

Harvest Market

Dr. Madhu B K, A Shrinivas, G Prashanth Rao, H J Kishan

Department of Computer Science and Engineering
Vidya Vikas Institute of Engineering and Technology, Mysore, India

Abstract: This unique Direct-to-Consumer platform called the "HAR-VEST MARKET" creates a direct relationship between farmers and consumers. It gives farmers the chance to make unique profiles and market their produce to a larger audience. Farmers may give buyers useful information about their products, such as the products' origin and prices, by listing each item in-depth on their websites. With the use of this web application, consumers can conveniently buy goods from farmers while enjoying a smooth and safe online transaction experience. It incorporates dependable payment gateways to protect the confidentiality and security of private financial data. The application also provides numerous distribution choices, giving farmers the freedom to take care of their own logistics or work with neighbourhood delivery providers. Customers can select the delivery option they prefer, whether it's home delivery or pickup from designated locations. In conclusion, by bridging the gap between farmers and customers, the HARVEST MARKET revolutionises the traditional agricultural industry. By establishing a digital market, it helps farmers increase their revenue and client base while enabling consumers to obtain fresh, locally sourced goods and make educated purchasing decisions. The web application offers a new paradigm for agricultural trading, encouraging a beneficial relationship between farmers and consumers by promoting transparency, sustainability, and community engagement.

Keywords: Platform, Direct-to-Consumer, farmers, consumers, HARVEST-MAR-KET, products, distribution, locally, sourced, revenue, paradigm, beneficial, transparency, sustainability

I. INTRODUCTION

The system is designed for end users to use and for administrators to manage. Once any processing can be done, the end users must log into the system. The users can browse the products they have access to and, if they so want, add them to their shopping cart. The administrator can access every product that has registered to the database and maintain all of the product details.

This D to C shopping strategy offers a way to minimize and reduce these costs. Authorized Customers can choose the things they require without physically going to stores or APMCs and bringing them with them. To access fresh goods, they merely surf their personal computers or mobile devices, assessing the descriptions and images of the products before making a selection. Additionally, the shop's proprietors are not required to arrange or display the things in their inventory.

Today every company uploads their complete information on their official website and after collecting this information customer takes final decision for purchasing. That is why e-commerce companies have their own portals to disseminate information among consumers. This decision helps the company to increase its sale manifold. However, it is also important to look into the e-commerce portals of various companies in India so that a clear picture can be shown to the customers. In [7]. The video classifier was conducted by Mousavi et al. Histogram of Directed Tractlets is the term used to refer to it, and it can identify irregular conditions in complex scenes. Traditional approaches, using optical flow which only measures edge features from two subsequent frames, are compared with this method which is developed over long-range motion projections called tractlets. As a result, spatiotemporal cuboid footage sequences are statistically gathered on the tracks that move through them.

In [8]. Consumer Feedback Analysis Through Social Media for B2C Electronic Companies in India
2017 • Publishing India Group

Indian B2C electronic commerce market is rising at an aggressive pace of 21.3% and is likely to reach \$28 billion revenue by 2019-2020 with annual growth rate of 45% in next 4 years.

II. METHODOLOGY

1. Requirement analysis: Identify the needs of farmers, consumers, and the agricultural market to conduct research and collect requirements. Identify the web application's major features, functions, and user expectations.
2. To visualise the user interface (UI) and user experience (UX) design of the online application, create wireframes and mockups. Make sure the design is accessible on a variety of devices and responsive.
3. Technology Stack Selection: - Determine which frameworks and technologies are best suited for creating web applications. Based on scalability, performance, and security needs, choose the proper programming languages, frameworks, databases, and other tools.
4. Front-end Development: - Use HTML, CSS, and JavaScript to implement the UI design, resulting in an aesthetically pleasing and user-friendly interface. Create responsive navigation and layouts
5. Back-end development: Create the server-side functionality and logic using an appropriate programming language (such as ExpressJS and Python). To enable data exchange between the client-side and server-side, develop APIs and integrate them with the front-end.
6. Database Design and Integration: - Create the database schema in accordance with the information needs of the application. Put database integration into practise to store and retrieve information about farmers, products, user profiles, transactions, and reviews.
7. Payment Gateway Integration: - To facilitate online transactions, integrate secure payment gateways. Use encryption and secure user data management to guarantee safe payment processing.

TESTING

To verify the functionality, compatibility, usability, performance, security, integration, accessibility, error handling, and load handling capabilities of the Harvest Market online application, testing is required in a number of crucial areas. The effectiveness and dependability of the web application can be assessed by conducting in-depth testing in these areas. Features, user actions, interface, performance under various loads, security vulnerabilities, integration with external systems, accessibility compliance, error handling, and recovery methods are among factors that are evaluated during testing. Regression testing is done to make sure that any modifications or new features won't impair the functionality of the system as it now exists. The web application can be validated and improved through thorough testing in order to deliver a seamless user experience

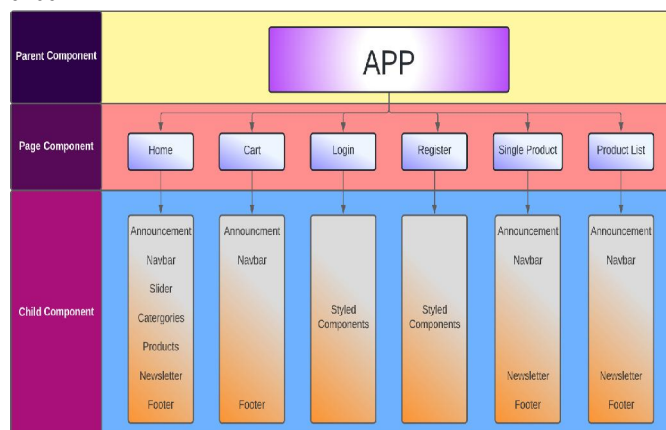


Fig 3.1 Component tree of the system

III. PROPOSED SYSTEM

A convenient online marketplace is offered by the proposed Harvest Market web application, a digital platform that links farmers and consumers. Farmers are able to build profiles, manage inventories, and list their goods with descriptions and photographs. Customers can explore products, conduct filter searches, put items in their shopping baskets, and safely complete the checkout process. The system enables direct connection between farmers and consumers as well as ratings and reviews. It provides delivery and pickup options, keeps track of sales information, and

offers a dashboard for platform administration. In order to close the gap between farmers and customers, the suggested approach encourages openness, sustainability, and participation from the local community in the agricultural sector.

IV. CONCLUSION

In conclusion, the web application Harvest Market is a game-changing development for the agricultural sector. It transforms conventional trading practises and encourages openness, sustainability, and community involvement by creating a digital marketplace that brings together farmers and consumers directly. The project aims to close the gap between farmers and consumers by giving farmers the tools to reach new markets and boost their income while giving customers access to locally sourced, fresh food and the knowledge to choose wisely. The Harvest Market web application offers a new paradigm for agricultural trading with its user-friendly design, safe transactions, and rich features like product listings, search and filtering options, ratings and reviews, and direct communication channels. Technology is used to build a positive interaction between farmers and consumers, creating a platform that enhances the agricultural ecosystem and local economies.

REFERENCES

- [1] <https://hbr.org/2020/03/reinventing-the-direct-to-consumer-business-model>
- [2] <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/the-six-must-haves-to-achieve-breakthrough-growth-in-e-commerce-d2c>
- [3] <https://www.ewizcommerce.com/resources/guides/manufacturers-direct-to-consumer-ecommerce>
- [4] Albert H., Judd, Rivers, (2006) "Creating a winning E-Business", Wagner Course Technology Thomson Learning, pp. 37-255.
- [5] Alawneh A., and Hattab E, (2007) "E-Business Value Creation: An Exploratory Study, Proceedings of the Seventh International Conference on Electronic Business", Taipei, pp. 181-188.
- [6] Alawneh A., and Hattab E (2009). "International Arab Journal of eTechnology", Vol. 1, No. 2, pp. 1-8
- [7] Amit B. and Steve M. (2007), "How to Plan E-Business Initiatives in Established Companies", Vol. 49, No. 1, pp. 11-22
- [8] Aranda-M., G. and Stewart, P. (2005), "Barriers to E-Business Adoption in construction international literature review", pp. 33-49
- [9] Ayo, Charles K. (2006). "The Prospects of e-Commerce Implementation in Nigeria, Journal of Internet Banking and Commerce", Vol. 11, No.3, pp. 68-75
- [10] Amar. K., Sohani, (2009), "Technology and Banking Sector", ICFAI University Press, pp. 1-39
- [11] Brahm C., (2009) "E-Business and Commerce Strategic Thinking and Practice", Houghton Mifflin, pp. 114-312.
- [12] Chiemeké, S. C., Ewiekpaefe, A. and Chete, F. (2006), "The Adoption of Internet Banking in Nigeria: An Empirical Investigation, Journal of Internet Banking and Commerce", vol. 11, No.3, pp 33-49
- [13] David W, (2001) "E-Commerce Strategy, Technologies and Applications", Tata McGraw Hill, pp. 3-143.
- [14] Daft, Richard L. (1982), " Bureaucratic Versus Nonbureaucratic Structure and the process of Innovation and Change", pp. 129-166
- [15] Earl, M. (2000), "Evolving the E-Business, Business Strategy Review", pp. 33-38
- [16] Eben.O (2003) "A Systematic Approach to E-Business Security", pp. 87-103
- [17] Hackbarth, G. &Kettinger W. J. (2000), "Building an E-Business Strategy: Information Systems Management" pp. 78-90.
- [18] Kalakota, R. and Robinson M. (1999), "E-Business: Roadmap for success", Addison-Wesley, 112-149