The Effectiveness of using *PAUT* for Student Recruitment Management at Kolej Komuniti Selayang

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Abstract

Nowadays technology its importance all service in many sectors. This study focuses on the application management and recruitment of new students. This study aims to evaluate the effectiveness of the "Your Application First" PAUT mobile application in process for new student registration session 2 2023/2024 at Kolej Komuniti Selayang (KKSY). This study was made based on the situation that occurred during the COVID-19 pandemic era where it was difficult for students to get relevant information and also from the aspect of application. Thus, this system can help the new student's admissions committee and the who will register from anywhere and at any time. The data of this study were obtained quantitatively through the questionnaire method. The questionnaire was randomly distributed to 86 respondents consisting of new students who had registered. This study uses a descriptive method to assess users' perception of the effectiveness of the PAUT application. Data for this study were analyzed using percentage scores. The findings of the study showed that the average percentage of scores for all items of satisfaction with the use of PAUT was at a high level of 86.82%. The results of the study found that the effectiveness of this application in recruitment management showed that respondents agreed with the use of this application. The study also found that the use of this application for recruitment management is very good and satisfying. Overall, it was found that this application is an alternative platform that can help channel simple and easy-to-use information application process for new students at KKSY. It is proposed that in the future, a study can be conducted on the effectiveness of the use of the application in other community colleges to see what other factors can contribute to the improvement of the existing management system.

Keywords: Application, Community College, Management, Student Recruitment

1.0 Introduction

Kolej Komuniti Selayang (KKSY) is a one of Technical and Vocational Education and Training (TVET) institution in Malaysia. The education and training process that focuses on employment orientation with a primary focus on industrial applications. The purpose is to train a skilled workforce in a specific field. According to Azirin Abdul Aziz, the Director of the Student Recruitment and Development Division of the Jabatan Pendidikan Politeknik dan Kolej Komuniti (POLYCC), the intake of POLYCC students is projected to decrease by 12.8 percent in 2023 (Mohamed, 2023; Wahid, 2023).

This decline is supported by the Auditor General's 2019 Series 2 report, which indicated that the total intake of TVET students from 2016 to 2020 exhibited a downward trend ranging from 1.0% to 24.6% compared to previous years, with total enrollments dropping from 139,699 students in 2016 to just 99,589 students in 2020. The decreasing number of students enrolling in POLYCC can affect the growth of TVET institutes. These institutions have been important for TVET training and lifelong learning since 2001. The Ministry of Higher Education reported that graduates from these colleges have a marketability rate over 91% from 2018 to 2020. Thus, lower student enrollment can impact the job prospects of TVET graduates from POLYCC. Before the year 2021, apart from the application through the MYPOLYCC Student Recruitment official portal the student recruitment process was carried out conventionally. Applicants is required to attend the institution and fill in the admission application form manually.

However, there is a few problems that have been identified especially during the outbreak of the corona virus disease (Covid-19) pandemic outbreak. One of the problems in using manualy application is when it is quite difficult for the applicant to apply manually due to the risks in getting the virus at that time. In addition, it is difficult for some applicants who lived outside the area and far from the institution, which may have involved costs of travelling and so on. In addition, the manual method could also cause the risk of loss, damage to the application form, waste of time, materials, and manpower at the counter. Student Application Forms directly with institutions are hard to come by for applications for new students of KKSY, in addition to applications through the POLYCC Student Recruitment Portal. The process of recruiting new students can also be done manually or apply directly with the institution. Therefore, applicants need to come to the institution to collect the form and fill in the application form manually. The idea came about because the developers of the innovation felt that this traditional method could make it difficult for applicants, especially after the Covid-19 pandemic, in line with the government's order to reduce movement or contact directly. In addition, the rationale for the development of this innovation can also reduce the risk of losing physical forms or filling in errors from the applicant himself.

Previously, students had to communicate directly with the relevant officials face-to-face. Through this application, users will be guided to the correct and secure link or links. It can also assist officers in managing student applications as well as being able to communicate directly online. Apart from playing a role in promoting and attracting the interest of applicants, it also helps facilitate officers in providing advice on further procedures. The application can also help in terms of saving time as officer can communicate with applicants anytime and anywhere. It's supported by this statement Jamil et all (2019), usage usability and effect of Mobile Application (Mobile Apps) in National University of Malaysia (UKM) Student Orientation Week (MMM).

Material savings can be achieved with minimal paper use and the risk of loss of raw data can be avoided to ensuring consumables such as stationery, paper, cartridges and so on are used optimally to avoid waste as stated in the treasury circular, (Pekeliling Perbendaharaan, 25 July 2024, PB3.1 : Kemaskini 2024). Ministry of Finance Malaysia. In addition, it can help in saving paper storage space or records of processed application forms.

In order to improve the management of student recruitment and indirectly increase the number of student intake, the researcher has taken the initiative to produce an application known as a PAUT using Link Tree. PAUT is an initiative using information and communication technology in line with current technological developments. Therefore, this study was conducted to identify the effectiveness of the PAUT application in the management of student recruitment applications. This is supported by the statement of the Chief Secretary of State in the Public Sector Digital Conference (PDiSA) 2023, where he stated that we need to realize that the best public service does not only depend on the ability and competence of the people who administer and manage it, nor on policy documents, guidelines and standard operating procedures (SOP) alone, but also on its advanced technology, simplifying and saving time and energy.

2.0 Methodology

Waterfall model development method is uses in this application. Which is there are several main stages that describe the stages activities in waterfall model. The reason for using it method because the stages in application in the waterfall model are clearly structured. According to Jayusman and Wasiyanti (2019), this model provides a systematic and sequential approach for the development of the system Waterfall Model Implementation in the Web-Based School Test System.

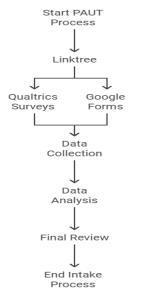


Figure 1. Waterfall Methods 1

Ismail et all (2022), said the important factors of using the student admission application system for Malaysian Certificate of Education (SPM) Graduates in the State of Malacca, found that positive correlations between system usability and applicant satisfaction, highlighting the importance of ease of use and institutional choice in the effectiveness of such systems.

Romeo and Thelma (2020), said Building a Framework for the Integration of School Management Systems (BFISMS) June 2022 schools services mainly focuses on student services including student entry monitoring grades, enrolment, assessment, library management, providing student reports and graduate tracking. Not many schools in Indonesia have implemented an online admission system Development of the application management process and student registration according to Hidayat et all (2023). While at KKSY will be easier and more practical with the use of the PAUT application that has been developed. In other words, it is easy, simple and friendly to all users because they can access various information in just one link.

This study was carried out in a descriptive form using a survey method by distributing questionnaires to collect the necessary data. All the data will be evaluated through the feedback given by the respondents. The research data was carried out during KKSY new student orientation week involving a total of 86 new students from various program backgrounds.

The questionnaire method facilitates the respondents where the respondents will mark the answers selected from the distributed form. In addition to that, the quantitative approach can also benefit the study where it can produce a "valid" and "reliable" finding. According to Durga and Narayan (2019) the survey method is suitable for gathering the opinions or experiences of respondents based on the set of questions.

Features of the PAUT Application

PAUT (Figure 2) contains five domains or important things as the main display. Among the relevant domains include: -

- i. New student admission application form
- ii. FAQ
- iii. WhatsApp
- iv. social media
- v. Application review

| THE OPENGAMBILANKKSY | |
|----------------------|---|
| BORANG PERMOHONAN | L |
| FAQ ** | |
| WHATSAPP | |
| MEDIA SOSIAL ··· | |
| SEMAKAN PERMOHONAN | |
| Linktree* | J |

Figure 2: PAUT Application Features

Further, the data of this study was analyzed through quantitative methods using the 'Statistical Package for the Social Science' (SPSS) software to obtain accurate, simple research findings and able to answer all the research questions conducted by the researcher The quantitative data obtained was analyzed using descriptive analysis. Descriptive statistical analysis is used to describe the demographic information of the study sample such as age, gender, race, and other data to describe and answer the research questions.

A 5-point Likert scale is a survey tool used to measure attitudes, opinions, or perceptions by asking respondents to indicate their level of agreement or disagreement with a statement. The questionnaire in this study requires respondents choose one of the scores based on the clues. Scale A five-point Likert was chosen because of its reliability value which is high and gives a lot of options to respondents to make the right choice (Mohd Majid 2004) therefore, this research will apply likert score.

The objectives of this study are threefold: first, to identify the role of gender as a significant factor influencing the use of the PAUT application among new applicants at KKSY; second, to examine how the selection of program courses affects the utilization of PAUT among these applicants; and third, to assess the ease of use of the application as a crucial determinant in its adoption by new students at the institution

3.0 Results and Discussion

The results of this entire study show many interesting findings. The results are categorized into two parts of discussion.

Part A: Demographics of Respondents

i. Demographics of Students Respondents

Table 1 shows that the majority of respondents are female students with 60.5% while male students are 39.5%. Based on the number of 86 respondents, the number of female students is seen to be dominant with 60.5% compared to 39.5% for males.

| | 10001 | | ap===00 0 | | 000110101100 |
|---|--------|-----------|-----------|---------------|--------------------|
| F | Gender | Frequency | Percent | Valid Percent | Cumulative Percent |
| ſ | Male | 34 | 39.5 | 39.5 | 39.5 |
| ſ | Female | 52 | 60.5 | 60.5 | 100 |
| | Total | 86 | 100.0 | 100.0 | |

Table 1: Demographics of Student Respondents

This situation is normal for the entry of students into the TVET system in recent times which is largely dominated by Malay students. The admission of new students to this community college is mostly dominated by students using SPM results.

ii. Student's Program

The results indicate the distribution of program selections among applicants, highlighting a notable preference for the Sijil Pastry, which garnered the highest frequency at 30 (34.9%), followed by the Sijil Culinary with 23 (26.7%) and the Sijil Operasi Perhotelan with 20 (23.3%). Together, these three programs account for a significant majority of the applications, reflecting a strong interest in culinary and hospitality-related fields. The other programs, such as Sijil Rekabentuk Dalaman and Diploma In Games Arts, received fewer applications, with 10 (11.6%) and 1 (1.2%) respectively, indicating a more niche interest. Overall, the data suggests a clear trend toward vocational courses in the culinary and hospitality sectors among new applicants at Kolej Komuniti Selayang

| Programs | Frequency | Percent | Valid | Cumulative |
|-----------------------------|-----------|---------|---------|------------|
| | | | Percent | Percent |
| Diploma In Games Arts | 1 | 1.2 | 1.2 | 1.2 |
| Fashion and Apparel | 2 | 2.3 | 2.3 | 3.5 |
| Certificate | | | | |
| Culinary Certificate | 23 | 26.7 | 26.7 | 30.2 |
| Hospitality Operation | 20 | 23.3 | 23.3 | 53.5 |
| Certificate | | | | |
| Pastry Certificate | 30 | 34.9 | 34.9 | 88.4 |
| Interior Design Certificate | 10 | 11.6 | 11.6 | 100.0 |
| Total | 86 | 100.0 | 100.0 | |

Table 2: Distribution of Respondents by Program

iii. Smartphone Ownership

Table 3 shows 100.0% smartphone ownership where all respondents have at least one smartphone. The students own one smartphone because they just completed SPM and not having self-financial support. The phone basically given or bought by parents.

| Table 5. Smartphone Ownership anong Respondents | | | | | | | |
|---|-----------|---------|---------|------------|--|--|--|
| Smartphone | Frequency | Percent | Valid | Cumulative | | | |
| Ownership | | | Percent | Percent | | | |
| No | 0 | 0 | 0 | 0 | | | |
| Yes | 86 | 100 | 100 | 100 | | | |

Table 3: Smartphone Ownership among Respondents

iv. Social Media Accounts

Based on the information from Table 4, it can be summarized that the respondents who are new students have more than 5 social media accounts which is 30.2% percent of the respondents. Followed by 25.6% of respondents who have 4 social media accounts, 19.8% who have 3 social media accounts, 16.3% who have 2 social media accounts and only 8.1% who have 1 social media account.

| Table 4: Ownership of Social Media Accounts by Respondents | | | | | | |
|--|-----------|---------|---------|------------|--|--|
| Smartphone Ownership | Frequency | Percent | Valid | Cumulative | | |
| | | | Percent | Percent | | |
| 1 | 7 | 8.1 | 8.1 | 8.1 | | |
| 2 | 14 | 16.3 | 16.3 | 24.4 | | |
| 3 | 17 | 19.8 | 19.8 | 44.2 | | |
| 4 | 22 | 25.6 | 25.6 | 69.8 | | |
| 5 and above | 26 | 30.2 | 30.2 | 100.0 | | |
| Total | 86 | 100 | 100 | | | |

Table 4: Ownership of Social Media Accounts by Respondents

v. Types of Social Media Account

Based on the information from Figure 2, it shows the type of social media accounts that new students at KKSY have in their daily lives now. Social media such as WhatsApp, Instagram, Tiktok and Telegram, are the most owned and used social applications which are 90.7%, 76.7%, 70.9%, and 67.4% far leaving other social applications such as Facebook and Twitter with only 22.1% respectively and only 17.4%.



Figure 3: Types of Social Media Account owned by the Respondent

vi. Types of Social Media Platforms

Various social media platforms exist around us today. Figure 3 shows the types of social media platforms that respondents often use to access relevant information. The Tiktok application leads other social media with 61.6% for that purpose, followed by Instagram 58.1%, websites 53.5%, Facebook 18.6% and Twitter 15.1%.



Figure 4: Types of Social Media Platforms Respondents Access Information

vii. Types of social media used to get Information about KKSY

While Figure 4 shows the types of social media platforms that respondents often use for the purpose of accessing information and also obtaining information related to KKSY. Tiktok social media is still the main choice of new students which is 43.0%. Followed by Instagram 30.2%, institutional websites by 29.1%, Facebook 23.3% and Twitter 1.2% only.

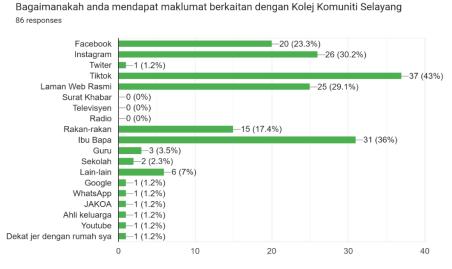


Figure 5: Types of Social Media Platforms Respondents Access Information

Part B: Level of Application Effectiveness

The findings of the study related to respondents' feedback on the use of the PAUT application are shown in Table 5 to 7.

i. Accessibility

In Table 5 as many as 58.1% of respondents agree that every information can be accessed easily with the use of this application, supported by 26.7% of respondents who expressed strong agreement out of a total of 86 respondents. Only 12.8% of respondents said they were unsure and only 2.3% of respondents said they disagreed with this.

| | Frequency | Percent | Valid Percent | Cumulative |
|---------------|-----------|---------|---------------|------------|
| | | | | Percent |
| Do not Agree | 1 | 1.2 | 1.2 | 1.2 |
| Not Sure | 13 | 15.1 | 15.1 | 16.3 |
| Agree | 49 | 57.0 | 57.0 | 73.3 |
| Totally Agree | 23 | 26.7 | 26.7 | 100.0 |
| Total | 86 | 100.0 | 100.0 | |

Table 5: Information is easily accessible.

ii. Time Consume for Application

Out of a total of 86 respondents, 49 respondents agreed while 23 respondents strongly agreed with the use of this application, applications can be made more quickly. While 13 respondents gave an uncertain answer and one respondent disagreed with the use of this application, the application process can be made faster as shown in Table 6.

| Table 0. Application can be made quickly. | | | | | | | |
|---|-----------|---------|---------------|------------|--|--|--|
| | Frequency | Percent | Valid Percent | Cumulative | | | |
| | | | | Percent | | | |
| Do not Agree | 1 | 1.2 | 1.2 | 1.2 | | | |
| Not Sure | 13 | 15.1 | 15.1 | 16.3 | | | |
| Agree | 49 | 57.0 | 57.0 | 73.3 | | | |
| Totally Agree | 23 | 26.7 | 26.7 | 100.0 | | | |
| Total | 86 | 100.0 | 100.0 | | | | |

Table 6: Application can be made quickly.

iii. Registration Process

Table 7 also shows the respondents' findings on the registration process can be made quickly through the use of this application. 45 respondents agreed and 27 respondents strongly agreed, using this application the registration process of new students can be done faster. While 13 respondents gave an uncertain answer and 2 respondents disagreed with this question.

| Table 7. Registration can be done quickly | | | | | | | |
|---|-----------|---------|---------------|------------|--|--|--|
| | Frequency | Percent | Valid Percent | Cumulative | | | |
| | | | | Percent | | | |
| 2 | 2 | 2.3 | 2.3 | 2.3 | | | |
| 3 | 12 | 14.0 | 14.0 | 16.3 | | | |
| 4 | 45 | 52.3 | 52.3 | 68.6 | | | |
| 5 | 27 | 31.4 | 31.4 | 100.0 | | | |
| Total | 86 | 100.0 | 100.0 | | | | |

Table 7: Registration can be done quickly

4.0 Conclusions

Overall, based on the responses to this study, it shows that the full use of the PAUT application by new students is successful and helps facilitate the initial registration process. This study also found that all respondents already have smartphones and social media accounts. This result is also very relevant and shows that each respondent has the literacy ability to understand and has basic skills in operating applications through smartphones in general. Apart from that, it cannot be denied that new students born in the world of technology and digitization are more advanced in the use of applications and social media. Social media applications such as Tiktok are the main choice for this new generation in many ways and this has been supported by the results of this study.

However, some proactive measures have been planned to overcome the problem of students who still do not have smart phones and also social media accounts by the institution even though the number is less based on the ratio of respondents involved. Among them is the role of the lecturer himself who takes the initiative to help some of the new students such as using a laptop instead of a smartphone. It is hoped that in the future the application management process and student registration at KKSY will continue to be smooth and easy with the "PAUT" application that has been developed. In other words, it is easy, simple and friendly to all parties involved in the process apart from the user himself. Smartphones also have a lot of potential to be used optimally for learning and management, but the level of use for this purpose is still at a low level as explained by Al-fawareh & Jusoh (2014). It is suggested that in future studies this innovation can be improved by adding items related to student management. Furthermore, a study related to the use of applications that are suitable for the management of new student registration is also suggested.

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Author Contributions

M. N. Hanapiah: Conceptualization, Methodology, Data Collection, Writing – Original; **A. Hashim:** Review & Editing; **D. Wahab**: Review & Editing.

Conflict Of Interest

The manuscript has not been published anywhere else and is not being considered by any other journals. All authors have authorized the review, agree with the submission, and state that they have no conflicts of interest in the work.

References

Durga, P. N., & Narayan, K. A. (2019). Strengths and weaknesses of online surveys. *IOSR Journal of Humanities and Social Sciences (IOSR-JHSS)*, *24*(5),

38.https://www.researchgate.net/publication/333207786_Strengths_ and_Weakness_of_Online_Surveys

- Hidayat, A., Armi, A. S., Rachman, A. A. F., Ilham, M. N., & Arif, M. I. (n.d.). Development of a web-based new student admission information system.
- Ismail, R., Afiqah, N., Samsudin, S. N., & Azman, A. (2022). Important factors of using the student admission application system for Malaysian Certificate of Education graduates in the State of Malacca. **International Journal of Academic Research in Business and Social Sciences**, *12*(12), 1004–1015.
- Jayusman, J., & Wasiyanti, S. (2019). Penerapan model waterfall dalam sistem ujian sekolah berbasis web pada SMK Wira Buana I Bogor. *Jurnal Techno Nusa Mandiri*.
- KementerianPengajianTinggi.(2021).https://great.mohe.gov.my/Admin/UploadPenerbitan/LAPORAN%20KAJIAN%20PENGESANAN%20GRADUAN%20TVET%202020.pdf
- Linktree: Pengertian, manfaat, cara membuat dan menggunakannya -Cermati.com. (n.d.). *Cermati.com*. https://www.cermati.com/artikel/linktree
- Mohamed, R. (2023, May 16). Permohonan pelajar ke politeknik, kolej komuniti menurun. *Kosmo Digital*. https://www.kosmo.com.my/2023/05/16/permohonan-pelajar-kepoliteknik-kolej-komuniti-menurun/
- Noor, M. S. H. (2022, February 5). Usaha jadikan TVET pilihan pertama belia [Review of Usaha jadikan TVET pilihan pertama belia]. *Berita Harian*. https://pspk.upm.edu.my/article/usaha_jadikan_tvet_pilihan_pertam a_belia-66095
- Pekeliling Perbendaharaan. (2024, July 25). PB3.1 (KEMASKINI 2024). Ministry of Finance Malaysia
- PDiSa| Persidangan Digital Sektor Awam. (n.d.). **Pdisa.mampu.gov.my**. Retrieved January 20, 2024, from https://pdisa.mampu.gov.my/
- Tuhuteru, H., & Siwalette, R. (2022). System design and implementation of online admission system at XYZ University. *Inspiration: Jurnal Teknologi Informasi dan Komunikasi*.
- Wahid, A. S. (2023, May 16). Permohonan politeknik, kolej komuniti menurun. *Sinar Harian*. https://www.sinarharian.com.my/article/258799/berita/nasional/pe rmohonan-politeknik-kolej-komuniti-menurun
- Zaccaria, A. (2020, July 6). Bootstrapped and global from day one: The story of Linktree. **Startup Nation**. https://startupnation.com/startyourbusiness/bootstrapped-global-linktree