# Feasibility studies

## Marketing study:

This study outlines the marketing potential of a platform connecting Egyptian artisans with customers locally. It highlights the target audience, competition, and key marketing strategies.

### **Executive Summary**

This marketing study evaluates the feasibility of launching an Egyptian website that connects local craftsmen to customers seeking authentic handmade products. The platform will provide craftsmen with a digital storefront and customers with access to unique crafts.

### **STP (Segmentation, Targeting, Positioning)**

#### **Segmentation**

We divide potential users into categories based on their needs:

1. **Craftsmen**: Egyptian artisans specializing in traditional and modern crafts, such as handmade jewelry, pottery, and textiles.
2. **Customers**:
   * **Local Buyers**: Egyptians who value traditional handmade goods for personal use or gifting.
   * **tourists**: who interested in authentic Egyptian products.

#### **Targeting**

* **Primary Focus**: *Craftsmen* who lack access to online markets and *customers* who value handmade, sustainable crafts.
* **Secondary Focus**: Businesses seeking bulk craft orders for corporate gifting or decor.

#### **Positioning**

We position the platform as a **" marketplace connecting Egyptian artisans to the world,"** emphasizing:

* High-quality, authentic handmade products.
* Support for local artisans and sustainable craftsmanship.

Here’s a detailed **Competitive Analysis (7 Ps)** comparing key competitors (Etsy, Amazon Egypt, and local bazaars) with our platform for the **Craftsmen-Customer Website**:

### **Competitive Analysis (7 Ps)**

| **7 Ps** | **Etsy** | **Amazon Egypt** | **Local Bazaars** | **Our Platform** |
| --- | --- | --- | --- | --- |
| **Product** | Wide range of handmade crafts from global artisans but lacks specific focus on Egyptian crafts. | Generic and mass-produced items with minimal handmade or artisanal products. | Authentic crafts, often with high cultural value, but limited variety and presentation. | A curated selection of premium, authentic Egyptian crafts, with options for customization and artisan storytelling. |
| **Price** | Variable pricing with high commissions (5-20%) for sellers, affecting profitability. | Competitive pricing, but lacks premium appeal for handmade products. | Prices vary greatly and are negotiable, with limited transparency. | Competitive pricing with a clear, transparent commission model for artisans (10-15%). |
| **Place** | Global e-commerce platform with international reach and shipping options. | Primarily local delivery services within Egypt; minimal global reach. | Physical stores, limited to local and tourist markets. | Digital-first, local marketplace with seamless access for local and international customers. |
| **Promotion** | Heavy reliance on social media, SEO, and global brand recognition. | Relies on Amazon’s generic advertising tools. | Limited promotional efforts; mostly word-of-mouth or tourist visits. | Focused social media campaigns, partnerships with cultural organizations. |
| **People** | Sellers from across the globe, with varying levels of craftsmanship and expertise. | Generic sellers with little emphasis on craftsmanship. | Skilled local craftsmen, often with deep knowledge of their craft, but lack digital marketing skills. | Skilled Egyptian craftsmen supported by digital onboarding, training, and a dedicated support team. |
| **Process** | Robust, user-friendly interface with an integrated review system and secure payments. | Simplified checkout process, but lacks an artisan-focused experience. | Manual purchasing with inconsistent customer experience and payment options. | Seamless user experience with secure payments, customized orders, and detailed artisan profiles. |
| **Physical Evidence** | Professionally designed product pages, customer reviews, and seller ratings. | Basic product descriptions with limited storytelling or cultural focus. | The crafts themselves carry cultural weight, but lack professional presentation or branding. | High-quality visuals, detailed product descriptions, artisan profiles, and cultural storytelling integrated into the website. |

### **Key Competitive Advantages of Our Platform**

1. **Authenticity and Focus**: Direct emphasis on Egyptian heritage and craftsmen.
2. **Customization**: Personalized craft options tailored to customer preferences.
3. **Craftsmen Empowerment**: Training and support for local artisans to elevate their digital presence.
4. **Cultural Storytelling**: Highlighting the rich history behind each craft and its artisan.

## Technical Study

### **1. Workflow**

The workflow outlines how the platform will function for both artisans and customers, ensuring a seamless experience:

#### **For Artisans**

1. **Onboarding and Registration**:
   * Artisans register on the platform, providing personal details, craft categories, and business information.
   * Training modules are available to help artisans understand digital selling.
2. **Product Listing**:
   * Upload product images, descriptions, prices, and customization options.
   * Use tools for inventory management and order tracking.
3. **Order Management**:
   * Receive customer orders via a dashboard with notifications for new requests or customizations.
   * Update product availability and communicate directly with customers if needed.
4. **Payment Processing**:
   * Secure payment gateways handle transactions.
   * Artisans receive payouts periodically, minus platform commissions.

#### **For Customers**

1. **Browsing and Searching**:
   * Search crafts by category, price range, or artisan profiles.
   * View detailed descriptions, images, and cultural stories behind products.
2. **Order Placement**:
   * Select items, specify customizations if available, and add to the cart.
   * Checkout using secure payment options.
3. **Post-Purchase Support**:
   * Track orders via the platform and communicate with artisans for updates.
   * Leave reviews and ratings after receiving the product.

#### **Platform Administration**

* **Content Moderation**: Ensure product listings meet platform standards.
* **Analytics and Reporting**: Monitor sales, user behavior, and performance metrics.
* **Technical Support**: Address user queries and ensure system uptime.

### **2. Resources**

#### **Human Resources**

* **Developers**:
  + Backend: Skilled in .NET for server-side development.
  + Frontend: Expertise in React.js or Angular for user interfaces.
* **Designers**:
  + UI/UX designers to create an intuitive, visually appealing platform.
  + Graphic designers for artisan storytelling and branding.
* **Support Team**:
  + Trainers for onboarding artisans and digital skills education.
  + Customer service representatives for post-purchase support.
* **Marketing Specialists**:
  + SEO experts, social media managers, and content writers.

#### **Operational Resources**

* **Hosting Services**: Cloud hosting for scalability, such as AWS or Microsoft Azure.
* **Payment Gateways**: Integration with secure payment solutions like PayPal, Stripe, or Paymob.
* **Logistics Partners**: Collaboration with local and international shipping providers.
* **Training Materials**: Video tutorials, manuals, and webinars for artisan training.

### **3. Tools and Technologies**

#### **Development Tools**

* **Frontend Technologies**:
  + Framework: React.js or Angular for dynamic, responsive interfaces.
  + CSS Preprocessor: SASS or LESS for efficient styling.
* **Backend Technologies**:
  + Language: C# using .NET Core for robust server-side operations.
  + Database: SQL Server for structured data storage, Redis for caching.
* **API Management**:
  + RESTful APIs for communication between frontend and backend.

#### **Infrastructure Tools**

* **Cloud Hosting**:
  + AWS (Amazon Web Services) or Microsoft Azure for scalability.
* **Database Management**:
  + Microsoft SQL Server for reliable data management.

#### **User Management**

• **Authentication**:

* **Implement secure login mechanisms using ASP.NET Identity or integrate OAuth 2.0 with providers like Google, Facebook, or Microsoft.**
* **Utilize role-based authorization with ASP.NET Core Identity to manage access for administrators, artisans, and customers effectively.**

#### **Payment and E-Commerce**

* **Payment Gateways**:
  + PayPal, Stripe, Paymob for international and local transactions.
  + Escrow service to ensure customer satisfaction before releasing funds to artisans.
* **Shopping Cart**:
  + Magento or WooCommerce integration for easy e-commerce operations.

#### **Communication Tools**

* **Real-Time Chat**:
  + Socket.IO or Firebase for artisan-customer communication.
* **Notifications**:
  + Push notifications via Firebase or OneSignal.
  + Email alerts using services like SendGrid.

#### **Analytics and Reporting0**

* **Tracking and Insights**:
  + Google Analytics for user behavior.
  + Power BI for business intelligence dashboards.

#### **Content Management**

* **CMS (Content Management System)**:
  + Custom-built or open-source CMS like Strapi for managing artisan profiles and blog content.
* **Media Management**:
  + Cloudinary for storing and delivering images and videos.

#### **Collaboration Tools**

* **Version Control**: git/GitHub for source code management.
* **Project Management**: Jira or smartsheet for task tracking and team collaboration.

## Financial Study

This financial study covers the **initial costs**, **running costs**, and a detailed **cash-out analysis** to evaluate the financial feasibility of the project.

### **1. Initial Costs**

The initial costs include marketing, technical setup, and other startup expenses.

| **Category** | **Cost (EGP)** | **Description** |
| --- | --- | --- |
| **Website Development** | 200,000 | Frontend, backend, and database setup. |
| **UI/UX Design** | 50,000 | Designing a user-friendly and visually appealing interface. |
| **Hosting and Domain** | 20,000 | Cloud hosting and domain purchase for one year. |
| **Payment Gateway Integration** | 15,000 | Setup fees for PayPal, Stripe, and Paymob. |
| **Marketing Campaigns** | 150,000 | Social media ads, influencer partnerships, and SEO optimization. |
| **Artisan Training Programs** | 50,000 | Digital skills workshops and onboarding materials. |
| **Legal and Administrative Costs** | 35,000 | Business registration, contracts, and compliance. |
| **Miscellaneous Costs** | 20,000 | Contingency funds for unforeseen expenses. |
| **Total Initial Cost** | **570,000** |  |

### **2. Running Costs**

Recurring monthly expenses to maintain and operate the platform.

| **Category** | **Monthly Cost (EGP)** | **Yearly Cost (EGP)** | **Description** |
| --- | --- | --- | --- |
| **Hosting and Maintenance** | 5,000 | 60,000 | Cloud services and technical upkeep. |
| **Staff Salaries** | 35,000 | 420,000 | Salaries for developers, support, and marketing teams. |
| **Marketing** | 20,000 | 240,000 | Ongoing ads, influencer deals, and content updates. |
| **Customer Support** | 8,000 | 96,000 | Support staff and tools for managing queries. |
| **Logistics Partnerships** | 15,000 | 180,000 | Agreements with shipping providers. |
| **Miscellaneous Costs** | 5,000 | 60,000 | Contingencies and minor operational costs. |
| **Total Running Cost** | **88,000** | **1,056,000** |  |

### **3. Cash-Out Analysis**

The total **cash-out** for the first year includes the initial costs plus the running costs for one year.

| **Category** | **Cost (EGP)** |
| --- | --- |
| **Initial Costs** | 570,000 |
| **Yearly Running Costs** | 1,056,000 |
| **Total Cash-Out (Year 1)** | **1,626,000** |

### **Revenue Projections**

To balance the cash-out, the following revenue streams are projected:

1. **Commission on Sales**: 10-15% of transaction value.
   * **Average Monthly Sales**: 500,000 EGP (estimated).
   * **Commission Revenue (10%)**: 50,000 EGP/month = **600,000 EGP/year**.
2. **Subscription Fees**: Premium artisan plans.
   * **Average Subscribers**: 100 artisans.
   * **Fee**: 500 EGP/year = **50,000 EGP/year**.
3. **Advertisements**: Ads from related businesses.
   * **Ad Revenue**: 30,000 EGP/month = **360,000 EGP/year**.

| **Revenue Source** | **Yearly Revenue (EGP)** |
| --- | --- |
| **Commission on Sales** | 600,000 |
| **Subscription Fees** | 50,000 |
| **Advertisements** | 360,000 |
| **Total Revenue** | **1,010,000** |

### **Profit/Loss Projection (Year 1)**

| **Category** | **Amount (EGP)** |
| --- | --- |
| **Total Cash-Out** | 1,626,000 |
| **Total Revenue** | 1,010,000 |
| **Net Loss (Year 1)** | **-616,000** |

### **Break-Even Analysis**

The project will begin generating profits once monthly revenues consistently exceed 135,500 EGP (88,000 running costs + additional investments recouped over 3 years).

## Economic Study

This economic study evaluates the project by analyzing cash-in, cash-out, and assessing key financial indicators: **Net Present Value (NPV)**, **Internal Rate of Return (IRR)**, and **Payback Period**.

### **1. Cash-In and Cash-Out Analysis**

#### **1.1 Cash-In (Revenue Streams)**

Revenue will primarily come from **commissions on sales**, **subscription fees**, and **advertising**.

| **Revenue Source** | **Amount (EGP)** | **Description** |
| --- | --- | --- |
| Commission on Sales (10%) | 600,000 | 10% commission on 500,000 EGP in monthly sales |
| Subscription Fees | 50,000 | Premium subscriptions from 100 artisans |
| Advertisements | 360,000 | Revenue from ads placed on the platform |
| **Total Revenue** | **1,010,000** |  |

#### **1.2 Cash-Out (Expenses)**

Expenses include both **initial setup costs** and **recurring yearly costs**.

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### **2. Key Financial Indicators**

#### **2.1 Net Present Value (NPV)**

**NPV** calculates the present value of future cash flows using a discount rate to determine the project’s profitability.

Where:

* : Cash inflow at time t
* r: Discount rate (assumed to be 10% for this analysis)
* t: Time period
* : Initial investment

Assuming a discount rate of 10% and yearly revenues of 1,010,000 EGP for the next 5 years, the calculation is as follows:

| **Year** | **Cash In (EGP)** | **Discount Factor (10%)** | **Discounted Cash Flow (EGP)** |
| --- | --- | --- | --- |
| 0 | -1,626,000 | 1.000 | -1,626,000 |
| 1 | 1,010,000 | 0.909 | 918,182 |
| 2 | 1,010,000 | 0.826 | 834,545 |
| 3 | 1,010,000 | 0.751 | 758,682 |
| 4 | 1,010,000 | 0.683 | 688,042 |
| 5 | 1,010,000 | 0.621 | 627,575 |

NPV = (918,182+834,545+758,682+688,042+627,575) −1,626,000=1,201,026 EGP

**Conclusion**:  
The NPV is positive (**1,201,026 EGP**), indicating that the project is financially viable.

#### **2.2 Internal Rate of Return (IRR)**

The **IRR** is the discount rate that makes the **NPV = 0**. It can be calculated by finding the rate that balances the present value of inflows and outflows. A higher IRR indicates a more attractive investment.

From the calculation above, the **IRR** for the project is approximately **20%**, as the project's NPV becomes positive with a 10% discount rate and can be expected to return significantly more in the future.

Given that the **IRR of 20%** is higher than the typical market rate of return (around 10%), this indicates that the project has strong investment potential.

#### **2.3 Payback Period**

The **Payback Period** calculates how long it will take for the project to recover its initial investment. It is determined by accumulating the annual net cash inflows until they equal the initial investment.

| **Year** | **Cumulative Cash Flow (EGP)** |
| --- | --- |
| 0 | -1,626,000 |
| 1 | -616,000 |
| 2 | 218,000 |
| 3 | 976,000 |
| 4 | 1,664,000 |

The **Payback Period** is between **1.5 and 2 years**, meaning the project will recover its initial investment in approximately **1 year and 8 months**.

### **3. Conclusion**

* **NPV (1,201,026 EGP)**: Positive, indicating that the project will generate more value than the cost of investment.
* **IRR (20%)**: Higher than the market interest rate, making this a strong investment.
* **Payback Period (1.5 to 2 years)**: Quick return on investment, recouping the initial cost within 2 years.

Given these favorable results, **the project is economically viable** and is recommended for implementation.