ARXX: An Online Canvas for Alaminos City Painters Association's Artistic Services

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Abstract: This study investigates the transformative impact of online platforms on the contemporary art world, with a focus on the Alaminos City Painters Association's efforts to enhance their digital presence through the ARXX platform. It aims to address the need for local artists to gain visibility and connect with clients in a digital landscape. The research question centers on how digital platforms can empower artists and foster community engagement. Utilizing a descriptive and developmental research approach, the Alaminos City Painters Association's processes were analyzed through structured interviews and stakeholder consultations to identify necessary features for clients seeking artistic services. Additionally, the ARXX platform's acceptability was assessed through surveys and usability testing. The analysis revealed a strong correlation between the adoption of digital platforms and enhanced visibility for local artists. Stakeholders expressed enthusiasm for the ARXX platform, citing its potential to promote the association, showcase artists' work, and facilitate smooth transactions between artists and clients. The discussion explores the wider implications of the study, highlighting its ability to empower local artists, promote artistic development, and encourage community involvement. By connecting artists and clients through digital platforms, the study emphasizes the transformative power of online initiatives in revitalizing the art ecosystem. Therefore, the study underscores the potential of digital platforms to transform the art industry, promoting artistic growth and community engagement, and suggests future research on their long-term effects.

Keywords- artistic services, contemporary art, digital platforms, local artists

I. Introduction

The art world is undergoing a seismic shift driven by the rise of online platforms [1]. These platforms are fundamentally changing how artists showcase their work [2], connect with potential clients [3], and conduct business altogether. This study focuses on ARXX, a web-based platform specifically designed for the Alaminos City Painters Association in the Philippines. ARXX aims to bridge the gap between artists and clients, facilitating the display and sale of artworks within this local artist community [4]. The research presented here delves into the effectiveness of ARXX for both artists and clients associated with the Alaminos City Painters Association. Traditionally, artists have relied heavily on physical galleries for exposure, limiting their reach and potential clientele. Online platforms like ARXX offer a revolutionary solution by providing a global audience and fostering wider accessibility [5]. Understanding how ARXX functions and how it's received by both artists and clients is crucial. By analyzing its effectiveness, we can identify areas for improvement and ultimately maximize the platform's benefits for the artist community. While previous research has documented the general positive impact of online platforms on the art world, there's a critical gap in knowledge. Studies by Down [6] and Sanath [7] highlight the democratizing effect of online platforms, providing broader access for both artists and art enthusiasts. Additionally, research by Appel et al. [8] emphasizes how online platforms connect artists with a global marketplace. However, there's a lack of in-depth understanding of how these platforms can be tailored to meet the specific needs of artist associations.

An analysis that compares ARXX to well-known online marketplaces like Fiverr may give insight into its distinctiveness. In contrast to Fiverr, which caters to a wide range of freelancers, ARXX is designed especially for the Alaminos City Painters Association, providing a specialized artistic community. It may be possible to improve ARXX's features and increase its competitiveness in the digital art market by examining Fiverr's achievements in user engagement, transaction processing, and service visibility.

This study aims to bridge this knowledge gap by taking a deeper look at ARXX's functionalities and how it's received by both artists and clients within the Alaminos City Painters Association. By examining the platform's features and user experience, this research will provide valuable insights for optimizing artist association platforms like ARXX. Ultimately, the goal is to leverage the power of online platforms to promote and empower local art communities in the digital age [9]. This study aims to contribute valuable knowledge to the future of artist associations and online platforms in the evolving art world [10]. This study delves deeper into the specific needs of an artist association and how an online platform like ARXX can address them. It goes beyond simply documenting the benefits of online platforms and explores the practical application within a specific artist community. By examining the features and functionalities of ARXX, the study provides valuable insights for optimizing artist association platforms and promoting local artistic communities in the digital age.

II. Methodology

The development of the ARXX platform for the Alaminos City Painters Association followed a methodology combining descriptive and developmental approaches with Agile methodology. The descriptive approach entailed an in-depth examination of existing art platforms [11] and their relevance, while the developmental approach focused on the actual creation of the new system. Agile methodology facilitated iterative development, ensuring alignment with stakeholder expectations through continuous feedback. Flowcharts were used to map out existing processes, and a business model canvas was created to promote the association. Figma was utilized for wireframes and mockups, allowing stakeholders to visualize the platform's layout and functionality. The Entity-Relationship Diagram (ERD) modeled the database structure, outlining relationships between entities such as artists, artworks, clients, and transactions. The construction phase involved the coding and implementation of the system using HTML, PHP, CSS, JavaScript, Bootstrap, Laravel, and Visual Studio Code, converting design elements into functional code. Rigorous testing, conducted by the Quality Assurance (QA) team, ensured the system's performance and identified bugs, employing Blackbox testing to validate code quality. Post-testing, the software was prepared for deployment, overseen by IT experts, and presented to stakeholders, explaining navigation and usage. After deployment, feedback from artists and clients was sought to improve the platform, and an IT expert assessed its acceptability, functionality, security, scalability, and performance. Figure 1 shows the Agile Model.
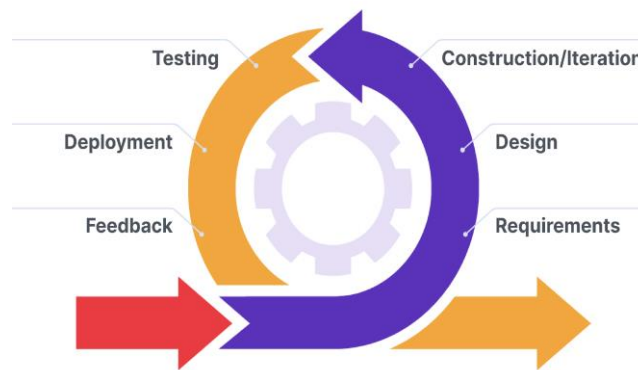

Figure 1. Agile Model

Data collection involved surveys to assess user satisfaction, interviews with key stakeholders for in-depth insights, and observations of artists' and users' behavior within the art community. Content analysis of social media [12] posts, online forums, and art-related publications identified trends relevant to the platform's development. Purposive sampling was utilized to select respondents who could provide relevant insights into online art promotion. Respondents included artists, art enthusiasts, and individuals involved in the local art community, ensuring diverse perspectives and comprehensive data for enhancing the ARXX platform. These respondents include President, Vice President, Secretary, Auditor, IT Expert, and 26 members of the association, totaling 32 respondents. Table 1 enumerates the respondents of the study.

Table 1: Respondents of the Study

Respondents	Number of Respondents
President	1
Vice President	1
Secretary	1
Auditor	1
IT Expert	2
Members of the association	26
Total Respondents	32

The study measured variables systematically, including features and functionalities of the ARXX platform as independent variables, user satisfaction as dependent variables, demographic characteristics as control variables, user engagement as moderating variables, and feedback on usability as mediating variables. Flowcharts, ERDs, and use-case diagrams were used to demonstrate processes, database connections, and user interactions. The weighted mean determined average survey responses, evaluating the platform's acceptability and satisfaction levels. A Likert scale was used to quantify user satisfaction and the platform's acceptability, with ratings categorized as Strongly Agree (4.21-5.00), Agree (3.41-4.20), Neutral (1.61-3.40), Disagree (1.81-2.60), and Strongly Disagree (1.00-1.80) shown in Table 2.

Table 2. Likert Scale

Scale	Statistical Limits	Rating
5	4.21 - 5.00	Strongly Agree
4	3.41 - 4.20	Agree
3	1.61 – 3.40	Neutral
2	1.81 – 2.60	Disagree
1	1.00 – 1.80	Strongly Disagree

III. Result and Discussion

This chapter presents the results and findings of the ARXX platform development, a web-based system designed to showcase the artworks and services [13] of the Alaminos City Painters Association. The results include stakeholder feedback, system testing outcomes, and usability analysis, interpreted in the context of initial project goals and existing literature. The ARXX platform was developed using a three-tier architecture: the Presentation Tier (client interface), Application Tier (server processing and business logic), and Data Tier (database management).
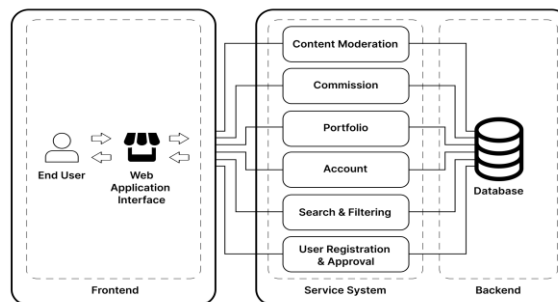

Figure 2: ARXX Platform Three Tier Architecture

ARXX Online Platform System Architecture and System Framework

This structure facilitated efficient development, testing, and deployment processes. The integration of user engagement features, such as commenting on artworks and marking favorites, significantly enhanced user interaction compared to previous versions. Notably, these additions led to a substantial increase in engagement levels. Improvements in system functionality and performance were evident, with the search functionality exhibiting a high success rate. The messaging and portfolio services experienced notable boosts in service requests and portfolio views, respectively. Enhancements in the user registration process and Content Management System (CMS) significantly reduced approval times, contributing to a more efficient workflow.

Data management using a MySQL supports active replication, which ensures that multiple database instances can handle requests, thus preventing service disruptions during failures[14]. These results demonstrate that the Presentation Tier enhancements significantly improved user experience, the Application Tier supported efficient interactions and content management, and the Data Tier maintained system reliability and efficiency.

In discussion, the results indicate that the ARXX platform successfully met its primary objectives. Interactive features in the Presentation Tier enhanced user engagement, and the robust functionality in the Application Tier supported efficient user interactions and content management. The Data Tier's performance was crucial in maintaining system reliability and efficiency. These findings align with existing research emphasizing the importance of user experience in web-based platforms and the value of real-time communication and effective portfolio management for artists.

The success of the three-tier architecture suggests that such a structure can significantly enhance web-based platforms' functionality and user experience. Future enhancements focusing on mobile optimization and advanced search capabilities could further improve user satisfaction and platform usage. Continuous stakeholder engagement and iterative development will be essential for sustained platform success. The ARXX platform has achieved its goal of providing a robust and user-friendly system for showcasing the artworks and services of the Alaminos City Painters Association, demonstrating significant improvements in user engagement and system performance. Future work will focus on further enhancing user experience and expanding platform functionalities.

D2C Business Model for ARXX Online Platform

The ARXX platform employs a direct-to-consumer D2C platforms allow artists to showcase their work to a worldwide audience, increasing visibility and sales opportunities[15] This model offers several advantages for both artists and clients. For artists, it

provides greater control over pricing and sales, enabling them to capture more value from their work. Additionally, it allows for direct communication with clients, fostering stronger relationships and better understanding of client needs and preferences.

For clients, the D2C model offers more personalized and transparent purchasing experience. ARXX sustains itself through a Php100 monthly membership fee per artist and a 5% commission on transactions, ensuring continuous platform maintenance and development. Clients can interact directly with artists, gaining insights into their creative processes and ensuring that commissioned works align closely with their visions. This direct interaction can also lead to more competitive pricing, as there are no intermediary fees.

The platform's features, such as the messaging service and portfolio management, support this business model by facilitating direct communication and interaction between artists and clients. The robust search and filtering capabilities make it easy for clients to find artworks and artists that match their preferences, while the commenting and favoriting features enhance engagement and connection [16].The D2C model is particularly well-suited to the ARXX platform, given its focus on showcasing the unique talents of the Alaminos City Painters Association. By providing a direct link between artists and clients, the platform helps to build a vibrant and supportive community where artists can thrive, and clients can enjoy high-quality, personalized artworks [17].

IV. Conclusion

The development and use of the ARXX platform, which was developed using three-tier architecture, achieved the desired goals by increasing users' participation, enhancing the system's performance and reliability, and proper data management. The satisfaction of the user interaction features in the Presentation Tier, the Application Tier with strong processing abilities that enabled smooth user engagement and content control. The Data Tier ensured system reliability and efficiency, which was supported by a MySQL database. The direct-to-consumer (D2C) business model enabled the platform to enable artists to sell their art to clients directly and develop a good artist-client relationship as well as offering the client personal buying experience. The stakeholders' feedback was positive, there was an increase in engagement and workflow efficiency as well as conformity to the best practices in the design of web-based platforms. Future assessments should incorporate quantitative performance metrics, such as platform traffic, conversion rates, and artist-client transaction data, to further validate ARXX's impact and effectiveness. Future work may include mobile optimization, improved search functions, and ongoing development to maintain and enhance the platform's efficiency and user satisfaction. Additionally, developing a mobile-responsive version or a dedicated app for ARXX will enhance accessibility and engagement, catering to the growing demand for mobile-friendly online marketplaces.

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