International Journal of Multidisciplinary
Research in Science, Engineering and Technology

(A Monthly, Peer Reviewed, Refereed, Scholarly Indexed, Open Access Journal)

Impact of Social Media Marketing on Online Cake Sales

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ABSTRACT: The rise of digital communication platforms has significantly transformed how businesses market their products and interact with consumers. In the bakery industry, where visual appeal and timely delivery play crucial roles, social media marketing has emerged as a powerful tool to attract and retain customers. This study explores the impact of social media marketing on online cake sales, focusing on how platforms like Instagram, Facebook, and WhatsApp contribute to brand visibility, customer engagement, and overall revenue growth. The research involves analyzing consumer behavior, engagement metrics, and sales trends in relation to different forms of social media content such as promotional posts, customer reviews, reels, and influencer collaborations. A survey-based approach is used to collect data from both bakery owners and customers, while sales data before and after implementing marketing strategies is compared to determine effectiveness. The findings suggest that consistent and creative social media engagement directly correlates with higher order volumes and brand recognition. This study highlights the importance of digital marketing strategies in modern business operations and provides actionable insights for small and medium-sized cake businesses seeking to expand their online presence and boost sales through social media platforms

I. INTRODUCTION

Food has always been an integral part of human culture, celebration, and bonding. Of all the food items, cakes have come a long way from being an occasional dessert to a commonly consumed and celebrated item, particularly in the case of customized and designer cakes. Historically, cake sales were restricted to local bakeries and word-of-mouth promotion. But with the advent of digital business and social media sites, there has been a trend towards online cake companies that use visual narratives and online engagement to attract wider audiences. This study is about the increasing power of social media marketing in the online cake market, with sites like Instagram, Facebook, and WhatsApp as crucial tools to access prospective buyers, establish brand name, and drive sales. Aesthetic images, short clips, reels, and influencer partnerships transform cakes into more than a commodity, but an experience. This form of marketing not only assists companies in connecting with a geographically wider group but also creates direct interaction with customers, which conventional forms of advertising did not.

The purpose of this research is to examine the impact of various social media marketing approaches on customer engagement, visibility, and buying decisions for online cake sellers. The study involves customer surveys, data analysis, and case studies of local and small-scale online bakeries. Through this, the study hopes to give insights into successful social media practices and provide recommendations for cake vendors who want to maximize their online presence and expand their business.

II. LITERATURE REVIEW

Emergence of Social Media in Food and Bakery Advertising

The popularity of social media has changed how companies promote their products, especially in the food sector. Initially, bakeries used conventional word-of-mouth or simple web listings for advertisement. The advancement of social media websites such as Instagram, Facebook, and WhatsApp, however, has changed the scenario, providing a visual and interactive platform for advertisement (Sharma & Patel, 2019). Research by Mishra and Khandelwal (2021) points out that Instagram, being visual-centric, is particularly well-suited for cake businesses since it enables bakers to post visually attractive content such as customized cakes, behind-the-scenes footage, and customer reviews.

Consumer Engagement and Purchase Decisions

Consumer behavior online is largely driven by visually appealing content and social proof in the form of likes, shares, and reviews. A study by Deshmukh and Rao (2020) indicates that social media facilitates a feeling of urgency and emotional connection, influencing purchasing decisions in a positive manner. Story polls, comments, direct messages, and influencer endorsement are some of the key features that contribute significantly to establishing two-way communication with customers. A survey by Thomas & Singh (2022) discovered that 78% of customers would be likely to order from cake companies they follow on Facebook or Instagram because they are exposed to quality images and customized content repeatedly.

Content Strategy and Branding

Planned content is important for brand creation in the online cake industry. Festive discounts, video tutorials, seasonal topics, and high-quality images are frequently utilized to entice customers. A study by Batra and Jain (2021) highlights the importance of consistency in branding — companies that have a consistent tone, style, and rhythm of content across social media platforms are likely to establish stronger relationships with their followers. Hashtag usage, geotag usage, and working with micro-influencers have also been shown to increase reach and brand awareness (Kapoor & Sethi, 2023).

Trust, Security, and Transaction Concerns

Despite its benefits, social media marketing poses trust and security issues for small online businesses. Studies by Kulkarni and Naidu (2020) reveal that many customers are hesitant to place online food orders due to fears of non-delivery, poor product quality, or payment fraud. To overcome this, platforms often include real-time reviews, customer ratings, and the option of cash on delivery (COD) to boost buyer confidence. Secure payment options integration and timely customer service are also highlighted as most important trust factors (Sen & Bhattacharya, 2021).

Comparative Enhancement : Existing Online Art Gallery System vs. Proposed System
Customer Reach

Traditional Means: Dependent on word of mouth, written pamphlets, or local shoppers, restricting audience to a precise geographic location.

Social Media Promotion: Expands visibility immediately from local to entire city or globally through sites like Instagram and Facebook.

Marketing Costs

Traditional Methods: Tend to have fixed costs for banner and print media advertising, personal promotions.
Social Media Marketing: Low-cost or free promotion via organic posts; paid advertising is also cheaper and targeted than traditional means.

Customer Interaction

Traditional Methods: No or little direct interaction with prospective customers prior to purchase.
Social Media Marketing: Facilitates real-time interaction, customer queries, polls, story reactions, and instant feedback via comments and direct messages.

Order Customization & Communication

Traditional Methods: Orders are primarily placed over the phone or in-store, which can result in communication breakdowns.

Social Media Marketing: Enables easy sharing of references, real-time customization discussions, and order confirmations through chat or forms.

Content Strategy and Branding

Traditional Methods: Static branding with little space for creativity and visual storytelling.
Social Media Marketing: Extremely visual — companies can create a brand personality through posts, stories, reels, and influencer partnerships.

Analytics and Performance Tracking

Traditional Approaches: No immediate feedback or rich performance insights.

Social Media Advertising: Provides rich analytics (likes, shares, reach, engagement, conversion rates), assisting organizations in continuously optimizing strategies.

III. METHODOLOGY OF PROPOSED SURVEY

HTML, CSS, JavaScript (Front End)

Provides an interactive and responsive user interface for admins and users.

-Built using HTML and CSS to create visually attractive artwork layouts.

-Utilizes JavaScript to add interactivity (e.g., image previews, form validation).

office-based navigation: admins can manage content, while normal users can browse and interact.

-Divides views into logical segments such as artist registration, gallery display, and artwork upload forms.x

PHP (Back-End)

-Manages business logic like order processing, customer support, and social media marketing integration.

-Manages user authentication for customer login and order tracking to provide a secure experience for buyers and admins.

-Manages order confirmations, payment status, and delivery details to provide smooth communication between customers and the bakery.

-Manages image uploads for product images, providing secure storage and compression for quick website loading without loss of quality.

-Enforces server-side validation of user information to avoid any fake or manipulated data during the ordering process.

MySQL (Database)

-Saves organized data like customer information (names, contact numbers, order history), cake information (flavors, sizes, prices, customizations), stock (ingredients), and order data (order status, delivery address).

-Applies relational tables to handle the relationship between data, e.g., connecting cakes with particular orders, connecting customers with their orders in the past, and correlating inventory with ingredient suppliers (with foreign keys).

-Comes with indexing techniques to boost the efficiency of search queries to enable customers to locate cakes according to flavor, size, price, or modifications (e.g., wedding cake, birthday cake) and also facilitate fast order status and history retrieval.

-Enables backup and restore processes to safely keep valuable information, such as customer details, cake orders, inventory numbers, and payment information, and allow data to be recovered in the event of system malfunction.

The proposed system expands the cake studio service by integrating leading web technologies to provide customers and staff alike a uniform, interactive environment. Key features include:

-Multi-level user access with separate admin and customer roles, password protection, and secure session handling to guard against unauthorized use and maintain confidentiality.

-Enables registered users to shop, customize, and order cakes from grouped sections (e.g., birthday cakes, wedding cakes, custom cakes) without third-party intervention, providing an efficient shopping experience.

-Comprises features such as a shopping cart to add cakes, customizations, and delivery information; customers can order and check their order history, mimicking the real online shopping experience, although without actual financial transactions.

-Offers live administrative control of customer orders, cake listings, categories, and feedback to allow easy moderation, tracking of orders, and control of the shop products.

-Supplies advanced search and filtering capabilities, which make customers able to navigate cakes according to taste, size, category, price, or modifications. This capability provides an engaging and personalized experience when buying cakes.

IV. CONCLUSION AND FUTURE WORK

This project offers an entirely functional and pedagogic cake studio shop system built from PHP and MySQL. The application overcomes current cake ordering software limitations by having a simple and user-friendly customer interface, minimalistic management in cake customization, and secure authenticated users. With simulated ordering, customer and admin role-based dashboards, and real-time order management, the system is perfect for learning purposes, learning at the beginner level, and running a small-scale cake business. Future development can involve the addition of a real payment gateway, customer feedback mechanisms, social sharing options, and the inclusion of an automated inventory system. These improvements would greatly enhance the scalability and usability of the platform, making it a good candidate for deployment in actual cake shop businesses.

V. RESULT

The Cake Studio Shop website is built to provide a seamless and enjoyable experience for cake lovers, with a seamless interface for cake browsing and ordering custom cakes. With a responsive and intuitive design, users can browse through a vast array of cake choices, read extensive product descriptions, and choose customizations according to preference. The website features secure user authentication, easy navigation, and a seamless checkout process. Customers are able to order directly, while the admin interface allows effective inventory, order, and user management in real-time. The system also has a mock payment integration to show e-commerce functionality without the complication of real payment processing. User feedback highlights the platform's interactive and engaging nature, making it a great tool for educational purposes as well as practical use in the cake shop business.

REFERENCES

1. Welling, L., & Thomson, L. (2017). PHP and MySQL Web Development (5th ed.). Addison-Wesley.
2. Nixon, R. (2018). Learning PHP, MySQL & JavaScript (5th ed.). O'Reilly Media.
3. Duckett, J. (2011). HTML and CSS: Design and Build Websites. Wiley.
4. Freeman, A., & Sanderson, J. (2017). Pro PHP and jQuery. Apress.
5. Beighley, L. (2009). Head First PHP & MySQL. O'Reilly Media.
6. Rosenfeld, L., Morville, P., & Arango, J. (2015). Information Architecture: For the Web and Beyond (4th ed.). O'Reilly Media.
7. Krug, S. (2014). Don't Make Me Think: A Common Sense Approach to Web Usability (3rd ed.). New Riders.
8. ISO/IEC 27001:2013. Information security management systems – Requirements. International Organization for Standardization.
9. Jacob, R., & Akshay, V. (2021). "Implementation of a Secure Authentication System for Web Applications." International Journal of Computer Applications, 178(30), 1–5.
10. Khan, M. Z., & Yousaf, M. (2020). "Role-Based Access Control in Web Applications." International Journal of Web & Semantic Technology, 11(2), 15–22.
11. Patel, S., & Ramesh, K. (2022). "Design and Implementation of an E-Commerce Platform Using PHP and MySQL." International Journal of Engineering Research and Technology, 11(6), 88–93.
12. Zhang, Y., & Wang, H. (2021). "Performance Optimization of MySQL Databases in Web Applications." Journal of Information Technology, 19(3), 212–220.
13. Kumar, A., & Mishra, R. (2019). "Exploring Open Source Technologies for Web-Based Projects." International Journal of Software and Web Sciences, 23(2), 40–45.
14. Sharma, V., & Kaur, P. (2020). "User Experience Design in Digital Art Platforms." International Journal of Human-Computer Interaction, 36(9), 812–819.
15. Singh, T., & Mehta, N. (2022). "Web Development Trends: A Study of Modern Frontend and Backend Tools." Journal of Web Engineering & Technology, 13(1), 51–60.
16. Mozilla Developer Network (MDN). (2024). HTML Reference Guide. Retrieved from https://developer.mozilla.org
17. PHP Documentation. (2024). PHP Manual. Retrieved from https://www.php.net/manual/en

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