



SURVEY ON ART GALLERY WITH E-COMMERCE

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Abstract : *In pandemic, we have seen that local artists have suffered a lot, as their talent did not reach many people. So, they are quitting their profession and are moving to secondary businesses, which results in the depletion of our Indian cultural arts like Manjusha Painting, Mysore Painting, Parsi Embroidery, Toda Embroidery, and many more.*

This website helps local vendors and others sell their work from the comfort of their homes through the internet. Here, users can select the aesthetic painting to buy, or they can add it to their Wishlist too. The item in the shopping cart will be presented as an order, and the user can place the order by filling in some basic details like address, phone number, and payment methods.

The user may access a full web interface by logging in, registering, and using it (if new). They may use their accounts to submit and sell their creative work, follow others, and like and bookmark topics. A chatbot will be ready to assist the user. To keep your website safe, we offer security features like two-factor authentication, SSL certificates, and a firewall.

Our proposed model will be proven to be suitable for local vendors and others by providing benefits such as acquiring, selling, and promoting their innovation. This platform guarantees that traditional and cultural arts in India do not become extinct, but rather help to raise and perpetuate the country's ethnicity. Our motto is to make sure that art culture is preserved for future generations and provide credibility to artists who have worked hard to bring out their talent.

IndexTerms - art, culture, e-commerce, selling, purchasing, searching, security, digital payment.

I. INTRODUCTION

India is known for its intangible cultural heritage. Painting, sculpture, pottery, and textile art are among the various genres of Indian art. Indian art has a long history that predates Indian civilization; thus, it's no wonder that Indian art's successes make every Indian proud. That isn't the case. Only a few Indian artists have been recognized as dominating the art market or being sold for a higher price. However, the fact that it is predominantly linked with Indian culture makes it unique, and so does the way of thinking about life and the complexities of nature. This provides the country with optimism as it stands at a fork in the path. A multitude of cultures have inspired Indian art.

India is a democratic country, so every person living in this country has equal importance. So, if we talk in terms of artists and their talents, everyone has a unique talent and equal importance should be given to them. But the case is that only well-known artists are getting paid more, and local artists are not getting paid that much. After the pandemic, local artists' conditions have become worse. Because of the lower income, they are quitting their profession and moving to secondary businesses, which has resulted in the depletion of our Indian art and culture.

Our Paper is an online art gallery platform where artists can share their artistic work and also promote and sell their masterpieces. The following are some of the aspects of our project:

- Promoting traditional art-work.
- Buying and selling of masterpieces.
- Description of art and its origin in each Indian state.
- Locating nearby art shops.

II. PROGRAM BACKGROUND

This paper suggests a strategy for launching an online art gallery with e-commerce. The framework's main purpose is to give a platform for local artists to sell and promote their work while also receiving and credit for their work. This portal also provides knowledge and information about various arts and cultures specific to Indian states. Our platform also promotes **Digital India Movement** by providing an online payment method.

III. PROBLEM STATEMENT

Due to COVID-19, mobility was restricted and all market events and art fairs were cancelled for months and months all over the world. Due to this, many local artists or vendors incurred huge financial losses in their businesses. So, they are quitting their job and moving to a second business. They are not getting credit and recognition for their talent, and they are also not getting an online platform to showcase their unique work and earn money. The major issue with today's generation is that they are not aware of Indian art and culture, which has resulted in the depletion of traditional Indian arts and cultures.

IV. SCOPE

The scope of our project is to provide a digital platform that helps to raise and maintain the ethnicity of Indian art-work by getting local artists and vendors onto an online platform and providing recognition and credits for their talent.

V. LITERATURE SURVEY

- [1] Beatrix E.M. Hasbelsberger and Pawan V. Bhansing propose in their paper "Art Galleries in Transformation: Is COVID- 19 Driving Digitisation?"

About how COVID-19 challenges art galleries to think about digital channels and their limits, such as plain representation of information online, online anonymity, confidence, emotional engagement, trust, and lack of personal distanced interaction. It has been found that these limitations can be overcome by providing rich, informative videos, online talks, photos of the material used in artwork, filmed guided tours, and online galleries should ensure to maintain a professional online appearance with well-organised and structured content about each and every artistic concept.

- [2] "E-commerce: The New Art Market," Archana Rani, Head & Associate Professor of Visual Art, R.G. College, Meerut,

Explain how the invasion of e-commerce has played an important role in the revival of the Indian market and how it has affected the Indian economy. Its outcomes include: taking a digital-first approach to selling art because many young artists believe that putting art online is a great option as it gives everyone a platform to show their talent and makes selling their original, ethical, and unique artforms to a larger audience easy. As the art industry is booming and creating tough competition among the artists, several virtual art platforms like Fixdi, Artzolo, Eikowa, etc., have a lot of paintings and their prices range from Rs 5,000 to Rs 2 lakh. People are developing an interest in art. All these factors have taken the Indian economy to a new height.

- [3] Xin Kang, Wenyin chen & Jian Kang, College of Design, National Taipei University of Technology describes in a paper "Art in age of Social media: Interaction behavior analysis of Instagram art accounts"

People are familiar with physical art galleries; they prefer to look for artworks in museums, art galleries, and so on. But in the era of the digital world, the art markets are evolving online, and the problem arising is how to deal with the interactive psychology of artwork and digital marketing in social media. An extensive analysis has been done of the interaction between artists and their followers on a platform called Instagram, and it has been found that the most liked artwork by the followers is preferred by the people, and this analysis has explored the social aspect of artwork.

- [4] Shubham Vaid, of the Symbiosis Institute of Business Management Pune, describes in his paper "Consumer and Online Payments"

stated that the world is evolving digitally more and more and that every second of a person's life revolves around technology. In this digital era, people are widely using e-commerce websites for buying and selling commodities. Payments are an important factor to consider while using e-commerce websites, and different payment methods are internet banking, debit and credit card payments, and UPI payments (Unified Payment Interface). So, research has been done by Shubham Vaid on security and trust factors and found that people are following online payment options only where the gateway is trusted and secured. This can be done by PCI DSS (Payment Card Industry Data Security Standard), which is a security standard that handles prime credit cards from major card schemes, and AES (Advanced Encryption Standard), SSL (Secure Socket Layer) in order to encrypt and protect data from unauthorised access.

- [5] Research on the topic "Database Security for E-commerce Websites" by Karan Gadgil, Karan Pardeshi, Karan Gupta, and Samiksha Potey, Department of Computer Engineering, RMD Sinhgad School of Engineering, Pune, Database security concerns are an important factor for e-commerce because, on a daily basis, millions of people use e-commerce websites for buying and selling, and protecting their data is of the utmost priority. He talked about security concerns such as being attacked by hackers, intrusions by 3rd parties, URL injection, XSS (Cross Site Scripting) and various Ransomware attacks, which lead to a decrease in the quality of security and trust by the user. URL injection can be prevented by using a firewall, and ransomware attacks can be prevented by using an IDS (Intrusion Detection System), which detects malicious activity, maintains backups, and keeps the system up-to-date regarding the latest security.

- [6] Carolina Marques de Carvalho, ISCTE Business School Lisbon, proposes in her paper "Project for an Online Art Gallery as Social Cooperative"

Fig1. Shows the commercialization of artwork has been mainly in the hands of physical art galleries, which charge around 40% commission to artists and work only with well-known artists. Creating an online art gallery by the name of MEcenas to help young artists achieve projection in the market is not only for young artists, but also for all other local vendors in earning money for their livelihood and making art and culture available at a reasonable price to the audience. Based on this market analysis, which found that in 2012 the global art market was estimated at \$56 billion, the biggest and fastest- growing markets were China, France, Great Britain, the USA, and Germany.

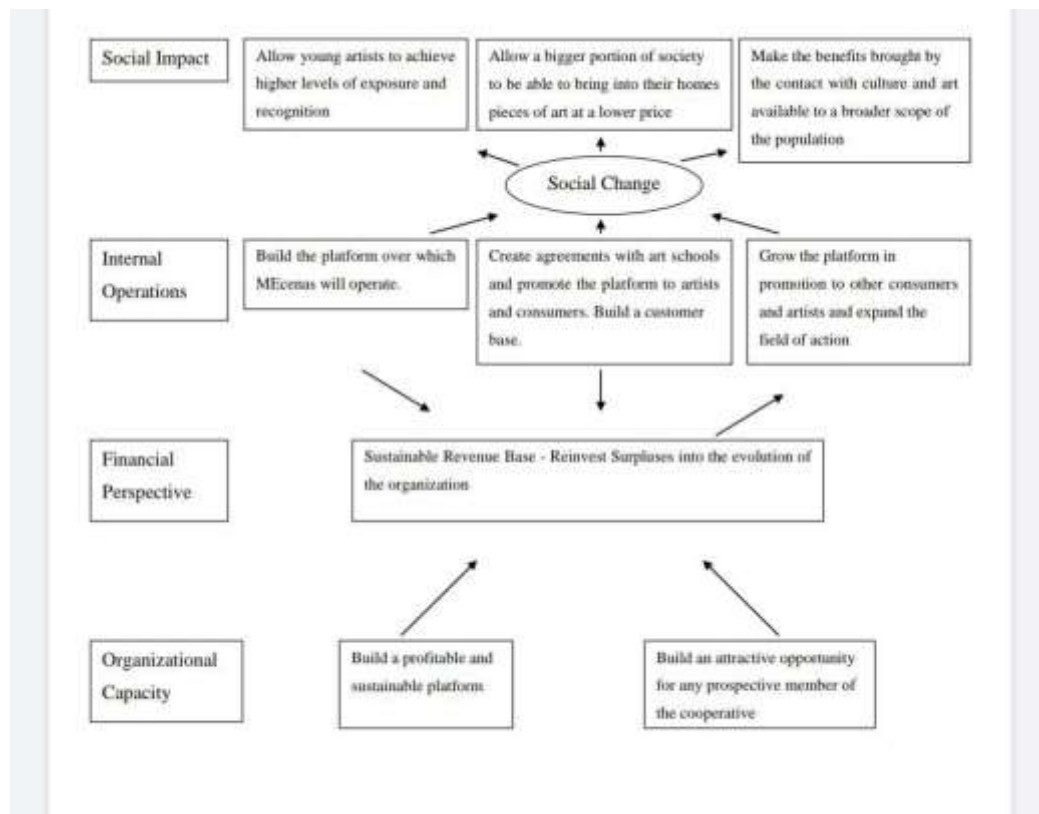


Fig1. Strategy Map of MEcenas

- [7] Wierczyńska-Kaczor, Urszula “Creating an online art exhibition: The influence of an online contest on the experience and behaviour of internet users”.
The difficulty of art galleries providing online material for artwork display and how these online art galleries alter the viewer’s perspective because the presentation of art merely provides metadata about the artwork and the medium, is the subject of research. What if the virtual art exhibition has more than the basic data? Is it possible that it will have a good influence on Internet user experiences? A study of these issues was conducted, and the following results were reached:
- 1) The hypothesis concerning the practical influence of improved background on the respondent’s impression of the art presentation was confirmed.
 - 2) The hypothesis concerning the mediating role of art interest in the viewer’s preferred environment of the virtual art exhibition was rejected.
- [8] Abhilasha Jaiswal “Online Art Gallery” stated that online art galleries are web pages or websites where you can put your artwork images for viewing. These are new concepts in purchasing and selling artwork, where both digital prints and traditional paintings are available to people. Basically, it’s a platform for people to save time, travel costs, and energy. A large variety of activities can be done from the comfort of their homes. But to explore all these features, users and artists must know how to operate them and how they can use them to their fullest. As technology advances, everyone must know how to communicate digitally with individuals all over the world.
- [9] Dr. Shobha G, Pramod K, Akash Hegde, Sandhya S “AWS and the Gupshup API were used to build a chatbot”. Chatbots are computer programs that can have text or voice interactions with people. Chatbots are available for a variety of uses, including e-commerce, communication, and answering user questions. Because, people cannot be everywhere to answer customer questions, these bots are built with the GupShup Bot Builder API, which deploys them on the AWS Cloud (Amazon Web Services) and connects them with Rally.
- [10] Nerella Tarak Krishna, Sai Vishnu Giri, Konapalli Pavan Kumar Reddy, Kannadasan R, Prabakaran N, Krishnamoorthy A. “Dialog flow and web services are used in the development of the chatbot”.
Chatbots are extremely useful for reducing human effort in less-complex activities, such as responding to messages, and they also provide excellent customer service around the clock. However, sometimes the way a question is asked is different, and the chatbots are unable to answer it effectively. Therefore, the models are replaced with artificial intelligence systems with greater query-answering capabilities. These systems are managed by Dialog Flow, which aids in the creation of an end-to-end bot without the need for the user to be concerned with the algorithm that should be used to train the bot.

VI. METHODOLOGY

You'll need an appropriate hosting plan to run an e-commerce marketplace website. If the hosting services is insufficient and the website receives a high volume of traffic, the website may crash, forcing the purchase of a premium hosting plan. The SSL (Secure Socket Layer), PCI DSS (Payment Card Industry Data Security Standard), AES (Advanced Encryption Standard) certificate and 3D Secure is essential since money will be exchanged over that platform. The website will be more secure with an SSL certificate, and no one will be able to access the data of the users.

HTML is used to construct documents in a web browser, CSS is used to create appealing web pages, JavaScript is used on the client side to verify the behavior of the webpage, and Bootstrap is used for simplifying the webpage. The frontend is created using these technologies. Django is a web framework that is basic and straightforward to use. It is likewise open source and freely available, and it is used to create backends. MongoDB is a document database that may be used to create worldwide applications that are highly accessible and scalable.

The basic ideology of the project is that we are creating a website in which both the artist and the buyer as a customer land on the website by registering themselves. Then, after that, they can login into it and use several features, like:

1. Artists can log in and browse through other people's feeds and posts; they can like and save various posts; they can sell their masterpieces; they can write about the description of art and how and when it originated in each state in India; and they can find nearby art shops and galleries by providing access to their location.
2. Buyers can get access to it by signing in. They can check out different art forms of artists, buy their unique art pieces, Wishlist their favourite art works too, check the descriptions and information about traditional artwork in our Indian culture, and they can also find out the nearby art shops and galleries by giving access to their location.

The features to be operated and accessed by the end-user of this website after registering and login are shown in Fig2:

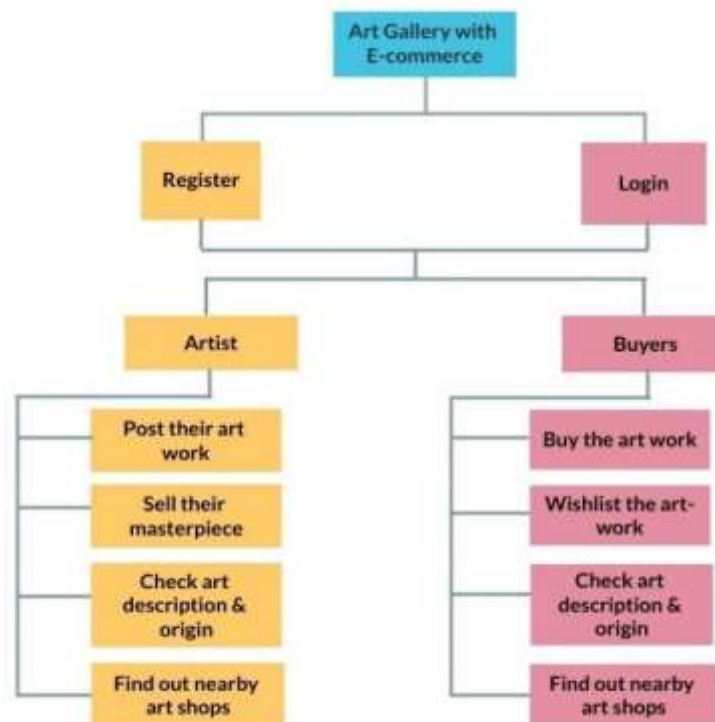


Fig2. Block Diagram of Art Gallery with E-Commerce

VII. LIMITATIONS

The limitations found while considering online art galleries are:

- Confidence, emotional engagement, and trust in the online art galleries.
- Plain representation of information online.
- Lacking and distance personal interaction.
- Online anonymity.

The limitations can be overcome by providing rich informative videos, online talks, photos of the material used in art work, and filmed guided tours. Galleries should make sure to maintain a professional online appearance with well-organized and structured content about each and every artistic concept. Online art galleries should also have to balance the lack of personal touch and emotional engagement to grow their online art business. They can do so by connecting the visitors on a more personal level, by giving social media talks with artists and experts, and by producing podcasts on different arts and cultures.

VIII. CONTRIBUTION TO SOCIETY

Our project model helps artists to create an account through the portal provided in our project model. After that, it helps them post their artworks and sell them through the portal, where they can also earn money. The description also provides a brief history of the art. This project model helps artists with their career growth and they can reach or connect large numbers of people through their talent. This project model is intended to assist artists in showcasing their talent in both digital and physical modes, such as art galleries, exhibitions, and so on, as well as in selling their artworks. It also helps artists gain recognition for their outstanding work and earn money through a user-friendly environment. Not only for artists, our project model helps customers to create an account and follow their favorite artists and follow, like, and comment on their posts. This project model also helps people to connect themselves to our Indian culture and also prevents the depletion of our Indian culture's ethnicity. People will also get knowledge about the artwork and its origin in each of the states mentioned in the description. Our project model also helps in locating art-shops nearby where the customers and artists stay.

IX. CONCLUSION AND FUTURE WORK

Extensive analysis is conducted to determine the need for interaction between the artist and the customers. Artists can also enter digital mode to continue their business and sustain their career and income growth. People can follow artists and like their talent, and they can also comment on their work. In this project model, customers who follow the artist can also purchase the artwork if they wish to, and a Wishlist option is also provided for the project model if they wish to purchase the artwork later. This is nothing but e-commerce, which is designed into this model along with the art gallery in order to make the selling of artworks easier and quicker in a user-friendly environment and also so that artists can get recognition for their outstanding work. This project also provides knowledge about the artworks from each Indian state. Payments can be made in digital mode as well, in order to support the Digital India movement.

The project can also be further improved by expanding it across the world, and this can be done according to the parameters of a particular region and its culture. Interaction networks can be made stronger between the artists and their followers. Security can be improved further by the threats occurring day by day, and even the database can be protected to keep the details safe. Payment security can be improved day by day and simplified for smoother transactions when buying the artwork. Even the art stores can be connected with this project model apart from India and across the world according to the expansion done for a particular region.

X. ACKNOWLEDGEMENT

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