STAKEHOLDERS' PERSPECTIVES ON THE FUNCTIONALITY OF THE ACCREDITATION ONLINE MANAGEMENT SYSTEM

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ABSTRACT: *Program accreditation is integral to ensuring the quality and credibility of educational offerings, serving as a benchmark that assures stakeholders of adherence to established standards. This study explores the stakeholders' perspectives on the Accreditation Online Management System (AOMS) developed to streamline the accreditation process at one state university in the Philippines. Utilizing a mixed-method approach, the study gathered stakeholders' perspectives on the usability and functionality of AOMS. Results indicate an average SUS score of 74, signifying above-average usability with room for improvement. Based on the qualitative data gathered, stakeholders praised the system's ease of use and participative nature and acknowledged the user-friendly design of the system. Suggestions for improvement include incorporating date and time stamps and enabling file conversion to PDF format. The study underscores the pivotal role of participatory use and ease of use in enhancing user engagement and system effectiveness in the context of program accreditation.*

Keywords: program accreditation, online management system, system development, stakeholders' perspectives

1. INTRODUCTION

Program accreditation is essential for ensuring the quality and credibility of educational offerings, serving as a benchmark that assures stakeholders of a program's adherence to established standards. Program accreditation not only validates the quality of academic programs but also contributes to continuous improvement and innovation in educational practices [1]. Additionally, accreditation enhances the mobility of graduates in the job market and facilitates recognition of qualifications globally, as noted by the International Network for Quality Assurance Agencies in Higher Education [2]. As part of the University of Science and Technology of the Southern Philippines' (USTP) effort to ensure the delivery of excellent and quality education to students, academic programs are submitted for accreditation by an external body. The Accrediting Agency of Chartered Colleges and Universities in the Philippines (AACCUP), Inc., is the accrediting body for the program quality of state universities and colleges (SUCs).

One of the daunting tasks in preparation for accreditation is the retrieval of the required supporting documents for accreditation from various offices. College instructors assert that the overwhelming workload, including tasks such as accreditation document preparation and other program evaluation compliance, frequently disrupts their regular routines and detracts from their primary responsibility as educators [3]. The onset of the pandemic intensified this task as a work-from-home arrangement became the norm, rendering the manual collection of necessary documents much more difficult for the accreditation taskforce. Faced with this evolving scenario, the imperative for online or remote accreditation became evident, necessitating the adoption of digital solutions to streamline the accreditation process.

In response to this concern, the USTP funded a project on the development of the Accreditation Online Management System (AOMS). This system served as a single repository of accreditation documents and has the following notable features: Users with access rights can upload and update documents; the accreditation task force can access the required documents uploaded by various offices and generate a real-time report of all accredited programs. As the institution's stakeholders increasingly adopt this digital solution for the accreditation process, understanding their feedback becomes crucial for enhancing system functionality and overall effectiveness. Thus, this study was conducted to gather stakeholders' perspectives on the usability and functionality of the AOMS after beta testing and user training.

2. REVIEW OF THE LITERATURE

Accreditation is a vital procedure in higher education aimed at ensuring the quality of programs. It functions as a crucial mechanism to verify that educational providers adhere to standards aligned with the expectations of the educational community and society [4]. A recurring theme in accreditation is the focus on quality assurance assessment and the commitment to continuous improvement. Accreditation significantly contributes to the enhancement of quality and excellence in higher education institutions. It highlights the positive influence of accreditation processes on various aspects, indicating a substantial impact on the overall improvement of educational quality [5]. Navigating the accreditation process can pose challenges. Higher education institutions, functioning as open systems, depend on the collaboration of various entities, including faculty members, to contribute to the accreditation process [6]. The challenges associated with program accreditation preparation, especially in the context of the Philippines, have been reported in studies [3]. Faculty members expressed the overwhelming workload, including tasks related to accreditation document preparation, as a disruption to their routine and a diversion from their primary responsibilities. With these issues, the need for an efficient online management system is imperative. Electronic document management systems can create, keep, and organize the data in an organization [7]. These systems contribute to the reduction of paper-based workflows, promoting sustainability and cost-effectiveness.

3.   METHODOLOGY

A mixed-method approach was employed in this study, combining qualitative and quantitative data collection techniques to provide a holistic understanding of the system's usability and functionality. The System Usability Scale (SUS), developed by [8], was utilized for evaluating the usability of this system. The System Usability Scale (SUS) comprises 10 items, each employing a Likert scale to gauge users' perceptions of the system's usability, efficiency, learnability, and overall user satisfaction. An open-ended questionnaire was also utilized to gather stakeholders' feedback on the functionality of the system as well as to solicit suggestions for its improvement.

A total of 20 respondents provided feedback through the System Usability Scale, while 17 stakeholders shared their insights in response to open-ended questions, highlighting positive features of the system and offering valuable suggestions for improvement.

Data gathering was conducted after a series of trainings for the expected users of the system. It commenced with the quantitative phase, which utilized the System Usability Scale. For the qualitative phase, an open-ended questionnaire was distributed via Google Forms to request feedback from the stakeholders who participated in the training, including their comments on the merits of the system and areas for improvement.

The quantitative data from surveys was analyzed using descriptive statistical techniques such as means, frequencies, and percentages. On the other hand, the qualitative data were subjected to thematic analysis. Ethical considerations were ensured in the conduct of the study, from prioritizing privacy and informed consent to fostering inclusivity and transparency.

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4. RESULTS

System Usability

Results of the usability survey are presented in Tables 1 and 2. The odd-numbered questions (1, 3, 5, 7, 9) are positive statements while the even numbered items are negatively-stated, thus, were presented separately for easy interpretation.

Table 1: Responses to the positive statements of the System Usability Scale (SUS)

Statements	5-Strongly Agree		4-Agree		3-Fair		2-Disagree		1-Strongly Disagree	
	f	%	f	%	f	%	f	%	f	%
1. I think that I would like to use this system.	8	40%	10	50%	2	10%	-	-	-	-
3. I thought the system was easy to use.	10	50%	3	15%	7	35%	-	-	-	-
5. I found the various functions in this system were well integrated.	8	40%	6	30%	5	25%	1	5%	-	-
7. I would imagine that most people would learn to use this system very quickly.	6	30%	7	35%	6	30%	1	5%	-	-
9. I felt very confident using the system.	8	40%	6	30%	6	30%	-	-	-	-

As presented in Table 1, 90% of respondents (combined 40% strongly agree and 50% agree) expressed positive feelings about wanting to use the system. In terms of ease of use, the majority (65%) of respondents (combined, 50% thought the system was easy to use and 15% found it fair) found it to be easy to use. This is a positive indicator of perceived usability. A significant portion (70%) of respondents (combined, 40% found the functions well integrated and 30% found them fair) indicated positive perceptions of the integration of system functions. However, there is a small percentage (5%) who disagreed. 65% of respondents (combined 30% strongly agree, 35% agree) believe that most people would learn to use the system quickly, suggesting a positive perception of the system's learnability. Lastly, 70% of respondents (combined, 40% felt very confident and 30% felt confident) reported feeling confident while using the system. This indicates a positive level of user confidence in interacting with the system.

Table 2: Responses to the positive statements of the System Usability Scale (SUS)

Statements	5-Strongly Agree		4-Agree		3-Fair		2-Disagree		1-Strongly Disagree	
	f	%	f	%	f	%	f	%	f	%
2. I found the system unnecessarily complex.	1	5%	1	5%	6	30%	8	40%	4	20%
4. I think I would need the support of a technical person o be able to use this system.	0	0%	1	5%	6	30%	11	55%	2	10%
6. I thought there was too much inconsistency in this system.	0	0%	2	10%	3	15%	11	55%	4	20%
8. I found the system very cumbersome to use.	0	0%	-	0%	2	10%	9	45%	9	45%
10. I needed to learn a lot of things before I could get going with this system.	1	5%	2	10%	6	30%	7	35%	4	20%

Table 2 shows the descriptive statistics results for the even-numbered statements that were negatively phrased in the System Usability Scale (SUS), providing insights into areas where users may have concerns or find challenges with the system. A notable portion (60%) of respondents (combined, 40% disagree and 20% strongly disagree) did not find the system unnecessarily complex. This is an indication of the system being user-friendly. A majority (65%) of respondents (combined, 55% disagree and 10% strongly disagree) expressed the capability of using the system on their own. A majority (75%) of respondents (combined, 55% disagree and 20% strongly disagree) felt that the system showed consistency. A substantial majority (90%) of respondents (combined, 45% disagree and 45% strongly disagree) reported finding the system manageable to use. This indicates significant positive usability and effective streamlined user interactions. About 55% of respondents (combined, 10% strongly agree, 35% disagree, and 20% disagree) indicated that they can use the system effectively. This could be due to the user training provided to the various stakeholders in the system.

The responses provide insights into user perceptions of the system's usability, user-friendliness, and learnability. The positive sentiments suggest that the system is generally well-received, but specific areas of improvement can be identified for further refinement in order to present a more user-friendly and efficient system.

In the overall scoring of the system's usability, odd-numbered questions (1, 3, 5, 7, 9), were recomputed using the scale position minus 1. The total sum was then multiplied by 2.5 to derive the overall SUS value, which ranges from 0 to 100. The average System Usability Scale score is said to be 68 [9]. If a system or product scores above 68, it is typically perceived as having above-average usability, while scores below 68 may indicate below-average usability. The result of the AOMS usability survey revealed an overall rating of 74, which shows that the system has above-average usability. Still, the finding acknowledges that the AOMS, despite its acceptability, presents a prospect for refinement to further elevate its usability. This was investigated through qualitative means.

Merits of the AOMS

Based on the results of this quantitative data, a qualitative review was conducted. Key themes that emerged based on stakeholders' feedback on the merits of the system include ease of use, being user-friendly, and being participative. As expressed by one participant, "The AOMS is very user-friendly; the dashboard is organized and easy to access, and all the documents can be made available in one click away (P008)". Participants also found the system's capability to "go shopping" for some redundant documents to be very helpful, with one participant saying that "it makes it easier to look for an attachment by only shopping (P004). Indeed, ensuring the user-friendliness of online systems is paramount for optimal user experience and system effectiveness.

The stakeholders also found the system easy to use, saying that "it has a clean interface and is easy to explore (P010)" and that "it allows different offices to access documents and files without hassle (P012)". The significance of ease of use

in online systems lies in its profound impact on user satisfaction and technology adoption. The seminal work on the Technology Acceptance Model (TAM) underscores the crucial role of perceived ease of use in shaping users' attitudes and intentions toward technology adoption, highlighting its pivotal influence on the success of online systems [10]. Similarly, the Unified Theory of Acceptance and Use of Technology (UTAUT) further reinforces the paramount importance of ease of use as a determinant factor in enhancing user acceptance and promoting the successful adoption of online systems [11].

Moreover, one stakeholder conveyed appreciation for the participative nature of using the AOMS, highlighting that the "gathering and banking of data is not solely laid to the task force(s)" (P005)". Participative use in online systems has been shown to have a positive impact on user engagement and system effectiveness [12].

Areas for improvement

Two themes emerged based on stakeholders' suggestions for improvement of the system: the need for a date and time stamp on the uploading of the documents and the capability to convert files to PDF format. As expressed by one participant, "It doesn't show the date and time of when the files were uploaded or changed (P017)." The inclusion of timestamps in online document systems is crucial for establishing a clear chronological order of document edits and collaborations, enhancing version control, and aiding in the resolution of disputes or discrepancies in collaborative work. The timestamp's time information can be utilized to monitor the punctuality of vital transactions, such as the generation, submission, or delivery of a document. [13]. Another stakeholder also conveyed that "a mobile-based version and a capability to directly capture images that also automatically converts the images to PDF. This frees up some space and reduces the hassle of keeping files on the local drive and uploading them later on (P003)." The PDF format offers several advantages for the long-term storage of records as it is not platform-dependent, ensuring accessibility across different computing environments, and its ubiquity among millions of users worldwide makes it a lasting format [14].

5. CONCLUSION

The evaluation of the Accreditation Online Management System (AOMS) through both quantitative and qualitative measures provides valuable insights into its usability, merits, and potential areas for enhancement. In conclusion, the AOMS, while demonstrating commendable usability and garnering positive feedback, stands poised for refinement based on stakeholders' insights. The convergence of usability assessments and stakeholder perspectives positions the AOMS as a dynamic system, responsive to user needs and poised for iterative improvements to ensure sustained effectiveness in facilitating the accreditation process.

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