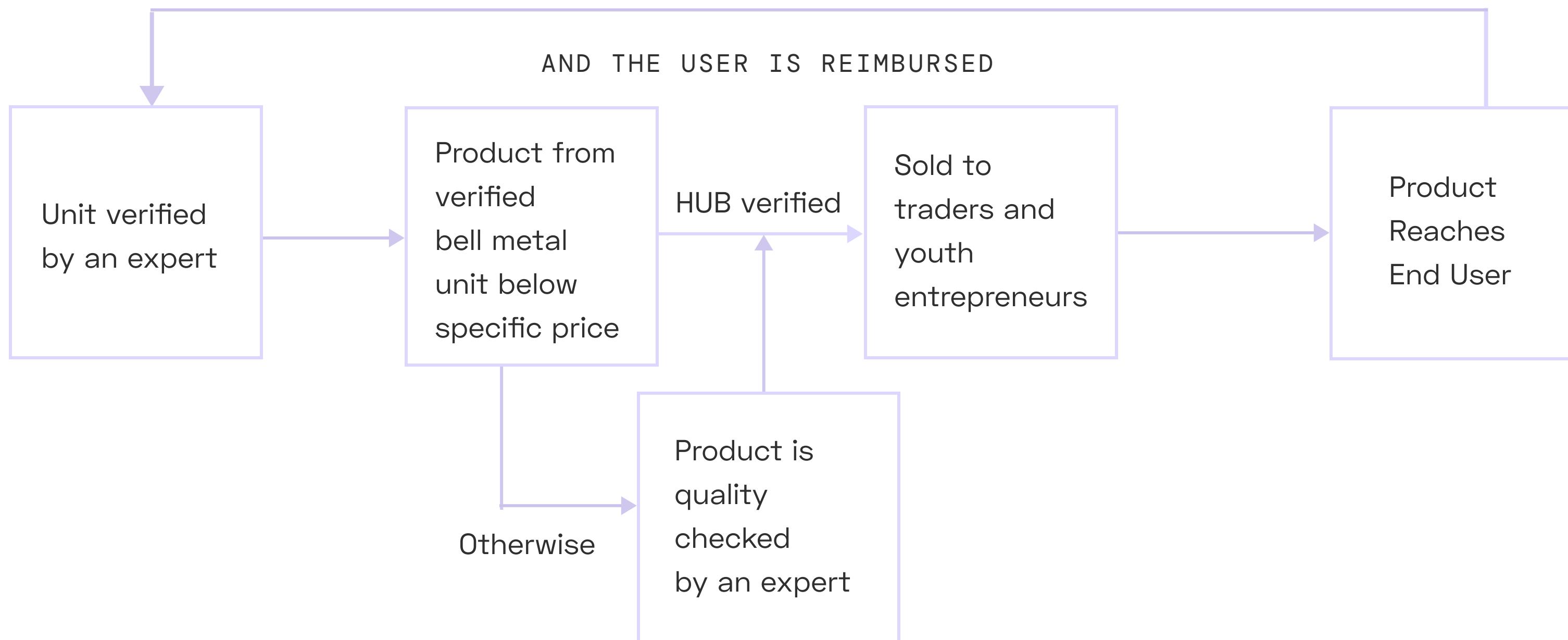
Verifying Authenticity

BELL-METAL UNIT

INCASE OF MORE THAN FIVE FAULT PRODUCTS AN EXPERT IS SENT TO THE UNIT TO VERIFY AGAIN

AND THE USER IS REIMBURSED

Unit verified by an expert → Product from verified bell metal unit below specific price → HUB verified → Sold to traders and youth entrepreneurs → Product Reaches End User

Otherwise → Product is quality checked by an expert

Private & Permissioned Blockchain

01   **Shared Ledger**

02   **Smart Contracts**

03   **Private Channels**

04   **Consensus**

Pitch

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Organizational Structure

Process- Operating Team	Process-operating Team (Rural Youth): Carry out the essentials of the process like recording blockchain system entries, applying QR codes, Tagging, etc.
Accounting & Finance Team	Maintain books of the raw materials & products flowing through the system and also pricing the products appropriately before the sale
Consumer Marketing Team	A team of rural youth dedicated to market the industry by leveraging our branding and building an emotional connection with the consumers.
Training & Upskilling Team	Spreading awareness and tech-knowhow among artisans & Techno-management training
Artisan Onboarding Team	An initiating team of our company whose sole job is to show the artisans the benefits of the system on ground and encourage them to join hands and identifying SPOC candidates
Tech Maintenance Team	