Here is the **updated and complete blockchain entry structure**, now including the **artisan (karigar) entry** along with all other stakeholders in the Kashmiri handicrafts ecosystem.



## Complete Blockchain Entry System for the Kashmiri Handicrafts Sector

This system ensures full transparency **from raw material sourcing to buyer transactions**, **tracking every step** in the **handicraft production and sales process**.



### 1. Raw Material Sourcing (Waguvar – Wool, Silk, Walnut Wood, Papier-Mâché Base, etc.)

*Ensures transparency in sourcing materials from farmers and suppliers.*

| **Entry Type** | **Data Fields** | **Blockchain Network** |
| --- | --- | --- |
| **Raw Material Harvesting** | Supplier ID, Material Type, Harvest Date, Quantity, Source Location (Geo-tag), Certification (e.g., organic, sustainable) | Private Blockchain |
| **Supplier Verification** | Supplier Name, Govt. ID, License Number, Past Transactions | Private Blockchain |
| **Quality Certification** | Lab Test Report, Certification ID (Silk Mark, GI Tag), Certifying Authority | Private Blockchain |
| **Supply Chain Tracking** | Supplier to Manufacturer Transaction ID, Material Movement Logs | Private Blockchain |



### 2. Artisan (Karigar) Entry – The Most Crucial Addition

*Ensures artisans (karigars) receive fair wages, maintain authenticity, and allow buyers to verify their craftsmanship.*

| **Entry Type** | **Data Fields** | **Blockchain Network** |
| --- | --- | --- |
| **Artisan Registration** | Artisan ID, Name, Address, Aadhaar Number (India), Govt. ID, Specialization (Weaving, Wood Carving, Papier-Mâché, etc.), Years of Experience, Contact | Private Blockchain |
| **Workshop Association** | Artisan ID, Workshop ID, Craft Type | Private Blockchain |
| **Skill Certification** | Certificate ID, Issuing Authority (GI Certification, Training Institutes) | Private Blockchain |
| **Work Order Assignment** | Order ID, Artisan ID, Product Type, Assigned Date, Expected Completion | Private Blockchain |
| **Work Progress Tracking** | Work Logs (Stages: Spinning, Weaving, Dyeing, Embroidery, Carving, Painting), Timestamps, Photos, Time Spent | Private Blockchain |
| **Product Completion & Quality Check** | Final Product ID, Artisan ID, Quality Control Report | Private Blockchain |
| **Artisan Earnings & Payment** | Payment ID, Artisan ID, Work Completed, Wage Amount, Payment Status | Private Blockchain |
| **Royalty for Artisan (if applicable)** | Artisan ID, Product NFT ID, Royalty Percentage, Payment Address | Public Blockchain (Ethereum/Polygon) |
| **QR Code for Buyer Verification** | QR Code linking to Artisan’s Work History | Public Blockchain |



### 3. Manufacturing Units & Workshops (Karigar Karkhanay) Entry

*Tracks the conversion of raw materials into finished handicrafts.*

| **Entry Type** | **Data Fields** | **Blockchain Network** |
| --- | --- | --- |
| **Workshop Registration** | Workshop ID, Owner Name, Location, Craft Type, No. of Artisans | Private Blockchain |
| **Raw Material Intake** | Raw Material Batch ID, Date Received, Source (Linked to Raw Material Entry) | Private Blockchain |
| **Production Workflow** | Production ID, Assigned Artisan, Stages (Spinning, Weaving, Carving, Painting) | Private Blockchain |
| **Final Product Registration** | Unique Product ID (linked to NFT), Artisan Name, GI Certification | Private Blockchain |



### 4. Distributor Entry (Product Movement from Workshop to Market)

*Tracks how products move from workshops to wholesalers and retailers.*

| **Entry Type** | **Data Fields** | **Blockchain Network** |
| --- | --- | --- |
| **Distributor Registration** | Distributor ID, Business Name, License, Location | Private Blockchain |
| **Product Shipment Details** | Product ID, Distributor ID, Date Dispatched, Destination | Private Blockchain |
| **Real-Time GPS Tracking** | Shipment ID, Live Geo-location, Delivery Status | IoT + Blockchain |
| **Warehouse Storage Logs** | Storage Facility ID, Conditions (Humidity, Temperature) | Private Blockchain |



### 5. Wholesaler Entry (Bulk Distribution of Handicrafts)

| **Entry Type** | **Data Fields** | **Blockchain Network** |
| --- | --- | --- |
| **Wholesaler Registration** | Wholesaler ID, Business Name, License, Location | Private Blockchain |
| **Bulk Purchase Orders** | Order ID, Distributor ID, Product Type, Quantity, Price | Private Blockchain |
| **Inventory Management** | Product Stock ID, Quantity Available, Date of Stock Entry | Private Blockchain |
| **Sales Records to Retailers** | Retailer ID, Date of Sale, Quantity, Payment Status | Private Blockchain |



### 6. Retailer Entry (Selling to End Buyers)

| **Entry Type** | **Data Fields** | **Blockchain Network** |
| --- | --- | --- |
| **Retailer Registration** | Retailer ID, Business Name, Location, Online/Offline | Private Blockchain |
| **Product Purchase from Wholesaler** | Invoice ID, Wholesaler ID, Product Details | Private Blockchain |
| **Stock Availability** | Product ID, Quantity Available, Pricing | Private Blockchain |
| **Point-of-Sale Transaction** | Buyer ID, Payment Method, Transaction Hash | Public Blockchain |
| **QR Code for Authenticity Check** | QR Code linked to NFT | Public Blockchain |



### 7. Buyer Entry (Final Purchase & Ownership Transfer)

| **Entry Type** | **Data Fields** | **Blockchain Network** |
| --- | --- | --- |
| **Buyer Profile (Optional for KYC)** | Buyer ID, Name, Location, Payment Method | Private Blockchain |
| **Purchase Transaction** | Order ID, Retailer ID, Payment Confirmation | Public Blockchain |
| **Ownership Registration (NFT-based)** | Buyer Wallet Address, Product NFT ID, Transfer Date | Public Blockchain |
| **Delivery Confirmation** | Buyer Acknowledgment, Time of Receipt | Public Blockchain |
| **Reviews & Ratings** | Buyer ID, Product ID, Review, Star Rating | Public Blockchain |



### 8. Post-Sale Services & Resale Market (Ownership Transfers & Repairs)

| **Entry Type** | **Data Fields** | **Blockchain Network** |
| --- | --- | --- |
| **Warranty Registration** | Buyer ID, Product ID, Warranty Period | Public Blockchain |
| **Repair & Maintenance Logs** | Repair ID, Artisan ID, Fix Type, Cost | Private Blockchain |
| **Resale & Ownership Transfer** | New Buyer ID, Transfer Date, Price | Public Blockchain |



### 9. Sustainability & Ethical Trade Compliance

| **Entry Type** | **Data Fields** | **Blockchain Network** |
| --- | --- | --- |
| **Material Sustainability Score** | CO2 Emissions, Water Usage | Private Blockchain |
| **Fair Trade Compliance** | Artisan Wages, Working Conditions Report | Private Blockchain |



## Updated Summary of Stakeholder Entries

| **Stage** | **Stakeholder** | **Blockchain Type** |
| --- | --- | --- |
| **Raw Material** | Farmers, Suppliers | **Private (Hyperledger)** |
| **Manufacturing** | **Artisans (Karigars), Workshops** | **Private (Hyperledger)** |
| **Distribution** | Distributors, Warehouses | **Private (Hyperledger)** |
| **Wholesale** | Wholesalers | **Private (Hyperledger)** |
| **Retail** | Retailers | **Private (Hyperledger)** |
| **Buyers** | End Customers | **Public (Polygon, Ethereum)** |
| **Resale & Services** | Ownership Transfers, Repairs | **Public (Ethereum)** |
| **Sustainability** | NGOs, Government Bodies | **Private (Hyperledger)** |



## What’s Next?

1. **Would you like Smart Contract Code** for **artisan payments & royalt**