



Analysis of Information Systems as a Tool for Enhancing Access to Justice for Marginalized Communities

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ABSTRACT

This research explores how information systems can improve access to justice for marginalized groups, focusing on the challenges they encounter within legal frameworks. Employing a mixed-methods approach, data were gathered through surveys and interviews involving both community members and legal professionals. The analysis reveals that existing information systems can enhance awareness of legal rights and streamline access to legal services. Results show that by making information systems more user-friendly, understanding and navigation of legal processes for marginalized populations can be significantly improved. The study concludes that optimizing these systems is essential for filling gaps in legal access, highlighting the importance of collaboration between legal experts and technology developers to create effective solutions that address the specific needs of these communities. This research adds to the discourse on how technology can help close the justice gap and foster a more equitable legal system

INTRODUCTION

Access to justice is a fundamental right, yet it remains challenging for many marginalized communities around the world. According to the World Justice Project (2021), over 60% of individuals in low-income countries lack access to legal resources, highlighting a significant gap in legal support and understanding. These communities often face various social and economic barriers, such as poverty, discrimination, and low legal literacy, which hinder their ability to navigate the justice system effectively.

The integration of information systems emerges as a potential solution to these challenges, allowing for more efficient dissemination of legal information and services. The background of this research stems from the fact that despite various efforts to improve access to justice, many communities still feel neglected and lack channels to obtain accurate legal information. In today's digital era, technology should ideally serve to bridge this gap.

Previous studies have demonstrated the importance of technology in improving legal access. For example, research by Surden (2019) shows that digital platforms can enhance legal awareness and facilitate interaction between legal professionals and underserved populations. Additionally, the study by McCarthy and Doran (2020) concluded that mobile applications can assist marginalized communities in more easily accessing legal information. Research by Dignan and McLean (2020) explored the positive impacts of technology in legal advocacy, indicating that technology can expedite the process of filing legal complaints. Lastly, the study by He et al. (2020) emphasizes the importance of user-friendly information systems to enhance community participation in legal processes.

Moreover, it is essential to incorporate the latest literacy on the role of information systems in promoting access to justice. Recent findings indicate that effective information systems not only improve legal literacy among marginalized groups but also empower them to engage more actively with legal resources and services. For instance, a study by Jones et al. (2022) highlights the transformative impact of interactive platforms that provide tailored legal information, thereby increasing user confidence in navigating the legal landscape. Another study by Smith and Lee (2023) reveals that community-based legal education programs, enhanced by technology, can significantly raise awareness of legal rights among underserved populations. This underscores the need for continuous updates in our understanding of how these systems can be optimized to meet the evolving needs of marginalized communities.

LITERATURE REVIEW

Despite these advancements, there remains a lack of empirical data specifically addressing how existing information systems are utilized to meet the needs of marginalized groups. This article aims to analyze the effectiveness of information systems in promoting access to justice for these communities. By examining both qualitative and quantitative data, this study seeks to identify successful strategies and potential gaps in the current legal service landscape. Ultimately, the goal of this article is to provide insights that can inform the

development of more efficient and accessible legal information systems, fostering a more equitable justice framework for all.

METHODS

In this research, the methodology employed is meticulously designed to gather and analyze pertinent data aimed at exploring the effectiveness of information systems in enhancing access to justice for marginalized communities. This section provides a comprehensive overview of the research instruments utilized, the processes involved in data collection, the analytical techniques applied, the hypothesis testing procedures, and the methods employed for data presentation.

1. **Research Instruments:** The primary instrument utilized in this study is a structured survey consisting of ten carefully formulated questions. These questions are specifically designed to assess respondents' legal awareness, their usage of digital resources, and their perspectives on the importance of training and collaboration in facilitating access to justice. The survey incorporates a Likert scale to obtain quantitative data while also including one open-ended question to allow respondents to offer their suggestions and insights.
2. **Data Collection Processes:** Data collection was conducted through an online survey distributed to a sample of 100 respondents, which included both members of marginalized communities and legal professionals. Prior to the distribution of the survey, a pilot test was performed with a small group to ensure the clarity and relevance of the questions posed. Following necessary revisions based on the pilot test feedback, the survey was disseminated through social media platforms and local community networks to reach a broader audience of respondents.
3. **Data Analysis Processes:** Once the data had been collected, it was subjected to analysis using statistical software. Quantitative data were examined through descriptive statistics to provide a comprehensive overview of the respondents' profiles and to identify any patterns in their responses. Percentages were calculated to determine levels of legal awareness, usage of digital resources, and attitudes towards training and collaboration efforts.
4. **Hypothesis Testing Processes:** In this research, hypothesis testing was conducted to ascertain the relationship between the training received by respondents and the subsequent increase in their confidence when accessing legal services. Regression analysis was employed to evaluate this hypothesis, where the dependent variable was the level of confidence and the independent variable was the number of training sessions that respondents had attended.
5. **Data Display Processes:** The findings of the data analysis were presented in both tables and graphs to facilitate understanding and interpretation. Tables were utilized to display numerical data, while graphs were employed to visually represent the relationships between variables. This presentation format was chosen to provide a clear and accessible overview

of the research findings and their implications for improving access to justice through information systems.

Through this methodological approach, the study seeks to generate a profound understanding of how information systems can contribute to enhancing access to justice for marginalized communities.

RESULT AND DISCUSSION

This study is focused on analyzing the effectiveness of information systems in promoting access to justice specifically for marginalized communities. To achieve this objective, a mixed-methods approach was employed, enabling the collection of comprehensive data through surveys and interviews conducted with both community members and legal professionals. The findings from this research reveal several key insights that have been carefully summarized in the tables presented below.

Table 1. Research Data on Access to Justice for Marginalized Communities

Research Aspect	Findings	Percentage
Awareness of Legal Rights	Aware of legal rights	35%
	Unaware of legal rights	65%
Utilization of Information Systems	Utilizing digital legal resources	30%
	Not Utilizing digital legal resources	70%
Impact of User-Friendly System	Increased confidence using applications	70%
	Confidence before using applications	40%
Need for Training and Support	Believe training is necessary	80%
Collaboration Among Stakeholders	Feel coolaboration is important	75%
	Do not feel collaboration is important	25%

The data presented in Table 1 illustrate significant disparities in awareness and utilization of legal resources among marginalized communities. A staggering 65% of respondents indicated that they are unaware of their legal rights, which highlights a critical gap in legal literacy. Furthermore, only 30% of participants reported utilizing digital legal resources, suggesting that there are substantial barriers to access that need to be addressed.

Table 2. Summary of Research Findings

Category	Detail
Awareness of Legal Rights	65% of respondents are unaware of their legal rights
Utilization of Information	Only 30% utilize digital legal resource
Impact of applications	70% report increased confidence
Need for Training	80% believe digital training is essential
Importance of Collaboration	75% of lawyers consider collaboration with technology crucial

The insights summarized in Table 2 further reinforce the importance of addressing these gaps. Notably, 80% of respondents expressed that they believe training is essential for improving their understanding and utilization of legal resources. Additionally, 75% of legal professionals indicated that collaboration with technology is crucial for enhancing access to justice. These findings underscore the need for targeted interventions to empower marginalized communities and improve their access to legal resources. In the context of enhancing access to justice for marginalized communities, it is crucial to understand how information systems can serve as effective tools. These communities often face various challenges, including a lack of knowledge about legal rights and limitations in accessing legal services. This research aims to explore the effectiveness of information systems in promoting access to justice, focusing on the utilization of digital technology and training to improve legal understanding. To achieve this research objective, a survey was conducted involving 100 respondents. This survey consists of 10 questions designed to evaluate legal awareness, the use of digital resources, and respondents' views on the importance of training and collaboration in access to justice. Below is a table presenting the survey questions:

Table 3. Survey Questions

Question	Answer Options
Are you aware of your legal rights?	a. Yes b. No
How often do you seek information about your legal rights?	a. Very often b. Sometimes c. Rarely d. Never
Have you ever used digital legal resources (e.g., websites, apps) to obtain legal information?	a. Yes b. No
If you used digital resources, how easy was it for you to find the information you needed?	a. Very easy b. Fairly easy c. Difficult d. Very difficult
How confident are you in using technology to seek legal information?	a. Very confident b. Somewhat confident c. Not confident d. Not at all confident
Do you believe that training on the use of digital resources would be beneficial?	a. Very beneficial b. Beneficial c. Not beneficial d. Not at all beneficial
How many training sessions do you think are necessary to improve your understanding of access to justice?	a. 1-2 sessions b. 3-4 sessions c. 5-6 sessions d. More than 6 sessions
How important do you think collaboration between legal professionals and technology developers is in enhancing access to justice?	a. Very important b. Important c. Not important d. Not at all important
Do you feel comfortable asking for legal help through digital apps or platforms?	a. Very comfortable b. Somewhat comfortable

	c. Not comfortable d. Not at all comfortable
Do you have any suggestions to improve access to justice through technology?	(Open-ended response)

The results of this survey provide deep insights into the challenges and opportunities faced by marginalized communities in accessing justice. Of the 100 respondents, 65% stated that they were unaware of their legal rights. Using the percentage formula:

$$Percentage = \left(\frac{65}{100}\right) \times 100 = 65\%$$

This indicates a significant information gap that needs to be addressed.

Furthermore, the survey revealed that only 30% of respondents had ever utilized digital legal resources. This calculation was performed similarly:

$$Percentage = \left(\frac{30}{100}\right) \times 100 = 30\%$$

Among those who used digital resources, 70% reported feeling more confident after using legal applications, calculated as follows:

$$Percentage = \left(\frac{70}{100}\right) \times 100 = 70\%$$

On the other hand, 80% of respondents felt that training on the use of digital resources was essential to enhance their ability to access legal services. This shows a strong awareness of the importance of education.

To measure the impact of training on confidence, we employed regression analysis using the formula:

$$Y = a + bX$$

If $a = 20$ and $b = 0.5$ with X as the number of training sessions, for example, 3 sessions, then:

$$Y = 20 + 0.5 \times 3 = 21.5$$

This reinforces that training can positively contribute to increasing confidence. Finally, 75% of legal professionals felt that collaboration among stakeholders is crucial for creating innovative solutions. This indicates that synergy between the legal sector and technology can contribute to the development of more inclusive and accessible platforms. Overall, the results and discussion highlight the necessity of a holistic approach that integrates education, technology, and collaboration to improve access to justice for marginalized communities.

CONCLUSIONS AND RECOMMENDATIONS

This research successfully explored the effectiveness of information systems in enhancing access to justice for marginalized communities. Findings from the survey indicate that the majority of respondents still lack understanding of their legal rights, and only a small number have utilized existing digital resources. This significant information gap underscores the importance of improving legal education and access to relevant technology.

From this study, several key points have been concluded. First, there is an urgent need for educational programs aimed at increasing legal awareness

among marginalized communities. Second, collaboration between legal service providers and technology developers is essential to create more user-friendly and accessible platforms. Third, awareness campaigns about legal rights should be implemented to ensure that individuals know their legal entitlements and how to access available services.

In light of these findings, several implementation recommendations are proposed. First, it is crucial to develop training programs focused on the use of digital resources and legal understanding, specifically targeting communities in need. Second, expanding collaboration between the legal and technology sectors should be encouraged to generate innovative solutions that are accessible to everyone. Third, campaigns aimed at raising awareness of legal rights should be conducted through various media, including seminars and the use of digital platforms.

With these steps, it is hoped that access to justice for marginalized communities can be significantly improved.

FURTHER STUDY

Every research inherently has its limitations, and this study is no exception. One of the primary limitations is the relatively small sample size, which may not fully represent the diverse experiences of all marginalized communities. Additionally, the survey was conducted in a specific geographic area, potentially limiting the generalizability of the findings to other regions or contexts. For future investigations, several suggestions can be made. First, it would be beneficial to expand the sample size and include participants from a broader range of locations to enhance the representativeness of the data. Second, incorporating qualitative methods, such as in-depth interviews, could provide richer insights into the unique challenges faced by marginalized groups in accessing justice. Finally, conducting longitudinal studies would allow researchers to assess the long-term impacts of educational programs and technological interventions on legal awareness and access to justice. By addressing these limitations and pursuing these avenues for further study, future research can contribute to a more comprehensive understanding of how to effectively promote access to justice for marginalized communities.

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