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Revolutionizing Industry Dynamics: The Decentralized Marketplace for Seamless Manufacturer-Consumer Interaction

K. Ravikumar[1], Meiroopashree R K[2], Kavinraajhan A[3], Madheswaran V L[4], Navajeevan S R[5]

Assistant Professor, Department of Computer Science and Engineering, Knowledge Institute of Technology, Salem, India[1]

Department of Computer Science and Engineering, Knowledge Institute of Technology, Anna University, India[2,3,4,5]

ABSTRACT: Traditional product distribution methods that rely on wholesalers and merchants provide difficulties due to rising prices and restricted direct consumer-manufacturer contact in the dynamic industrial environment. We respond with a ground-breaking remedy—a Decentralized Marketplace. By streamlining the relationship between producers and customers, this cutting-edge platform aims to change the fundamentals of traditional commerce. Not every small- and large- scale sector is offered on one platform in the current application. Not every small- and large-scale sector is offered on one platform in the current application.

I. INTRODUCTION

In today's fast-paced industry, relying on wholesalers and retailers for product distribution frequently results in higher prices and a lack of direct connection between manufacturers and customers. We present a revolutionary solution to these problems: a decentralized marketplace. This cutting-edge platform seeks to transform traditional commerce by expediting the relationship between producers and customers. Come along as we examine the salient characteristics and advantages of this revolutionary endeavor.

II. LITERATURE SURVEY

A society's handloom and handicrafts have been an integral part of its culture since the dawn of civilization. The high caliber of a people's crafts and workmanship reflects the cultural patterns of that society. The phrase "handloom" and "handicrafts" refer to goods made by a particular culture using hand labor and native technology. A society's handicrafts frequently end up being its main source of income.

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After agriculture, hand looming has been a significant economic activity. Weaving beauty into the threads and crafting masterpieces to be worn is an age-old practice. However, over time, for a variety of reasons, this culture has lost its face value, and the weavers' financial situation has steadily gotten worse. This study provides a brief overview of the socioeconomic status, issues, and difficulties faced by handloom weavers in carrying on the tradition.

With only 2-3% import intensity, the textile industry employs 38 million people and generates approximately 30% of export earnings, 20% of industrial production, and 8% of India's GDP. It is also the country's biggest source of foreign exchange earnings. After agriculture, it is the second-largest employment-generating sector. India now contributes 15%of the world's cotton textile production, up from 12% in the previous decade. However, fragmented technology, low productivity, low-end products, and technical obsolescence have hindered the expansion of the textile sector.

It is yet not thoroughly investigated how generative neural network models can be used to comprehend and synthesize artistic designs. Several techniques are used in this work, including the most advanced generative models and style transfer algorithms available today, to examine and monitor how well they execute the task. The user score is then used to evaluate the outcomes. Additionally, a new dataset called "NeuralLoom" is provided by this study for the design generation task.

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An essential indication of the economy and the market value of businesses is an increase in productivity. According to the Ministry of Textiles' Annual Report 2012–2013, the textile sector supports the Indian economy by contributing4% of GDP, 14% of industrial production, and 11% of all manufactured exports. Additionally, about 35 million peoplework there. The purpose of this study is to identify the crucial success variables influencing the (textile) power loom industry's productivity utilizing information gathered through an interview-based questionnaire.

III. PROPOSED SOLUTION

A Decentralized Marketplace, our suggested remedy, offers a ground-breaking way to deal with the problems that the modern industrial landscape is facing. Through the absence of middlemen, this platform seeks to enable direct communication between consumers and manufacturers. Our revolutionary approach strives to improve industrial growth, boost profitability, and encourage cooperation by simplifying the conventional distribution paradigm and fostering efficiency and transparency all the way through the supply chain.

FEATURE:
Direct connectivity: is a feature that makes it easier for manufacturers and customers to interact directly, cutting out middlemen and enabling smooth transactions and communication.
E-commerce Integration: Sturdy e-commerce features that make it simple to browse, buy, and showcase products, improving the whole buying experience.
Resource sharing: is a way for manufacturers to work together to maximize resources like distribution networks and production sites, which lowers costs and boosts productivity.

IV. SYSTEM ARCHITECTURE

The products and materials that we will choose and buy are the foundation of the suggested solution. This strategy is applicable to any kind of application. The customer will first choose the products based on their needs by logging in or creating an account. The administrator must then go into the account and add the product details to the database in order to add the products to the database. The Material Owner will enter the Materials in the database. Included modules include the following
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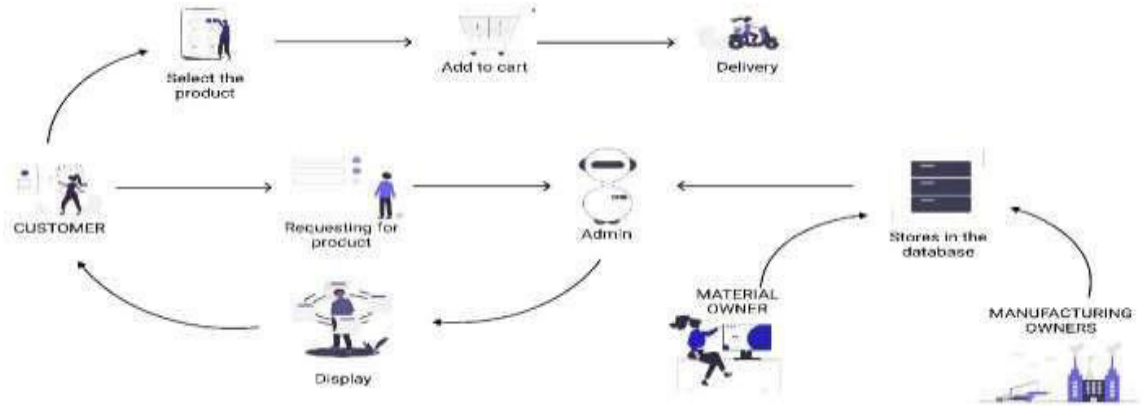

Fig 1. System Architecture Diagram

V. IMPLEMENTATIONS OF THE PROPOSED SYSTEM

MODULE – 1 (ADMIN)

Mechanisms for authorization and authentication for safe access. Orders, users, and products are managed via CRUD procedures .Features for managing databases, such as backup, restoration, and optimization

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MODULE – 2 (CUSTOMER)

Functionality for user registration and login. The ability to browse and search products. Control the addition, deletion, and updating of goods in your cart. Placing an order, following it, and looking up its history. Tools for managing your account, such changing your profile and changing your password.

MODULE – 3 (MATERIAL OWNER)

Product management for updating and adding goods based on materials. View the orders related to the materials they possess.

MODULE – 4 (MANUFACTURE OWNER)

Control of manufacturing specifics, such as specifications, amounts, and production procedures. Collaboration tools for exchanging information about manufacturing requirements with customers and material owners.

V. RESULTS AND DISCUSSION

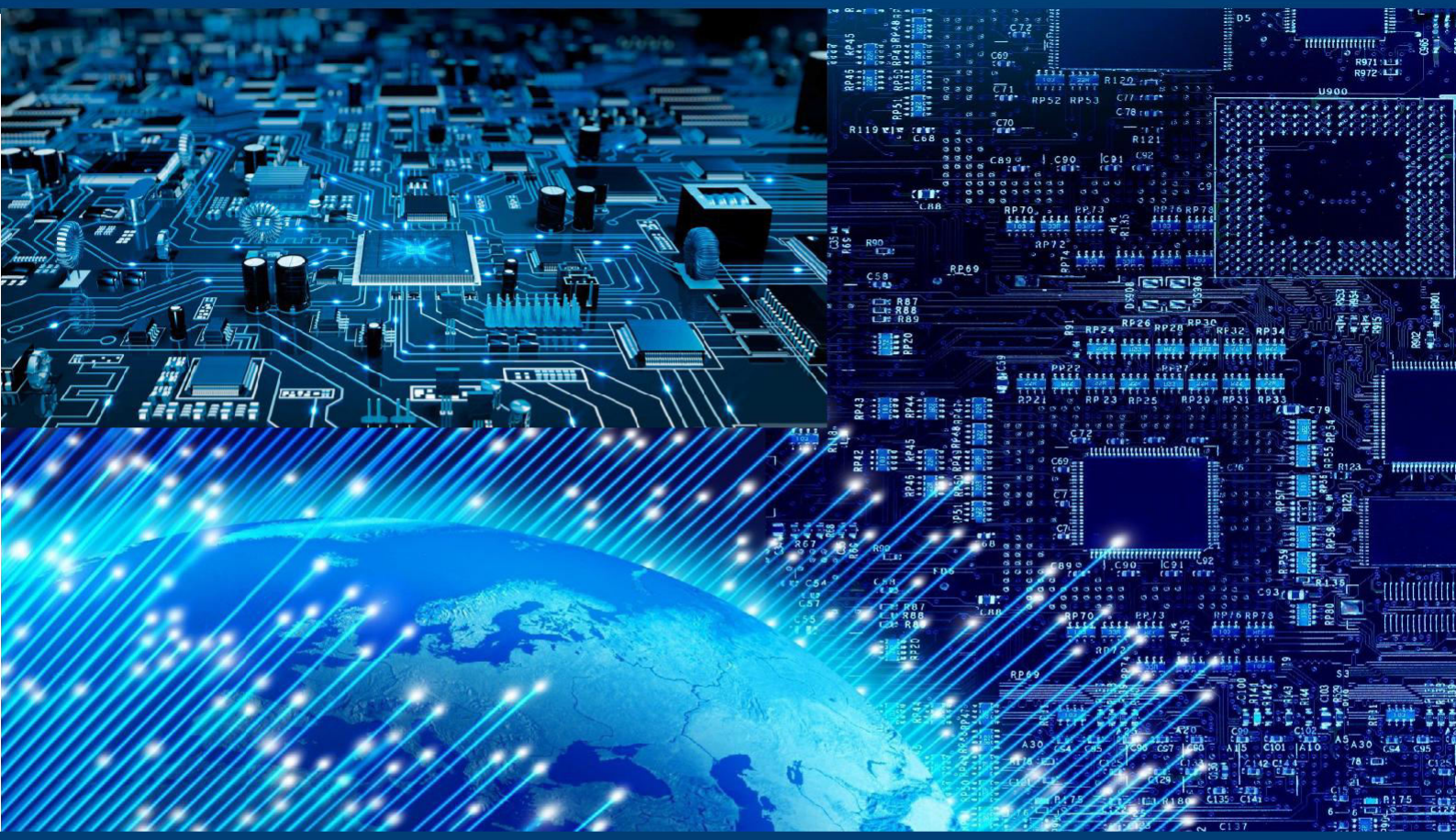
Through the direct connection of manufacturers and customers, the Decentralized Marketplace has effectively transformed the dynamics of commerce by removing the need for middlemen. Costs and fragmentation have decreased with the unification of all industries onto a single platform. Open lines of communication have increased confidence, which has decreased expenses and increased economic efficiency. The Stakeholders have direct access to information and distribution control.

VI. CONCLUSION AND FUTURE ENHANCEMENT

Through the removal of middlemen, the Decentralized Marketplace transforms business by encouraging direct communication between producers and customers. By integrating all industries, it lowers expenses and disarray. AI-driven personalization, blockchain transparency, augmented reality (AR) for immersive experiences, and category growth are some of the upcoming improvements. Collaboration with stakeholders and internationalization areimportant forces behind innovation and progress.

REFERENCES

[1] Umesh M. Bhushi', Shreeshail M. Pharsiyawar (2021) “Traditional handloom and handicrafts of Sikkim”, Indian Journal of Traditional Knowledge”.
[2] Shruti Mishra (2020) “A study on the present condition of the weavers of handloom industry”.
[3] Umesh M. Bhushi', Shreeshail M. Pharsiyawar (2020) “Some Perspectives in Handloom and Power loom Textile Industry”.
[4] Summaiya R Shaikh, Satish R Dulange (2019) “A Study of Factors Affecting Productivity of Power Loom Industries”.
[5] Anil Govindrao Suryavanshi (2018) “A study on growth of decentralized power loom sector in india.”.



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