Leveraging IT Skills for National Crisis

¹Rajavardhan R, ²Aneesh K, ³Gana N H, ⁴Azmath Patel, ⁵ MR. Srinivas Mishra ^{1,2,3,4} B. Tech Information Science Technology, Presidency University, Bangalore ⁵ Assistant Professor, SOCE, Presidency University, Bangalore

Abstract: Our goal is to utilize the huge pool of Information technology talent based in India for furthering the objectives of national importance, and in that context, we propose two integrated ICT tools: the National Importance Project Portal, which is a central place that catalogs vital projects and provides all information required for the successful implementation of the projects, and the Skill-Based Volunteer Network, which forms the basis of matching available appropriate Furthermore, this would allow tracking of milestones and schedules, improved coordination among many stakeholders, systematic integration of ideas, and act as a knowledge management tool, while the network will support networking, offer capacity building, and the purpose to reward volunteers.

The paper describes the original position of women in the world and their roll in business and suggesting the way to improve their position by comparing with North east India. What kind of business they are doing how they manage to get resources. Another section of the paper describes why it's only happening in north India rather in a whole part of India.

The purpose of this study is to present a systematic and analytical review of the available content based on a field survey conducted, that women position in not only to bear a child and to do house chores but women can do far better in business, entrepreneurs as well.

Core Methodologies: In the designing of a site like Ima Market, in Manipur, several important technologies will be incorporated to ensure that the site is effective and accessible to users. The usability of the interface can be enhanced by working with the frameworks of HTML, CSS, and JavaScript such as React.js or Angular. Databases will also be used in the management of product catalogs, user information, and records of transactions. They rely on the server, relying on Node.js for APIs, Django or Ruby on Rails for the back end. Online transaction reliability has scalable, secure hosting, and payment processors. Services may also include hosted solutions from AWS or Google Cloud, along with secure integration of payment processors such as PayPal or Razor pay, using SSL certificates, and then utilizing CDNs to ensure that the site is performing optimally.

Performance Insights: The primary metrics include website traffic, user engagement, and conversion rates against which the operational efficiency of Ima Market in Manipur can be measured. The visitor count, average session duration, and percentage of bounce rate are few of the good indicators to reflect the consumer behavior. It also needs to track some sales figures and conversion rate for knowing whether the platforms generate revenue or not. This allows for the development of inventory management by considering product performance, where one can determine the repeat purchase rate and customer retention in terms of how often they are coming to make their purchases, and it also gives an insight into the quality of experience on a website, as one can measure it in terms of how well it performs. Page speed or performance will significantly influence user interactions. Researching competition will always spot areas to be improved.. This is achieved through the utilization of Google Search Console as well as social media analytics to measure the impact of the SEO and marketing campaigns to visibility and customer acquisition. The total impact drawn from these metrics will expose the holistic strengths and weaknesses that exist in the platform.

Keywords: IT Talent Utilization, National Importance Project Portal, Skill-Based Volunteer Network, E-Commerce Integration, Ima Market.

1. INTRODUCTION

1.1 Background:

Technology is changing how society approaches and resolves important problems, particularly through centralized websites and e-commerce platforms. These platforms encourage cooperation, openness, and effectiveness in national initiatives by fusing e-commerce with project management technologies. To ensure accountability and transparency in major projects, the National Importance Project Portal centralizes resources, monitors progress, and encourages inter-sectoral collaboration. In addition, by giving local companies and craftspeople access to a digital marketplace, the e-commerce platform fosters economic development and cultural preservation. One example of how e-commerce may help sellers fill gaps and gain access to both domestic

and foreign markets is the restoration of Ima Market in Manipur.

1.2 Objectives:

- Increase Project Visibility: A centralized portal increases national programs' exposure, thereby enhancing stakeholder awareness and participation.
- Stakeholder Communication: Tools for direct communication enhance teamwork and community involvement in the implementation of projects.
- Promote Local Development activities: The portal ensures community involvement and relevance in development activities by showing regional efforts.
- Boost Accountability and Transparency: Ensures transparency by offering real-time information on project status, timeframes, and budgets.
- Provides for safe handling of confidential data involved in the project by offering data security management, which prevents unauthorized access.
- Boosts Market Coverage: Offers local vendors international visibility, thus enabling them to attract international customers
- Buying Experience: It enhances the user experience with intuitive navigation, detailed product descriptions, and interactive features.

2. REVIEW EXISTING WORK

Shop Local Products: Initiates respect for local culture by telling the stories and craftsmanship behind the uniqueness of Manipuri products

2.1 Lack of Integration between Portals and E-commerce sites

The lack of integration between centralized portals and e-commerce platforms hinders synergy that would benefit both high-level national projects and local economic empowerment. While portals centralize project management and resource allocation, e-commerce platforms focus on local vendors and businesses. The gap between the two systems prevents local vendors from contributing to national projects like sustainable construction. By integrating the two, real-time project tracking and local market reach can be perfectly aligned to foster empower community mutual growth and participation.

2.2. Obstacles in Digital Inclusion and Accessibility

Many rural and underdeveloped areas face considerable barriers of digital inclusion, especially because of poor infrastructure and a lack of digital literacy. Portals and commerce sites are built on the assumption of an elementary level of internet access and user knowledge, excluding an entire swath of clients, particularly those located in areas that are far off from a hub. Small vendors in traditional markets such as Manipur's Ima Market do not have the technical skills. Digital platforms must overcome these challenges by providing multilingual support, offline capabilities, and comprehensive training programs to enable broader participation and empowerment.

2.3. Lack of Emphasis on Cultural and Economic Sustainability

E-commerce platforms largely overlook the aspect of cultural preservation and economic sustainability in local artisans. Traditional handicrafts such as handwoven cloths and bamboo products remain unaccounted for within the larger market as they do not receive enough focused promotion or a fair price tag. With such features, the artisans are rendered powerless against the tides of mass-produced goods. stories Showing the cultural in products, implementing fair trade policies, and displaying ecocertifications will increase the value of products while promoting the preservation of cultural heritage and the economic resilience.

2.4 Threats of the Security Threat:

Centralized portals and e-commerce portals that handle sensitive information like financial transactions and project details have a concern for security breaches. Cyber attacks targeting these systems would lead to losses in the business and an end to any form of trust with small businesses and local stakeholders. The prevailing security measures usually become outdated soon. Implementing advanced security protocols such as multi-factor authentication, end-to-end encryption, and real-time threat detection will protect both users and platforms, ensuring confidence in system integrity.

2.5 Resistance to Technological Change

Resistance to technological changes is a major barrier, especially in rural and semiurban areas where digital adoption is low. Many stakeholders, including micro-vendors, are uncomfortable to change from face-to-face transactions to digital platforms. The resistance usually arises from a lack of understanding of the benefits and fear of the unknown factors. Addressing this barrier would require outreach through targeted practical demonstrations coupled with continuing support to help build confidence with the use of digital tools. Local community leaders should also promote these platforms to make the transition easier and promote their adoption.

2.6. Scalability Problems of the Existing Models

Current centralised portals and e-commerce platforms cannot be scaled easily and therefore, their applications can be very narrow. A system which is developed to cater to urban infrastructure may not be appropriate for a rural health care project. Similarly, the disaster management model cannot be adapted across different types of environments like floods and droughts. Thus, the rigidities in such models prevent the real potential of the platform from reaching diverse societal needs. Modular designs, open APIs, and adaptive algorithms are all elements that can ensure scalability by allowing the platforms to remain relevant and useful in many contexts.

3. METHODOLOGY

The study employs both qualitative and quantitative methods. Interviews with market providers, surveys with potential customers, and an examination of existing e-commerce models were done. Secondary data from government publications and studies on e-commerce integration in traditional marketplaces were also evaluated to supplement the research.

3.1 Analysis and Discussion

- 1. Needs for E-Commerce Integration
- 2. Reliable internet and technical assistance are crucial for e-commerce success. A user-friendly, multilingual platform with easy navigation would appeal to a wide range of users, particularly those with low computer abilities. Secure payment gateways are required to establish confidence and handle multiple payment methods.
- 3. Expands market reach for the sellers to customers' purchasing power and increases profits. The platform also exposes the cultural heritage of products. Convenience at the hands of customers, as they can shop anytime at the comfort of their homes, is still a major advantage of online shopping.

- 4. The challenges such as digital literacy can be overcome through vendor training programs, and the infrastructure issues can be overcome by public-private partnerships for better internet and logistics. To compete, vendors can focus on unique branding and showcasing local culture. Overcoming these obstacles will enhance the platform's potential.
- 5. E-commerce will further boost the economic growth as it will create a new source of income for sellers and enhance local entrepreneurship. In particular, women entrepreneurs will find a way into the digital economy. This platform will raise global awareness about Manipuri culture and bring their local products to a larger market.

4. RESULTS

The paper's findings on integrating e-commerce platforms for Ima Market highlight considerable possibilities for altering both the local economy and cultural heritage. By solving critical criteria such as digital infrastructure, user-friendly platforms, and secure payment mechanisms, the e-commerce solution allows local sellers to expand their market reach beyond regional limits. The usage of sophisticated technologies such as cloud computing, artificial intelligence, and blockchain guarantees scalability, security, and tailored client experiences. Furthermore, including cultural features into the platform increases the value of traditional Manipuri items while promoting their cultural relevance abroad.

However, the essay also discusses issues such as digital literacy, infrastructure limits, and competition from larger markets. Overcoming these limits is crucial through strategies such as vendor training programs, government collaborations to improve logistics, and unique branding initiatives. The impact is the growth of the economy, locals, especially wome n entrepreneurs, empowered, and international recog Manipuri nition culture. Finally, paper shows that e-commerce can be a powerful tool for economic and cultural transformation if it is planned and executed properly.

5. CONCLUSION AND FUTURE WORK

5.1. Conclusion:

The Agra Portal, in conjunction with the e-commerce portal, has drastically changed the manner in which people engage and relate to community events, has greatly enhanced local project visibility, and has further promoted economic development of artisans within Manipur. Artisans can reach wider markets with the platform to promote the crafts while boosting the economy, yet technology adoption and stakeholder collaboration are factors limiting some artisans' full participation. Training and support, in conjunction with effective and transparent communication, are required to overcome such problems.

Workshops that are continuously organized, user guides, and community support can fill the gap between technology and the artisans and vendors. The next phase of enhancement should be through user feedback, accessibility, and storytelling integration so that consumers connect with the cultural narratives of the artisans. Sustaining and expanding these platforms will depend on the collaboration of stakeholders like government agencies and NGOs. Ultimately, the Agra Portal and e-commerce portal illustrate how technology can be effective in empowering communities, promoting culture, and the drive of economic development in Manipur.

Most women are unaware of the marketing and trade systems. Improving trade and marketing requires a proper awareness campaign. Women vendors sitting on the roadside pay the same tax as those sitting under the shed. If the Government Make suitable arrangements for their seating and create proper policies for these ladies. These women's problems can be significantly decreased. Women play a vital role in the development of society, and their knowledge must be increased in all fields of life. Women vendors should be aware of social, political, and educational issues.

5.2. Future Work:

Future research on the Agra Portal with its ecommerce platform should state clear objectives on improving impact. Longitudinal research would examine long-term effects on community engagement, artisan incomes, and project success. User experience research through interviews or focus groups would reveal how design could be improved to allow users to be more satisfied with the product. Best practices will be developed based on comparative studies with similar initiatives, while the economic impact analysis will quantify benefits for artisans and the community. Researching barriers to technology adoption and the effect of storytelling on sales will be useful in helping to devise better support strategies and marketing. With these areas focused on, stakeholders can optimize the platforms for better community empowerment and sustainable development.

6 SUMMARY

This study revolves around the immense pool of IT talent in India, which could be tapped for the solution of significant national problems by two integrated solutions: the National Importance Project Portal and the Skill-Based Volunteer Network. The portal will act as a centralized cataloging, managing, and tracking hub for projects of national importance. This will increase transparency, encourage cooperation between stakeholders, hold people accountable, and allow real-time monitoring of project achievements. This is complemented by the volunteer network, connecting skilled individuals with specific project needs, supporting capacity building, and rewarding participation with rewards.

The paper continues to expand on the use of centralized IT solutions in association with ecommerce platforms for the local economic development and cultural preservation. Using an example of Ima Market in Manipur, this paper shall outline how an e-commerce platform can connect local artisans and vendors to bigger markets, both domestic and international. In addition to increasing market reach, this approach also arouses public awareness about Manipuri culture and crafts. It is going to be using cloud computing, artificial intelligence, and blockchain to really bring about scalability, security, and personalization.

Despite such, challenges still abound; such include the issue of digital illiteracy, which affects vendors with less internet capabilities in the countryside, hostility in the uptake of technology, and security concerns. It thus becomes evident that proper solutions may require vendor-targeted training, more public-private collaborative logistics, better internet connections, and advance security mechanisms in forms of encryption, among others, in real time.

The key findings will show the bridge that will bridge the gap of the e-commerce platform with the central management tool in support of economic empowerment of underrepresented groups, like women entrepreneurs, which will create benefits for their livelihoods since they will help artisans by the implementation of proposed solutions. The paper ends with recommendations on sustained collaboration between stakeholders, technological improvements, and further design improvement focusing on user requirements. Future areas of work could include longitudinal studies to determine long-term effects on these platforms concerning engagement in communities, artisan income levels, and successful project outputs. With proper strategy, such efforts can truly form a great avenue for transformation on the economic, cultural, and technological levels within India.

REFERENCES

- [1] Kumar, G. S., & Jose, J. T. (2017). Developing an electronic commerce platform. 2017 IEEE International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI), 1309–1313. https://doi.org/10.1109/icpcsi.2017.8391922
- [2] Tian, X., & Dai, W. (2010). Study on Information Management and Security of Ecommerce System. Study on Information Management and Security of Ecommerce System,. https://doi.org/10.1109/iptc.2010.183
- [3] Khoury, M., & Shirmohammadi, S. (2007). Accessibility and scalability in collaborative eCommerce environments. Accessibility and Scalability in Collaborative eCommerce Environments, 738–743. https://doi.org/10.1109/icdim.2007.4444312
- [4] Lingyu, M., Lauren, C., & Zhijie, D. (2019). Strategic development of fresh E-Commerce with respect to new retail. Strategic Development of Fresh E-Commerce With Respect to New Retail, 373–378. https://doi.org/10.1109/icnsc.2019.8743243
- [5] Coleman, E. R., Moudgal, R., Lang, K., Hyacinth, H. I., Awosika, O. O., Kissela, B. M., & Feng, W. (2017). Early Rehabilitation After Stroke: a Narrative Review. Current Atherosclerosis Reports, 19(12). https://doi.org/10.1007/s11883-017-0686-6
- [6] Sekerka, L. E., & Bagozzi, R. P. (2007). Moral courage in the workplace: moving to and from the desire and decision to act. Business Ethics a European Review, 16(2), 132–149. https://doi.org/10.1111/j.1467-8608.2007.00484.x
- [7] Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuit: Human needs and

- the self-determination of behavior. Psychological Inquiry, 11(4), 227-268.
- [8] Kocaman, R. (2024). Exploring the benefits of volunteer engagement in nonprofits: A value co- creation perspective.
- [9] Alexander H Nave. (2019). Physical Fitness Training in Patients with Subacute Stroke (PHYS- STROKE): multicentre, randomized controlled, Endpoint blinded trial. BMJ, 366, doi: https://doi.org/10.1136/bmj.l5101.
- [10] Belagaje SR. (2017). Stroke Rehabilitation. Continuum, 10.1212/CON.000000000000000423.