

# Enhancing Institutional Communication through an AI-Powered Ticketing System with Real-Time Progress Tracking

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## ABSTRACT

Abstract: Effective communication between institutions and their users is essential for resolving issues promptly and efficiently. Despite this, many existing ticketing systems continue to rely on basic forms or manual processes, which often lead to delays, misunderstandings, and a lack of transparency. This paper presented a project that introduces an enhanced solution which an AI-driven Ticketing System designed to help institutions manage and respond to user-reported issues more effectively, while keeping users informed throughout the process. Drawing inspiration from Schramm's Model of Communication, the system emphasizes the importance of clear and continuous information exchange between users and administrators. At the core of the system is a fine-tuned BERT Base Uncased Model, which automatically classifies incoming tickets and directs them to the appropriate department. This automation reduces the need for manual sorting, minimizes the risk of miscommunication, and significantly improves response times. A key feature of the system is a real-time progress bar that allows users to monitor the status of their tickets. This visual indicator fosters transparency and helps build user trust by keeping them engaged and informed. The system is developed using Laravel, Tailwind CSS, and MySQL. It also supports environmental sustainability by eliminating the need for paper-based processes. Usability testing revealed positive user feedback, highlighting the interface's ease of use and the clarity it brought to the ticket resolution process. Additionally, the AI model enhances efficiency by identifying similar past issues, enabling quicker and more informed responses. In summary, this AI-powered Ticketing System enhances institutional communication, accelerates issue resolution, and delivers a more transparent and user-friendly experience.

**Keywords:** *Institutional Communication, AI-Based Ticketing System, Progress Bar Tracking, Automated Issue Categorization*

## INTRODUCTION

Good communication is essential for a successful organization. It helps every member of the team work toward the company's goals respectfully and as a united force. If teammates can communicate clearly, they know what is expected of them which helps them deliver better work and avoid mistakes. This approach helps trust grow, reduces disputes and supports a positive and supportive atmosphere at work. Olugbo et al. (2023) state that during times of change or when starting to use new technology, strong communication shows employees the way and boosts the organization's success. Also, Igbokwe (2024) discovered that effective communication of the company's mission and employee responsibilities increases motivation and helps employees feel a closer bond to what they do.

In their work, (Markovic & Salamzadeh, 2018) point out that using communication leads to better management and success in fulfilling shared objectives. In this situation, using a ticketing system can have a big impact. Because of their structure, they manage and address both internal and external requests in the same standard fashion. They help problems to be identified, ranked and effectively settled openly which encourages quick replies and accountability. Organizations that set up ticketing systems improve their messaging, no matter the issue and offer better services which helps users remain satisfied. Even though they are not common in Malaysia such systems are vital for moving businesses forward and handling concerns efficiently.

Basically, a ticketing system helps users and organizations talk about problems, so that they can be solved quickly. Organizations, mostly IT related companies, depend on a ticketing system to record, trace and manage various internal and external incidents, requests and issues. You can use this to make tickets that can be handled and resolved without issues. In their study, Olugbo et.al (2023) pinpoint a number of problems in organizational communication. Unclear or inaccurate communication between members of an organization can harm both how they feel and how much they accomplish.

When information is not available on time, workers find it hard to remain productive and cooperate which makes people wonder about the communication strategies being used (Almahairah, 2022). If leadership does not express themselves well, this can bring into question how effectively employees do their job. There are several problems that cause difficulties in communication such as checking information, paying attention to certain things, lots of information to process, bias and worries about language and talking.

The research by Olugbo et al. (2023) points out that most conflicts in organizations arise due to poor communication which is what (Babayan, 2024) also argued, insisting that communication covers both understanding and sending feedback. AI in the digital ticketing system is being used by Southern University College (SUC) to ensure ticket issues are managed by their intended departments. It promotes clear communication between everyone, so problems are resolved faster and it also follows sustainable practices by minimizing paper waste. By using less paper, the system is environmentally friendly and also increases the efficiency of the institution (Khafid et al., 2023). It proposes a way and framework that aim to make ticket handling in service management more efficient by adding dynamic information to the tickets.

#### LITERATURE REVIEW

Standard Ticketing System depend on physical tickets and these can sometimes be compromised by fraud and misuse. Alternatively, e-ticketing gives companies stronger security which lowers the risk of fake tickets and improves how the process is handled. The traditional ticketing system that many places have used is the anti-counterfeiting ticket system

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which ensures authenticity using many security measures (Yuanjiang & Zhou, 2022). It greatly reduces the problems that usually come with traditional ways of selling event tickets. Some companies benefit from using e-forms by combining them with QR codes and RFID cards and controlling both security and convenience for customers (Pankaj & Prakash, 2023). Using digital solutions fixes the issues in the old system and meets the needs of higher education institutions to be more efficient when handling tickets.

At Southern University College and elsewhere, most internal service requests or

feedback tickets are handled by employees entering information into Google Forms, Microsoft Forms or by communicating with the staff in person. There are good things about these services, but they are not fully functional or clear. There is no system that lets users follow their ticket’s status or be informed when their submission is updated. Therefore, users often wonder if their matter is being managed, so they have to follow up and usually end up feeling frustrated.



Figure 1: Feedback Form of Southern University College

Managers often need to handle tickets manually by going over each request, sorting them and routing them to their corresponding departments. It slows down the process and also increases the chance of false communication, missing details or vital feedback being lost. Besides, because there is no central automatic system, it becomes difficult to see which problems happen most often and answer them with the same method.

The internal survey was carried out to find out from stakeholders if it is necessary and effective for the institution to switch to e-ticketing solutions. Students, faculty and administrative staff all gave their thoughts on the possible advantages and disadvantages of using an e-ticketing system. Key stakeholders were interviewed to learn more about what they have been through and what they expect in the e-ticketing process. The issues they mention will shape how the system is designed and deployed.

The research checked the opinion people had of the old system, what aspects they preferred to change including the interface and how regularly the current system was used. Here is a review of the interview. During the survey and interview, FIVE (5) questions were asked and the key findings are shown in Table 1, indicating what stakeholders prefer and recommend for the e-ticketing system. The data were collected for 1 week and out of 16 collected, 10 are from students, 5 from lecturers and one from an administrative staff member.

Table 1: Interview analysis

Item	Questions	Objective	Output
Q1	Please describe the main function you use in this feedback system. (complaint report, feedback tracking,	status update)	submitted to it resolution.
Q2	Can you describe the end-to-end process system form the moment a complaint is	highlight of its interface to ensure user friendly and	

intuitive

Q4 How would you ensure the feedback system can handle the user complaint without performance degradation.	Identify the system performance.	The output from user is prepare a good system tracking and reporting view. so, users can track their report time by time. especially any facilities that need to be used by many users like classroom, toilet.
Q5 What suggestion you can give for our system? Identify the system main function.	To collect the user suggestion. The output from user is complaint report, specifically on damage chair, class condition, aircond and fan.	The output from user should have the status timeline so user any responsible department can trace the status.
Identify the system processes.	The output from user is very simple. just key in the details and submit.	The output from user should provide contact to a certain department if the users need prompt feedback.
Identify the user interface (UI).		

As the output is based on the data, the system's design should be straightforward so users can easily submit their reports. It must address ordinary facility problems such as broken classroom chairs, conditions in the classroom area, air conditioning and fans. Users must be able to follow how their reports are being handled, especially in space used by several people such as classrooms and toilets. Users and the managers responsible would be able to see updates and respond appropriately with a status timeline. Besides, the website should give users the details they need to get in touch with departments directly in case they require immediate help.

From what has been collected during user testing and feedback, it is evident that for a e-Ticketing System to work well, it should be straightforward and simple to operate so that people can transmit basic information about important facility issues such as broken air conditioning, worn classroom furniture and untidy public areas. Still, managing users' expectations, mainly in institutional settings, now calls for a system that does more than record ticket. There is a greater need for a system that promotes straight forwardness, responsibility and constant communication with users in relation to offices. Adding a status timeline helps people see the progress in handling issues which strengthens confidence, leading to faster replies from the concerned departments.

These stipulations are difficult for conventional ticketing platforms which are not flexible and require manual effort, to handle in cases where efficient resource use and good communication are vital. Systems using generic forms (for example, Google or Microsoft forms) usually have delays in responding, lack good categorization and do not offer any proactive feedback (Abbas et al., 2022). By using Artificial Intelligence (AI) in ticketing systems, these issues can be greatly reduced. AI technology is able to group grievances automatically by analyzing the content of each one, direct the most suitable departments to resolve them and also anticipate repeating issues by reviewing previous cases (Khowaja et al., 2023; Jain et al., 2021).

Integrating AI-powered communication capabilities like priority tagging and automated escalation workflows can greatly improve the user experience by ensuring that each ticket is handled and sent to the appropriate expert very quickly. The use of machine learning algorithms in facilities management helps identify repeating issues and future analysis which results in better running of the workplace as well as more accurate organizing of

maintenance schedules (Shahid et al., 2022).

So, modern and responsive ticketing systems should include the use of user-centered design principles and intelligent automation. The system manages work efficiently and also lines up with the institution's main digital transformation, service quality and sustainable governance goals all at once.

#### *a. AI in Communication system*

The use of AI in communications and e-tickets changes the way organizations communicate with customers and oversee their workflows (Koka, 2024). Because of this change, tasks are handled faster, answers come sooner and customers are more satisfied. AI is key in helping with communication, fixing processes and offering a personalized experience to users. Using advanced algorithms, organizations can be ready for customer expectations and tune their support. By making this change, a business can operate better and build stronger relationships with customers which often leads to loyalty.

Institutional ticketing systems using AI offer bigger benefits than traditional digital platforms do. AI, basically, automates standard emails about tickets, sorts newly received ones and replies to common questions, so the staff can focus on more challenging cases. Thanks to this automation, there are fewer delays in addressing tickets and users always receive timely, up-to-date information about their tickets which promotes transparency and trust (Chen et al., 2022).

AI also makes ticket classification faster and more precise by using NLP, so tickets can be routed efficiently to the right staff or teams. As a result, tickets are sent to the right place, so there is less blocking in the workflow and problems are solved more quickly (García et al., 2023). AI assisted by machine learning can discover common problems with plants and sort tickets by their risk and history, ensuring that maintenance teams focus on prevention rather than fixing issues as they happen (Kotriwala et al., 2023).

Also, chatbots and virtual assistants supported by AI help businesses have real-time conversations with users. They give clear information about tickets and assist promptly with common matters which improves the user experience and lowers frustration. Being acknowledged and valued through personalized interaction is very important in places where community satisfaction and good operations depend on efficient ticketing (Müller et al., 2023). AI systems keep improving by looking at how users react and changing their communication strategies. Being able to adapt allows organizations to deliver services in ways that users now expect which helps them remain relevant and competitive in today's digital world. Thus, implementing AI systems in ticket management and communication internalizes more effective and intelligent workflows, supports a clear approach to the ticket workflow, identifies and prioritizes tickets and enables better communication with users. All of these factors improve the quality of services and increase how helpful can become from a company (Bucăța & Rizescu, 2017).

#### *b. Schramm's model for communication*

Successful communication forms a cornerstone of any organization, especially in today's technology-involved environments. SCRAM supports a step-by-step process for sharing

information in a way that improves communication. In the 1950s, Wilbur Schramm came up with the model which highlights the active roles of the sender, message, medium, receiver and feedback. The text points out the key role of situation and common experiences when we communicate effectively. It describes how context helps people understand messages which is why it is important for improving communication. It lists the main aspects that support successful communication, mainly in complex situations such as software or customer service.

These are the main features of the interaction between two individuals, as described in the model of communication (Figure 2). They make up these parts:

1. The sender in communication is the person who initiates the exchange by encoding and sending a message (Smith, 2022).
2. Channel: This is the method chosen for transmitting the message, including ways of communicating like verbal, non-verbal, digital or print (Johnson, 2023).
3. The receiver is the person or organization that understands what the message means (Singh et al., 2020)
4. Message: It refers to the content being communicated and it should be conveyed clearly and carefully to ensure people understand it properly (Brown, 2022).
5. Feedback is the response that goes from the receiver to the sender, helping confirm that the message was comprehended (Davis, 2023).

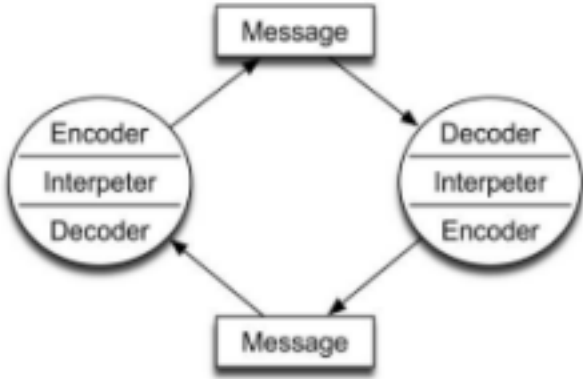


Figure 2: Schramm Model of Communication (Elkins et al., 2012)

Smith (2022) explains that being compatible is important for the various parts of SCRAM which promotes successful communications, mainly in systems with a need for interoperability and immediate answers. In addition, Johnson and Lee (2023) highlight the importance of this model in mixed-tech environments, pointing out that when components operate together smoothly, businesses can achieve better performance.

*c. Enhancing Communication: Application of Schramm Model with Ticketing System* The SCRAM model is congruent with Schramm’s communication theory, thus further validating its relevance to digital ticketing platforms. The application of the Schramm Model of communication within ticketing systems possesses the capacity to substantially ameliorate the communication dynamics between the sender (event organizers) and the receiver (ticket

holders). When implemented in a ticketing system, this model can significantly augment communication processes in several dimensions:

1. Encoding is the process of turning something into code and Decoding is how you turn code back into something usable. Users interpret electronic tickets as encoded messages at the entry points to guarantee precise and accurate messages are sent and received (Sub, 2018). When a ticketing system is used, data (such as event details, ticket prices, availability) is encoded and sent to potential customers. It states that sending a message is meaningful only if the receiver can decode it precisely because of proper encoding. Making the information simple, short and specific to the caller allows the system to limit errors and misunderstandings (Schramm, 1954).
2. Shared experiences between the parties improve how much people can understand each other. In a ticketing system, this is done by using user feedback, FAQs and help from customer support staff matched to the audience's interests.
3. Feedback Loop: The model points out that feedback plays a big role in any communication situation. Customers can use a feedback system in a ticketing system to communicate their views on the ticket buying experience. This feedback can help improve the system so that customers' needs are met and their satisfaction increases (Johnson, 2022).
4. Noise Mitigation: The theory asserts that disruptive factors called noise can interfere with good communication. This could mean there are problems with the technology, the info provided is sometimes unclear or there are too many ways to go through the process. Having certain codes and biometric authentications on tickets helps reduce errors during the process of ticket management (Shimizu & Nishisako, 2019).
5. Cultural Context: Schramm included in his model how culture affects the process of communication. The right ticketing system can offer different kinds of audiences a good experience by using their language, keeping content local and considering what makes them comfortable. It helps close the gap between different user communities and adds strength to the efficiency of communication (Doe, 2023).

The Schramm Model applied through ticketing can help make sure messages are clear, people enjoy similar experiences, offer chances to give opinions, cut down on unnecessary activity and value their cultural backgrounds. In conclusion, the model makes communication more efficient, prevents wrong messages and improves how smoothly the ticketing process works (Sub, 2018) which results in customers being more satisfied and getting their issues settled quickly.

## METHODOLOGY

This part explains the technique used to design the SUC e-Ticketing System. It displays the system's use-case diagram, explains the project prototype, details the technology being used and points out sustainability in the project. The SUC e-Ticketing System makes it possible for users to create, review and check the progress of their tickets. Administrators have access to submitted tickets and are able to direct them to the suitable departments by the selected categories. When the ticket is given out, the concerned department can start managing and resolving the problem.

An advanced BERT Base Uncased Model which is a model designed by Alqarni & Azim, (2022), has been added to the system to boost its efficiency and lower the need for manual sorting. Information from domain-specific tickets was used to train the model so it could

classify each ticket according to its content without help. As a result of this type of classification, tickets are sent to the right team automatically which keeps important and urgent issues from being ignored. Recommended to the NLP approach, it is easier for the system to make timely decisions, cut costs for bureaucratic processes and be more responsive overall.

The use-case diagram illustrating these operations is presented in Figure 3. A use-case describes the various actions involved in completing a task or transaction in the application. In the SUC e-ticketing System, the use-case shows how users and the system need to work together to record, track and handle all tickets as required. Part of this is to determine the roles needed such as user (submitter), admin and department staff, for an efficient ticketing process. Sticking to the use-cases method ensures that users are clear on how to use the system which helps determine what functions are necessary for ticket management.

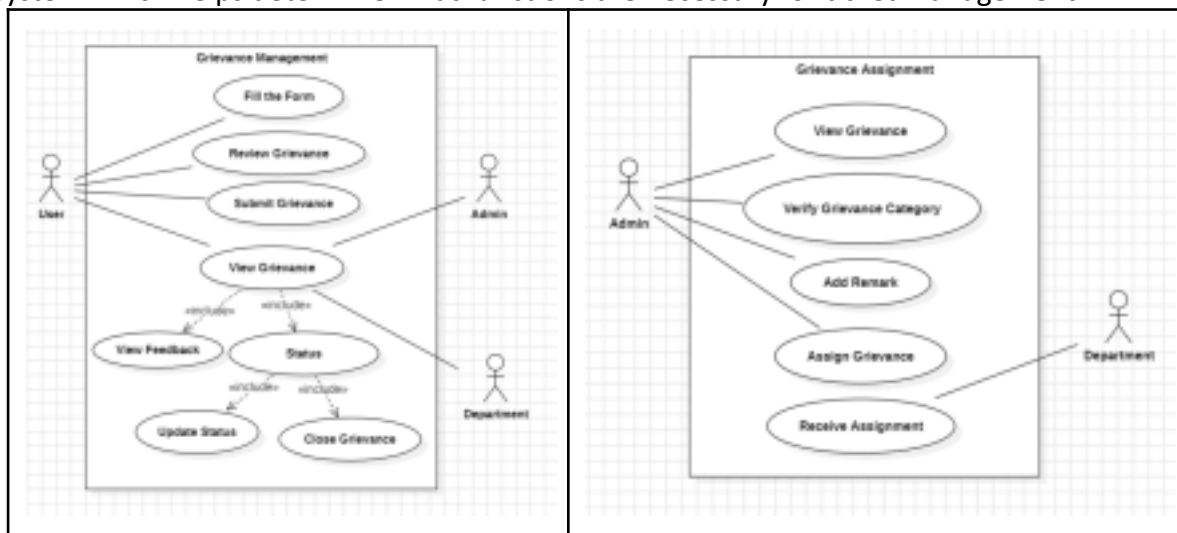


Figure 3: Use Case Diagram of Ticket Management

Figure 3 illustrate when a user sees a problem, they begin the journey by opening a ticket form on the system. Users need to fill in just the vital information, including the type of the issue, the area where it happened and any other files or images that support the report. After the crisis ticket is finished, the user will submit it. The ticket goes straight to the proper system to be further managed.

The admin has to go through each ticket after it is submitted. It requires checking if the problem is real, deciding how quickly it must be dealt with and finding out which team will deal with it. Since both the admin and the department can see the ticket details, there is improved collaboration and everyone is kept informed on the ticket.

As steps are followed, the system keeps the timeline neat and up-to-date. The status bar lets the user and admins check how far along the ticket is in the process. The admin can change the status of a ticket at any of these steps: confirming that the request was received, reporting that they are working on it or even showing that it has been settled. Once the reported issue is resolved to everyone's satisfaction, the admin can close the ticket which ends the ticket's life cycle.

Besides, the system also enables feedback so users or departments can ask further questions or make comments about the ticket. The use of this feedback keeps

communication going, so the system responds better and offers a better user experience. Because of its setup, the SUC e-Ticketing System responds to user needs in a timely manner, brings in the most

required departments and makes sure all participants stay up to date as the ticket is processed.

On the whole, the structure of the SUC e-Ticketing System correctly illustrates the full life cycle of reporting, managing and resolving issues in an institutional setting. It underlines a user-centered method by detailing how users, administrators and departments interact which encourages efficiency, transparency and good communication between offices. The Schramm Model of Communication shows that the system helps everyone understand each other more fully by reducing the confusion from noise, giving quick feedback and considering the background and culture of the users when an issue is reported or understood. This approach which emphasizes encoding and decoding together, helps messages be clearer and makes communication easier, preventing many misunderstandings and solving problems faster (Sub, 2018). With this framework, the Ticket Management System makes operations run smoothly, pleases users, answers their inquiries quickly and supports all users in a more considerate and welcoming way.

## RESULTS AND DISCUSSION

### a. Prototype Design

This section describes the structural design of the SUC e-Ticketing System, focusing on administrative and user interfaces. Figure 4 illustrates a user interface developed for ticket submission, encompassing submission details, a status progress bar, and the ticketing analytics.

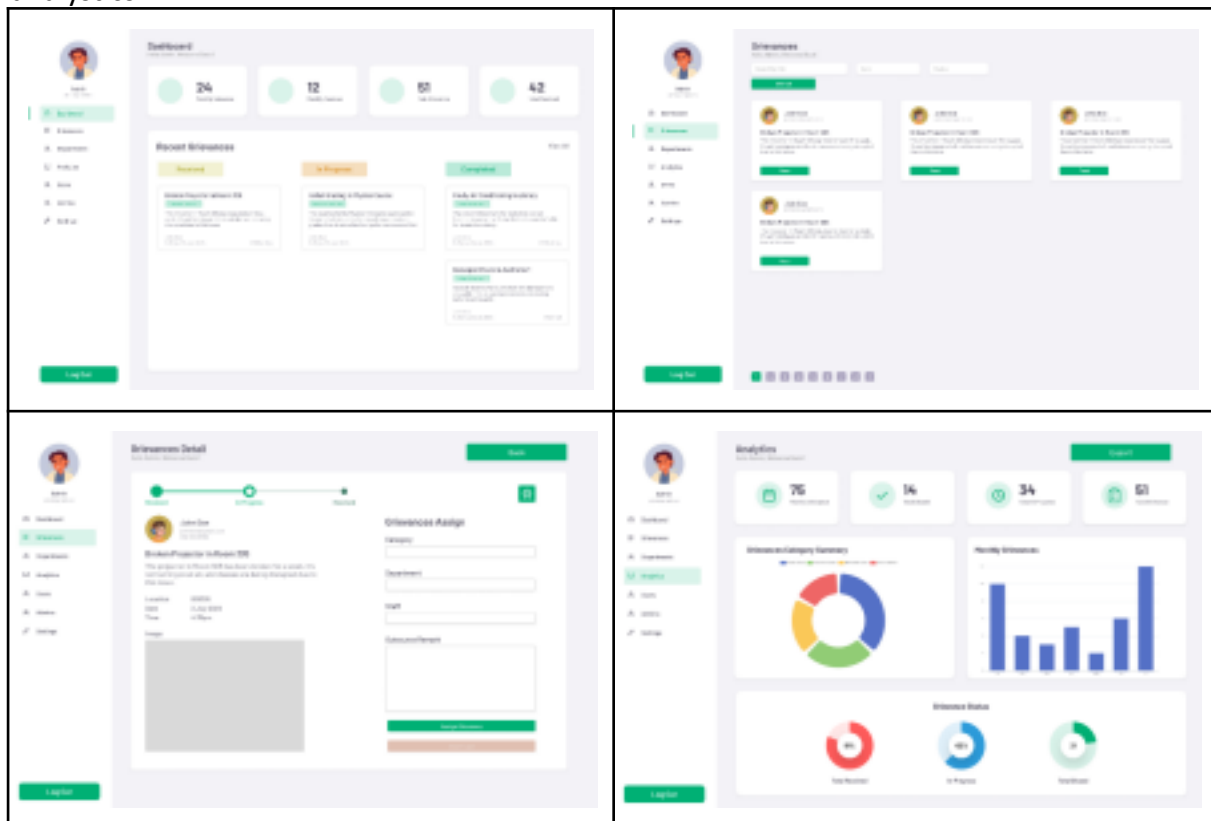


Figure 4: The Ticket Ticketing system interface shows system dashboard, ticketing report, ticketing details with progress bar and ticketing analytics.

Modern institutional feedback handling relies on the SUC e-Ticketing System 's approach which unites sustainability and operational features. Because everything is done electronically, there is less use of printed documents and a greater attention to environmental concerns at the institution. Apart from helping the environment, the system is crafted to

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improve operations and encourage different departments to collaborate. The way this system uses centralized ticket routing and instant ticket tracking means that problems are handled by the right department at the right time. Thanks to automated notifications, important people are notified along the ticket timeline and can respond within a timely manner.

Besides, different modules within the system improve its performance and capabilities. The Ticket Submission Module helps users with a user-friendly ticket form, the Ticket Monitoring and Dashboard Module enables users and administrators to check the progress and changes of tickets and the Department Assignment Module distributes tickets according to their urgency or category ensuring efficient teamwork. With the Communication Module, users interact directly with departments which gives everyone a clearer view of the process and supports trust.

The efficiency of the system goes up when AI-based ticket sorting, sentiment analysis and responses suggestions are included which help speed up decision-making for admins. They enable prioritizing important tickets and lower the demand on human workers by automating repetitive workloads. Because of this, important cases can be focused on by staff, while basic issues are resolved promptly and in the same way. Because of this intelligent automation and thoughtful design, systems are linked and make service delivery in institutions more reliable, responsive and answerable. Thanks to such enhanced features, the SUC e

Ticketing System handles issues in a more sustainable and efficient way and also helps continually improve campus activities with data.

#### *b. Analysis and Evaluation*

While creating the prototype, the SUC e-Ticketing System used a user-centered design approach to keep users' needs first. When the functional prototype was finished, an evaluation phase was carried out to check if the system could be used easily and worked well. Under the simulation, a total of 15 participants tried out the prototype under certain instructions by the facilitator. Data was gathered to analyze their Heuristic Evaluation, Content Quality and how the Navigation Structure worked. A Likert scale was used to measure each dimension, with choices ranging from 'Strongly Disagree' to 'Strongly Agree', following important guidelines from usability and user experience design.

Users said that the interface was free of confusion, looked nice, had a uniform style

and was easy to use. Users thought the layout was both simple and visually appealing, helping them interact easily. Yet, a few small changes were suggested, especially to improve the way images are displayed and the layout to improve clarity even more. The analysis of the content showed that the information given is helpful, clear and relevant which users agreed addressed their needs. Also, the Navigation Criteria review showed that users could smoothly find crucial features and move from one part of the site to another.

Analyzing the results of the evaluation helped to refine the prototype and showed that it met the important usability needs and requirements. The findings showed that processing user feedback early in the process, greatly increased how well and how soon the system could be implemented in practice.

Heuristic evaluation that shown in Table 2, found that almost everyone was very satisfied with the system's user interface and ease of use. 80% (54.5% strongly agreed and 45.5% agreed) of users shared that the system's main objective was plainly communicated. Nearly everyone agreed that the layout was easy to use, clean and uncluttered (90.9%) and that the color scheme looked nice (90.9%). People strongly agreed that the design and layout of the user interface are well done and very helpful (81.8%). Although some individuals (9.1%) were neutral about the layout and image relevance, the results indicated that the system's look and usability supported a good and easy experience for users.

Table 2: Heuristic Evaluation

Heuristic Criteria	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Key Insight	
Primary goal/purpose is clear	0	0	0	9.1%	90.9%	Users appreciated the clean and minimal layout.	
Clean, simple design	0	0	0	9.1%	90.9%	Colors were well received and contributed to aesthetics.	
Pleasing colour scheme	0	0	9.1%	9.1%	81.8%	Layout was spacious and user-friendly.	
Appropriate use of space	0	0	0	18.2%	81.8%	Design elements remained uniform throughout.	
Consistent design	0	0	0	27.3%	72.7%	Typography and color use were harmonious.	
Text and color are consistent	0	0	0	18.2%	81.8%	Icons were intuitive and easily interpreted.	
Icons are universally understood	0	0	0	9.1%	18.2%	72.7%	Visuals enhanced the functional purpose.
Images are meaningful and purposeful	0	0	0	45.5%	54.5%	Users easily understood the system's purpose.	

Next, the Content Analysis evaluation as shown in Table 3 indicates that users are happy with the system's clear and orderly way of presenting information. Significantly, almost all users strongly agreed that the main headings were simple to grasp, proving they are very helpful in directing users in the interface. Most respondents (72.7%) strongly agreed that what needed to be learned was simple and understandable, while 27.3% agreed, suggesting

that the system keeps things simple. Most readers (90.9%) said that the language used in the text was effective and free of jargon, but around 10% still wanted more clarity.

Most users indicated that help was easy to find on every page (54.5% strongly agreed and 36.4% agreed), though 9.1% were neutral which suggests help might be more clearly visible. Many users, 72.7%, regarded content placement well, saying “yes” that information placed above the fold was easy for users to find without scrolling. It was also noted that the search function is easy to use, since 81.8% of people strongly agreed with this. In general, the website was designed to help users, was clear to navigate and was easy to use.

Table 3: Content Analysis

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
0	0	0	9.1%	90.9%
0	0	0	27.3%	72.7%
0	0	9.1%	27.3%	63.6%
0	0	9.1%	36.4%	54.5%
0	0	0	27.3%	72.7%
0	0	0	27.3%	72.7%
0	0	0	18.2%	81.8%

**Content Criteria Key Insight**

Major headings are easy to understand

Minimal text/information presented

Clear terminology, no jargon

Help available on every page

Consistent design

Important content is above the fold  
 Search box is easy to identify and use  
 Major headings are easy to

understand  
 Headings are intuitive and informative.

Content is brief and not overwhelming.

Language used is simple and accessible.

Help options are present, but could be more prominent.  
 Aligns with Part 1: interface maintains visual consistency.

Key content is immediately visible without scrolling. Search functionality is

accessible and usable.

0 0 0 9.1% 90.9% Headings are intuitive and informative.

According to the results of the navigation test, users think the system is easy to use and well organised. Nearly all participants (90.9%) listed the similar navigation as a clear advantage, proving that the site was dependable and uncomplicated in its overall use.

More than 80% of respondents found it easy to locate themselves within the site, as the remaining 18.2% also agreed. Most users (72.7%) agreed that the data was easy to understand and use and the rest (27.3%) agreed as well. As a whole, the common findings from the criteria prove that the website’s design makes it simpler and more enjoyable for people to navigate.

Navigation Criteria	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Key Insight
Consistent navigation	0	0	0	9.1%	90.9%	Navigation layout is reliable across pages.
Easy to identify your location on the site	0	0	0	18.2%	81.8%	Users can easily track their current location.
Consistent way to return to main page/system	0	0	0	9.1%	90.9%	Return navigation is clear and intuitive.
Organisation of information makes sense	0	0	0	27.3%	72.7%	Information hierarchy is logical and effective.

The system provides features that help decrease the use of resources and make the university work more efficiently. With the help of the system, people can process tickets

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online, removing the need for paperwork and lessening paper usage in the system. Besides, the system makes sure teams can easily share information through tickets that are routed in one place, automatic notifications and updates on current statuses. Consequently, tickets immediately arrive at the right user, department or system, making it easier to handle them and improving the efficiency of response time. Applying AI in ticket management such as with automatic sorting, analysis of customer attitudes and offering suggestions, assists in handling important matters first. Due to these features, organizations can deal with complaints more wisely and take steps beforehand.

### CONCLUSION

To sum up, the inclusion of AI in the ticketing system prototype marks a major improvement in communication, productivity and sustainability in such institutions. By handling ticket grouping, assigning priority using AI and updating users instantly, the system removes much of the time spent on administration by team members. In Prediger’s view (2017), AI-led processes use live and clear communication to communicate with stakeholders and provide constant feedback which maintains a smooth and understandable process.

Moreover, introducing such a digital process shows a clear dedication to the

environment by reducing the requirement for paper in reporting processes. Since everything is paperless, the platform supports current eco-friendly habits and helps manage educational institutions more sustainably (Mohammed et al., 2024; Jose & Muhammed, 2024). AI software in the system boosts efficiency online and helps use resources wisely to prevent wasting them.

Schramm's Model, a communication theory, is an important part of developing and evaluating the system. The model points out that effective communication depends on both sides sharing ideas and getting feedback. In ticketing, it guarantees that all feedback about issues, progress and fixes is communicated, considered for the audience and received properly. It lessens miscommunications and makes customers more pleased because of its active response system (Sub, 2018).

Results from the heuristic, content and navigation analyses also suggest that the system is easy to use and effective. Ninety percent of participants stated that the design was neat and they rated the appearance of the app highly. The simplicity of information and limited use of professional terms were noted during content analysis and users were found to have no problems going back to important pages through navigation reviews. From this, it is clear that the system is able to follow user-centered design, making it more acceptable and successful over the long run.

In the future, it may be possible to use advanced AI modules to sort tickets, send maintenance alerts and create more user-friendly experiences by considering how and what the users have done in the past. In the future, this system could offer features in several languages and use chatbots for customers to get fast answers, ensuring everyone can communicate easily and immediately. All in all, by improving the ticketing process, AI makes digital transformation progress for institutions, ensures consistent and swift communication and lowers effects on the environment.

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