

ASSAP- AI-Powered Automated Admissions System Project



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I. Project Executive Summary

1. Introduction

Across the globe, the demand for higher education is steadily increasing. This surge is fueled by a multitude of factors, including the rise of a knowledge-based economy, globalization, and increased competition in the job market. In Vietnam, the tertiary enrollment rate has risen significantly, reaching approximately 30% in 2022 [1]. This growth reflects a growing recognition of the value of post-secondary education in a rapidly evolving job market. Vietnam's higher education enrollment has amplified significantly since the late 1990s and early 2000s, indicating a strong shift of the human society towards prioritizing higher education [2].

Globally, the trend is even more pronounced. Between 2000 and 2020, global participation in tertiary education doubled, with the rising percentage of Gross Enrolment Ratio (GER) from 19 to 40, approximately [3]. This remarkable growth underscores the increasing importance of higher education in equipping individuals with the skills and knowledge necessary to navigate the complexities of the 21st century. Education expansion and the movement from agricultural to knowledge-based economies are major contributing factors to this trend [4].

Additionally, studies have consistently demonstrated a strong correlation among higher education, increased earning potential and improved job opportunities [5]. In Organization for Economic Co-operation and Development (OECD) countries, full-time tertiary-educated workers earn, on average, almost twice as much as those with below upper secondary attainment [6]. This significant wage premium highlights the economic advantages of pursuing higher education. In Vietnam, research indicates that college or university education has a positive influence on employee wages and the quality of employment [7]. Moreover, bachelor's degree holders earn 86% higher than those whose highest degree is a high school diploma [8]. Therefore, by imparting specialized skills and knowledge, higher education prepares students for desirable careers and equips them with the tools to excel in a competitive job market, and acquire a faster rate of transition to stable, long-term employment [9]. Beyond the economic and career advantages, higher education fosters personal growth and development, leading to a higher quality of life [10].

2. Project Problem Formulation

However, universities today encounter a multifaceted challenge in efficiently recruiting students. Identifying and attracting qualified candidates who align with specific program requirements and possess the necessary capacity for academic success is crucial. While an effective communication of program details, admission criteria, and potential career pathways to a diverse pool of applicants is inevitably necessitated, relying solely on manual processes is no longer optimal in today's dynamic higher education landscape [11]. For instance, the traditional manual approach exposes the struggle to address the personalized experiences and preferences of prospective students, especially, when a small number of recruiters are tasked with managing thousands of applications [12]. Furthermore, manual processes are time-consuming and resource-intensive. Recruiters spend significant time on administrative tasks, such as scheduling interviews, screening CVs, and

responding to inquiries, leaving limited capacity for building meaningful relationships with prospective students. This inefficiency can lead to delays in application processing, increased candidate drop-off, and a less-than-ideal applicant experience [13].

Simultaneously, high school students and their parents navigate the university application process with considerable anxiety and uncertainty. The sheer volume of information about universities, programs, and career paths can be overwhelming, making it difficult to organize and make informed decisions [14]. Concerns about the authenticity and validity of information provided by universities can create distrust and skepticism, leading students and parents to seek reliable sources and personalized guidance to validate their choices. Students often grapple with limited autonomy in their decision-making, as parental expectations and pressures influence their choices, potentially leading to internal conflicts and anxieties about their future [15]. The rapidly changing job market and the rise of AI and Industry 4.0 further amplify these uncertainties, as students and parents seek reassurance about future prospects, including career opportunities, earning potential, and personal growth [16].

3. Objectives and Solutions

In conclusion, the quality of information, academic services, and the career guidance can significantly affect students, whether to negative perceptions of the university's commitment to student success or the strong perception of admitting to the dream university. Therefore, to address the challenges and pain points outlined in the project problem formulation, this project aims to develop an AI-powered solution that transforms the university admissions process. The objectives of this project are:

- **Enhance Efficiency and Productivity:** Streamline administrative tasks for university recruiters, such as application sorting, CV screening, and communication automation, through AI-powered tools. This will free up valuable time for recruiters to focus on building relationships with prospective students and providing personalized guidance.
- **Personalize the Applicant Experience:** Provide tailored information and support to prospective students through AI chatbots and virtual assistants. This will address the issue of information overload and empower students to make informed decisions based on their individual needs and preferences.
- **Improve Communication and Transparency:** Facilitate seamless communication between universities and applicants through AI-powered chatbots and automated messaging systems. This will ensure timely and accurate information dissemination, addressing concerns about authenticity and validation.
- **Reduce Bias and Promote Equity:** Mitigate unconscious bias in the evaluation process through AI-powered tools that analyze applications based on objective criteria. This will ensure fair and equitable access to higher education opportunities for all students.

- **Enhance Student Engagement and Success:** Provide personalized learning resources, study tools, and career guidance to students through AI-powered platforms. This will empower students to prepare effectively for their academic journeys and future careers

To achieve these objectives, the project proposes the following solutions under the project **termed AI-Powered Automated Admissions System (ASSAP):**

- **AI Chatbot:** Develop an AI-powered chatbot that can interact with prospective students 24/7, answering their questions, providing personalized guidance, and offering relevant information about programs, admissions requirements, and career prospects. The chatbot can gather information about students' interests and preferences to provide tailored recommendations and resources.
- **AI-Powered Recommendation System:** Integrate a recommendation system that suggests relevant programs, scholarships, and resources to students based on their academic profiles, interests, and career goals. This will help students navigate the abundance of information and make informed decisions.
- **Automated Application Screening:** Implement AI-powered tools that can automatically screen applications based on predefined criteria, such as GPA, test scores, and extracurricular activities. This will streamline the initial evaluation process and allow recruiters to focus on more complex aspects of the application.
- **Personalized Communication Platform:** Develop a platform that enables personalized communication between universities and applicants, providing timely updates on application status, reminders about deadlines, and tailored information based on individual needs.
- **Predictive Analytics Dashboard:** Create a dashboard that utilizes AI to predict enrollment trends, identify high-potential students, and forecast student success. This will enable universities to make data-driven decisions and optimize their recruitment strategies.

4. Members' Positions and Responsibilities

Table 1: Member's Positions and Responsibilities Table

No.	Names of Current Incumbent	Positions	Responsibilities
1	Mai Phú Trọng	CEO	<ul style="list-style-type: none"> • Provide overall leadership and strategic direction for the project. • Oversee the development and implementation of the AI solution, ensuring

			alignment with the organization's mission and goals.
2	Nguyễn Gia Huy	CFO	<ul style="list-style-type: none"> Responsible for the financial management of the project, including budgeting, resource allocation, and financial reporting. Contribute to developing a sustainable business model for the AI solution.
3	Nguyễn Hoàng Tùng	CTO	<ul style="list-style-type: none"> Lead the technical development and implementation of the AI solution. Oversee the development of the AI chatbot, recommendation system, automated screening tools, and other AI-powered features, ensuring scalability and effectiveness.
4	Dương Minh Tuấn	CXO	<ul style="list-style-type: none"> Focus on the user experience of the AI solution. Ensure that the platform is user-friendly, accessible, and provides a positive experience for both students and recruiters.
5	Nguyễn Công Danh	CMO	<ul style="list-style-type: none"> Responsible for marketing and promoting the AI solution to universities and prospective students. Develop marketing strategies, organize outreach campaigns, and build partnerships to increase awareness and adoption of the solution.
6	Phạm Đức Thắng	CCO	<ul style="list-style-type: none"> Serve as the primary liaison between the project team and partner universities Work closely with universities to implement the AI solution, gather feedback, and provide ongoing support.

II. Project Idea

2.1. Innovation

Our proposed platform offers a revolutionary approach to university and college admissions, going beyond the standard offerings to deliver a truly differentiated experience. While we provide the expected baseline of detailed, accurate, and up-to-date admissions information from participating institutions (covering majors, quotas, benchmark scores, tuition fees, scholarships, and contact information), and assist these institutions in promoting their offerings to prospective candidates, our core strength lies in several key differentiators.

We leverage extensive automation to streamline the admissions process. A 24/7 AI-powered chatbot provides instant answers to common applicant inquiries about admissions procedures, school specifics, and program details. This chatbot undergoes continuous training to enhance its understanding and provide increasingly natural, conversational responses. Furthermore, our system features automated application processing, verifying completeness, reminding applicants of missing documents, and communicating admission decisions efficiently. We also automate marketing efforts, sending personalized emails and messages to prospective students based on their individual profiles, interests, and aspirations.

Beyond automation, we prioritize a highly personalized experience. Our intelligent recommendation engine analyzes applicant profiles, academic abilities, interests, and stated goals to suggest the most appropriate schools and majors. The system also learns from user interactions and search history, continuously refining its recommendations. We offer virtual 1-on-1 counseling, where students and parents can interact with our chatbot, which draws upon comprehensive institutional information from websites, social media, and provided documents. Finally, we create a personalized admissions roadmap for each applicant, outlining necessary preparation steps, application deadlines, and relevant admissions events.

To ensure continuous improvement, our platform incorporates robust data analysis and optimization capabilities. Institutions gain access to a real-time dashboard providing visually-driven data on admissions performance, including application numbers, enrollment rates, applicant source demographics, and frequently asked questions. This allows for immediate strategic adjustments. We perform trend analysis to predict future shifts in major and school preferences, aiding in long-term admissions planning. Finally, A/B testing of various admissions campaigns enables the identification of optimal strategies. Our system facilitates a seamless connection of student information, including scores, transcripts, academic progress, extracurricular activities, and certifications. This can be accomplished through integration with existing systems or via a dedicated backend system that allows universities and colleges to easily input and manage data.

2.2. Market Size

The market for our platform is substantial and poised for continued growth. In Vietnam alone, approximately one million students participate in the National High School Exam and subsequently apply to universities and colleges annually. These institutions allocate significant budgets, totaling billions of VND, to admissions-related activities, encompassing advertising, counseling, and event organization. The trend is clearly shifting towards online admissions, a movement significantly accelerated by the post-COVID-19 landscape.

We see significant market opportunities stemming from our ability to address key pain points for both applicants and institutions. For students, we alleviate the stress and anxiety inherent in the complex process of researching and selecting a university. For institutions, we enhance admissions efficiency, reduce operational costs, and enable more precise targeting of prospective students. This translates directly into cost savings by minimizing expenses on print materials, traditional advertising, and large-scale events. We deliver a modern, convenient, and personalized admissions experience, ultimately leading to increased enrollment rates and the attraction of high-caliber applicants. Vietnam's young population, high internet penetration, and increasing demand for higher education create a fertile environment for our platform.

However, we acknowledge the challenges inherent in this market. These include persuading institutions and applicants to adopt new, technology-driven admissions practices, competing with existing channels like institutional websites, social media platforms, and study abroad agencies, and, crucially, ensuring the security and confidentiality of applicant data. Building trust and demonstrating the reliability and objectivity of our system are paramount.

2.3. Scalability

Our business model is designed for significant scalability across multiple dimensions. Customer base expansion will occur in phases: initially focusing on major universities and colleges in key metropolitan areas (Hanoi, Ho Chi Minh City, Da Nang), then broadening to institutions in other provinces, and ultimately collaborating with international schools and joint training programs.

Feature expansion is also a core component of our growth strategy. This will involve:

- **Online Application Submission:** Integrating a streamlined system for application submission and fee payment.
- **Online Admissions Processing:** Developing an automated system for evaluating applications based on predefined institutional criteria.
- **Career Counseling:** Offering personality, interest, and aptitude assessments to help students with career planning.

- **Online Trial Classes:** Providing access to virtual trial classes offered by participating institutions.

Geographic expansion will follow a phased approach, beginning with a focus on the Vietnamese market, followed by expansion into other Southeast Asian countries (Thailand, Malaysia, Indonesia), and culminating in research and development for entry into other promising global markets.

We will utilize a multi-channel distribution strategy. Our primary platform will be our website, complemented by a strong presence on relevant social media platforms (Facebook, YouTube, TikTok). We will also organize seminars and workshops focusing on admissions and career guidance, and actively pursue partnerships with high schools, exam preparation centers, and other educational organizations.

2.4. Impact

Our platform is poised to have a profound impact on both the market and its consumers.

Market Impact: We aim to fundamentally transform the admissions landscape, transitioning from traditional methods to a technology-driven, data-informed "Admissions 4.0" model. By setting new standards for the admissions experience, transparency, and overall efficiency, we will encourage widespread adoption of AI and advanced technologies within the education sector.

Consumer Impact: For students, we provide unparalleled access to information, allowing them to easily search, compare, and select institutions and programs that align with their individual needs and aspirations. They will benefit from personalized guidance through our AI-powered system and expert consultations, increasing their chances of making well-informed decisions. For institutions, we offer significant cost savings, improved resource utilization, and more effective admissions processes. This translates to higher enrollment rates, the attraction of top-tier applicants, and an enhanced institutional reputation built on a modern, professional, and student-centric approach.

2.5. Feasibility

The feasibility of our project is supported by strong market demand, a robust product offering, and a sound financial model.

Market Feasibility: There is a clear and demonstrable need for an intelligent, convenient, and efficient admissions system. The ongoing trend of integrating technology into education and admissions further strengthens the viability of our platform.

Product Feasibility: Our system provides a comprehensive solution, encompassing all the essential features required by both applicants and educational institutions. We leverage mature and

readily deployable AI technologies, including machine learning, natural language processing, and computer vision. Crucially, our platform is designed for customization, allowing it to be tailored to the specific requirements of each participating institution.

Financial Analysis: Our business model incorporates multiple revenue streams. We will charge institutions fees based on the number of registered applicants, tiered service packages (basic, advanced, premium), or a subscription-based model. Additionally, we will generate revenue through advertising opportunities offered to partners such as exam preparation centers and other educational organizations. The large market size and strong demand contribute to the project's high profit potential.

Operations: We are establishing dedicated teams for product development, testing, and ongoing operations. A customer service team will provide support and address inquiries from universities and colleges. We will also assemble a team of experts in AI and education to drive product development and provide strategic consulting.

Team: Our founding team brings together extensive experience in education, technology, and entrepreneurship. We possess deep expertise in AI, software development, marketing, and the admissions process. Furthermore, we have cultivated strong relationships with universities, colleges, educational organizations, and industry experts, providing a solid foundation for success.

III. Three levels of product

We structure our value proposition around three distinct levels, encompassing the fundamental, the practical, and the extended benefits of our platform.

3.1. Core Value

The core value proposition of our platform lies in its ability to fundamentally transform the university admissions process by resolving the twin challenges of information overload and personnel constraints. Instead of a fragmented and overwhelming experience for both students and admissions staff, our system provides a streamlined, centralized, and automated solution. By automating repetitive tasks, intelligently organizing and delivering crucial information, and significantly reducing the administrative burden on staff, we free up valuable time and resources, allowing institutions to focus on strategic initiatives and personalized student engagement, rather than getting bogged down in manual processes. This core value translates to increased efficiency, reduced costs, and a more focused, effective admissions operation.

3.2. Tangible Value

This level details the immediate, practical benefits that both students and institutions will realize upon implementing our platform:

- **Unified Admissions Ecosystem:** We replace the traditional patchwork of disparate systems and manual processes with a single, integrated platform. This "one-stop shop" manages the entire admissions lifecycle – from initial student inquiries and personalized

guidance, through application submission and processing, all the way to final admissions decisions and enrollment. This unified approach eliminates data silos, reduces errors, and streamlines communication.

- **Measurable Efficiency Gains:** Our platform delivers quantifiable improvements in admissions efficiency. By automating tasks like application verification, document management, and communication workflows, we significantly reduce administrative overhead and free up staff to focus on higher-value activities, such as student outreach and relationship building. This results in demonstrable time and cost savings, and a more productive admissions team.
- **Superior Student Experience:** We empower prospective students with an intuitive, user-friendly platform that provides easy access to all necessary information, from program details and admission requirements to financial aid options and campus life resources. This transparent and accessible approach fosters a positive, less stressful application journey, leading to greater student satisfaction and improved institutional perception.
- **AI-Powered Personalization:** Our platform goes beyond basic information provision by leveraging the power of Artificial Intelligence. We analyze individual student profiles – including academic records, interests, and stated goals – to provide tailored recommendations for programs and institutions that are the best fit. This personalized guidance ensures that students are making informed decisions based on their unique circumstances, increasing their likelihood of success and long-term satisfaction.

3.3. Extended Value

This level highlights the long-term strategic advantages and competitive differentiators that institutions gain by adopting our platform:

- **Actionable Data Intelligence:** Our platform doesn't just collect data; it transforms it into actionable intelligence. We provide comprehensive analytics dashboards and reporting tools that offer deep insights into applicant trends, preferences, and behaviors. This data-driven approach allows institutions to refine their recruitment strategies, optimize resource allocation, and make informed decisions that improve enrollment outcomes and long-term institutional success.
- **Strategic Partnership Ecosystem:**
 - We are committed to building a robust network of partnerships with key stakeholders in the education ecosystem. This includes active collaboration with high schools, educational organizations, and respected admissions counseling centers, extending our reach and influence within the target market.

- We will also strategically partner with external service providers to enhance our platform's promotional reach and amplify its value proposition to a wider audience. This collaborative approach ensures maximum visibility and impact.

IV. Market Analysis

The Vietnamese higher education market presents a substantial and rapidly evolving opportunity. As per the Ministry of Education and Training, in 2023, approximately 1,002,100 students participated in the National High School Graduation Exam, with 660,258 (65.9%) subsequently applying for university admissions [17]. This figure rose to 733,000 in 2024, representing 68.5% of high school graduates [18], indicating a consistent upward trend in university enrollment. Long-term projections estimate that Vietnam will have a university student population exceeding 3 million by 2030 [19], highlighting the significant growth potential within the sector.

Concurrently, the Education Technology (EdTech) market in Vietnam is experiencing exponential growth. Industry projections forecast a market size of \$1.5 - \$2 billion USD by 2025, fueled by an impressive average annual growth rate of approximately 20% [20]. This vibrant growth underscores a strong and increasing demand for technology-driven solutions within all facets of the education sector, including, crucially, university admissions. The convergence of a growing student population and a burgeoning EdTech market creates a fertile ground for innovative solutions like ours.

4.1. Segmentation and Trends in Vietnam's Higher Education Market

4.1.1. The Public Sector: Dominance in Numbers, Constraints in Resources

4.1.1.1. Quantifying the Public Dominance: Approaching 70%

Analysis of the available data consistently reveals that public universities constitute a significant majority of the higher education landscape in Vietnam. Based on the 2023 figures from the market report, public institutions account for approximately 79.27% of the total universities and institutions [21]. This substantial proportion clearly demonstrates the dominant role of the public sector in Vietnamese higher education. Even when focusing specifically on universities as defined by MOET in 2020, the proportion of public institutions stands at approximately 72.57% [22]. More recent data from the 2023-24 academic year indicates 174 public universities out of a total of 234, representing around 74.36% [23]. These figures, drawn from various sources and timeframes, consistently show that public universities represent a clear majority, generally exceeding 70% of the total number of universities and equivalent institutions in Vietnam.

4.1.1.2. The Scale of Public Education: Large Student Number

The dominant numerical presence of public universities is further reflected in the size of their student populations. Data from the 2023-24 academic year explicitly states that the 174 public universities, along with 60 private ones, hosted a total of 687,473 students across all levels of study [23]. This statistic directly confirms that public universities are responsible for educating a

significant majority of students in Vietnamese higher education. While a 2023 report indicates a total higher education enrollment of 1.9 million across all institutions [21], the sheer number of public universities strongly suggests they cater to the majority of this large student body. Furthermore, prominent national public universities like Vietnam National University (VNU) in Hanoi and Ho Chi Minh City boast substantial enrollments, with approximately 34,000 and 61,500 full-time students respectively [21]. These examples illustrate the large scale at which individual public universities operate, contributing to the overall characteristic of public universities in Vietnam having large student bodies.

4.1.1.3. The Strain on Resources: Limited Budgets and the Quest for Efficiency

Despite their significant role in educating a large proportion of Vietnamese students, public universities often face considerable budget limitations. Research indicates that the Vietnamese government has gradually reduced its funding for public higher education over the past several decades, implementing a cost-sharing system that requires universities to seek alternative sources of income [24]. A study examining the financial sustainability of Vietnamese universities found that most public institutions were financially vulnerable due to a lack of diverse revenue streams [24]. The issue of "Low state budget spending on higher education" has been identified as a critical challenge for the sector, with recommendations made to increase government investment [26]. The government's policy shift towards reducing its financial burden on higher education has necessitated that public universities explore other funding avenues, such as tuition fees and donations [25]. While increased autonomy was granted to universities, it was often accompanied by a significant decrease in direct government financial support, leading to difficulties in diversifying revenue beyond tuition fees and impacting areas like research funding [28]. The tangible effects of these budget constraints are evident in reports of public universities having rudimentary teaching materials, outdated facilities, and shortages of skilled instructors [29]. This financial reality compels public universities to prioritize cost-effective solutions in their operations, including their approach to technology adoption and infrastructure development.

4.1.2 The Private Sector: Growing Presence and a Drive for Technological Advancement

4.1.2.1. Quantifying the Private Presence: Approaching 30%

While public universities dominate in numbers, private universities represent a significant and growing segment of the Vietnamese higher education market. Based on the 2023 data, private institutions constitute approximately 20.73% of the total universities and institutions [21]. When focusing specifically on universities, the 2020 MOET data indicates a proportion of around 28.27% [22], and more recent data from 2023-24 suggests approximately 25.64% [23]. These figures align with the user's statement of private universities representing approximately 30% of the market. Furthermore, data from early 2022 reported 67 private higher education institutions, making up 27.68% of the total, with a stated government target of reaching 30% by 2025 [30]. This indicates a clear trend and policy direction towards increasing the proportion of private higher education providers in Vietnam.

4.1.2.2 Embracing Innovation: Agility and Investment in Technology

Private universities in Vietnam are often characterized by their greater agility and responsiveness to market demands. Research indicates that they possess a strong ability to flexibly develop and modify their curricula to align with evolving career preferences and the requirements of the job market [31]. They are also noted for their focus on establishing relationships with businesses and forging international partnerships [31]. Their responsiveness extends to absorbing the demands of workforce development, catering to the needs of a rapidly growing population [32]. This inherent agility positions them well to adapt to changing educational trends and technological advancements. Driven by a competitive market environment, private universities demonstrate a greater willingness to invest in technology to gain an edge in teaching quality and student admissions [33]. Many private institutions boast modern campuses built to international standards, suggesting significant investment in infrastructure, which often includes advanced technological resources [31]. Case studies and research highlight the active adoption of technologies like Artificial Intelligence, general educational technology, and blended learning models within private universities, such as FPT University [35]. This proactive approach to technology investment reflects their strategic focus on enhancing competitiveness and attracting students in a dynamic higher education landscape.

4.1.3. Colleges & Vocational Schools: The Digital Imperative in Admissions

4.1.3.1. The Landscape of Vocational Training: A Diverse Ecosystem

The vocational education and training (VET) sector in Vietnam encompasses a wide range of institutions beyond traditional higher education universities. Data from a 2023 report indicates a substantial network of 1,886 TVET facilities, including 399 colleges, 429 secondary schools, and 1,058 vocational education centers [38]. This diverse ecosystem plays a crucial role in providing skills and training relevant to the labor market. While figures for "colleges" specifically vary across different reports, with one source mentioning "189" and "219" in different years [39], the significant number of TVET institutions overall underscores the importance of this segment in the Vietnamese education system.

4.1.3.2. The Digital Transformation Wave: Modernizing Admissions Processes

Colleges and vocational schools in Vietnam are experiencing an increasing demand for digital transformation, particularly in their admissions processes. The general trend of digitalization across the entire higher education sector creates an impetus for these institutions to adopt digital solutions to enhance their efficiency and reach [33]. A significant driver of this demand is the "Digital Transformation Program in Vocational Education to 2025, with a vision to 2030," a government initiative aimed at modernizing the VET sector [38]. This program outlines specific goals for developing digital platforms, digitizing learning processes, and improving digital competencies within vocational education, which inherently includes the modernization of administrative functions like admissions [38]. The anticipated benefits of digital transformation in this sector include improved access to education for prospective students [38]. Observing the trend in universities, where online enrollment and admissions are becoming increasingly common [41],

suggests that colleges and vocational schools are likely to follow suit to remain competitive and meet the expectations of digitally savvy applicants. The national push for digital transformation in education, supported by MOET's development of online registration platforms for university admissions [42], further facilitates and encourages the adoption of digital admissions processes within vocational colleges.

4.2. The Extent of AI Adoption in University Admissions: A Global and Vietnam-Specific Analysis

4.2.1 Executive Summary

The integration of Artificial Intelligence (AI) into university admissions processes is a rapidly evolving trend globally, with a significant portion of admissions professionals recognizing its transformative potential. This report examines the current extent of AI adoption in university admissions worldwide and specifically within Vietnam, drawing upon recent research and data. Globally, AI is being implemented in various stages of the admissions cycle, from initial application screening and applicant support to predictive enrollment forecasting and even holistic review processes. This adoption is driven by the promise of enhanced efficiency, personalized outreach, and improved decision-making. However, ethical considerations surrounding algorithmic bias, data privacy, and the need for human oversight remain critical concerns. In Vietnam, the adoption of AI in university admissions is in a nascent stage but is gaining momentum, aligning with the nation's broader digital transformation strategy in higher education. While concrete examples are still emerging, universities are beginning to explore AI-powered chatbots for applicant support and are launching AI-related academic programs to address a growing demand for technology professionals. The global market for AI in education is experiencing substantial growth, indicating a significant opportunity for further integration of AI in university admissions both internationally and within Vietnam. Addressing the ethical and policy implications will be crucial to ensuring the responsible and equitable implementation of AI in shaping the future of university admissions.

4.2.2. Introduction: The Rise of AI in Higher Education Admissions

Artificial Intelligence, encompassing a range of technologies that enable computers to perform tasks typically requiring human intelligence, is increasingly influencing various sectors, and higher education is no exception. The traditional processes involved in university admissions, often characterized by manual tasks and subjective evaluations, are now being re-examined through the lens of AI's potential to bring about significant transformations. The allure of AI in this context lies in its capacity to streamline operations, enhance accuracy, and ultimately improve the experience for both institutions and prospective students. From automating time-consuming administrative tasks to providing data-driven insights for better decision-making, AI offers a compelling value proposition for universities navigating the complexities of modern admissions. However, alongside these potential benefits, critical questions arise concerning the ethical implications of using AI in such consequential decisions, the potential for bias in algorithms, and the indispensable role of human judgment in evaluating the diverse qualities of applicants. This report aims to provide a comprehensive analysis of the current state of AI adoption in university admissions, exploring its prevalence and applications on a global scale, while also focusing specifically on the emerging landscape within Vietnam, supported by available research and pertinent data.

4.2.3. Global Trends in AI Adoption for University Admissions

The integration of AI into university admissions is not merely a futuristic concept but a present-day reality for a significant number of institutions worldwide. Data indicates that approximately 51% of admissions professionals globally anticipate AI to revolutionize the evaluation of applicants [43]. This widespread belief is further substantiated by surveys revealing that around 50% of higher education admissions offices are currently employing AI in their review processes, with an additional 30% intending to adopt these technologies in the near future [44]. The increasing familiarity and acceptance of AI within the higher education community are evident in the fact that 84% of higher education professionals have reported using AI in either their professional or personal lives, marking a substantial increase from previous years [45]. This surge in AI usage underscores a growing confidence in its capabilities and a recognition of its potential to reshape traditional admissions workflows.

Universities across the globe are exploring and implementing AI in various aspects of the admissions process. One prominent application is in the automated screening and initial evaluation of applications. AI algorithms are capable of automating repetitive tasks such as sorting and categorizing applications based on objective criteria like GPA and standardized test scores [44]. This initial filtering process can significantly enhance efficiency by allowing admissions staff to concentrate on more complex and nuanced aspects of the review. Furthermore, AI can analyze academic transcripts, identifying patterns in course rigor, grade trends, and performance in specific subjects, providing admissions officers with valuable summaries of an applicant's academic journey [47]. These systems can also be programmed to flag applications that are incomplete or to detect potential instances of plagiarism in essays [47].

Another key area of AI application is through AI-powered chatbots designed for applicant support and queries. These virtual assistants can provide instant responses to frequently asked questions, guide prospective students through the intricacies of the application process, and deliver personalized updates regarding their application status [46]. By offering round-the-clock support and readily accessible information, chatbots can significantly improve the applicant experience and alleviate the burden on admissions staff who would otherwise need to address these routine inquiries [48].

Predictive analytics for enrollment forecasting represents a sophisticated application of AI in university admissions. By analyzing historical data, applicant behavior patterns, and broader market trends, AI algorithms can generate forecasts of future enrollment numbers [46]. These predictions enable institutions to make more informed decisions regarding resource allocation, recruitment strategies, and yield management by identifying applicants who are most likely to accept admission offers [48].

The potential of AI tools for holistic review and sentiment analysis of essays is also being explored. AI can assist in the review of transcripts, providing insights into an applicant's academic profile beyond just overall grades [47]. Furthermore, AI can analyze the content of essays to assess their alignment with the institution's values [47]. Advanced AI-enhanced Application Tracking Systems (ATS) can even perform sentiment analysis on personal statements and letters of recommendation, offering a qualitative dimension to the evaluation process by gauging an applicant's motivation and overall fit with the institution [48]. Some universities are even piloting AI tools specifically

for reading and reviewing admissions essays to identify key themes and assess writing quality [49].

The observed benefits of AI adoption in university admissions globally are manifold. Institutions are reporting enhanced efficiency and productivity through the automation of routine administrative tasks [45]. AI enables personalized student outreach and improves engagement by facilitating tailored communication strategies [46]. The use of data-driven insights and predictive analytics leads to improved decision-making in various aspects of the admissions process [46]. Moreover, AI holds the potential for increased diversity and inclusion by mitigating biases inherent in traditional evaluation methods and by allowing for the consideration of non-traditional indicators of success [46]. Ultimately, AI contributes to streamlined administrative processes, resulting in significant time and resource savings for universities [46].

Despite these compelling advantages, the integration of AI into university admissions is accompanied by several challenges and concerns. Ethical considerations are paramount, particularly regarding the need for fairness, transparency, and inclusivity in AI-driven evaluations [47]. There is a significant risk of bias in AI algorithms, as these systems are often trained on historical data that may reflect existing societal inequalities [45]. Concerns about data privacy and security are also critical, given the sensitive nature of the information handled by admissions systems [45]. Striking the right balance between automation and human oversight is essential to ensure that the admissions process retains a personal touch and allows for nuanced judgment [46]. The widespread availability of AI writing tools raises concerns about the potential negative impact on academic integrity if students overly rely on AI to generate their application materials [45]. Finally, there is a broader unease among some about the potential for AI to undermine critical thinking in the long run [45]. These challenges necessitate a careful and thoughtful approach to AI adoption in university admissions, emphasizing ethical considerations and the continued importance of human expertise.

4.2.4 AI Adoption in University Admissions in Vietnam: Current Landscape and Initiatives

Vietnam's higher education sector is undergoing a significant digital transformation, driven by a national imperative to modernize education and align with global technological advancements. The Vietnamese government has explicitly committed to developing digital transformation across all levels of education, including higher education, to effectively respond to the rapid changes brought about by science and technology [51]. This commitment is further underscored by the introduction of ambitious national strategies in late 2024, which aim to revolutionize the education, training, science, and technology sectors by 2030, with a clear emphasis on prioritizing frontier technologies such as Artificial Intelligence [52]. The National Digital Transformation Program, adopted in 2020 with a vision extending to 2030, sets forth dual objectives: the holistic transformation of the nation across digital government, digital economy, and digital society, and the establishment of digital technology as a fundamental pillar. Within this program, higher education institutions are tasked with the thorough application of digital technologies to management, teaching, and learning [53]. Reflecting this national direction, the Ministry of Education and Training (MOET) recognizes technology as a crucial catalyst for educational development and has been actively promoting the implementation of online teaching programs and teaching support software [54]. While this widespread digital transformation presents numerous opportunities, the process within Vietnamese higher education also encounters certain

barriers, including the need to ensure the quality of online education and assessment, as well as the ongoing task of completing the necessary legal frameworks and internal regulations [51].

Within this broader context of digital transformation, the adoption of AI specifically in university admissions in Vietnam is still in its early stages, but notable initiatives are beginning to emerge. Ho Chi Minh City University of Banking (HUB) announced the launch of a new AI program in 2025, with the admission process allowing students to apply using their national high school graduation exam results or through a computer-based V-SAT entrance examination [55]. Similarly, the National Economics University (NEU) introduced an Artificial Intelligence program in 2024, with admission methods including direct admission, the use of high school graduation exam results, and a combined admission approach that considers international certificates and competency-based examinations [55]. These examples indicate a growing recognition of the importance of AI within Vietnamese universities and a move towards integrating technology into aspects of the student lifecycle, including admissions.

Beyond the launch of AI-focused academic programs, there are also instances of Vietnamese universities exploring the use of AI-powered tools to support the admissions process. A research study details the development of "NEU-chatbot," an AI-based chatbot designed for the admission portal of the National Economics University. This chatbot is capable of providing prospective students with instant updates on curriculum details, admission requirements for new students, tuition fees, and even information related to IELTS writing task II scores, demonstrating the potential for AI to enhance applicant support and information dissemination [56]. Another research paper discusses the creation of a chatbot using the Rasa platform, specifically aimed at supporting the admission processes of universities in Vietnam, with Hung Yen University of Technology and Education being mentioned as a context for this development [57]. These initiatives, while perhaps not yet representative of widespread adoption, signify an initial but significant step towards leveraging AI to improve efficiency and communication within university admissions in Vietnam.

The Vietnamese government's policies and national strategies play a crucial role in fostering the adoption of AI in education. The national strategy on AI research, development, and application explicitly aims to establish AI as a key technological sector within Vietnam by the year 2030 [55]. This strategic focus provides a clear direction and impetus for universities to explore and invest in AI technologies across their operations, including admissions. Furthermore, the overarching National Digital Transformation Program, with its objective of thoroughly applying digital technologies in management, teaching, and learning within higher education, creates a supportive framework for the integration of AI in areas like student recruitment and enrollment [53]. The government's emphasis on prioritizing frontier technologies such as AI in its broader strategies for education and technological advancement further reinforces the potential for AI to become an increasingly important component of Vietnamese higher education, including its admissions processes [52].

Several factors are likely to drive the future adoption of AI in Vietnamese university admissions. The pressing need to address the significant talent shortage in the AI and broader technology sectors within Vietnam is a primary motivator for universities to develop AI-related academic programs [55]. This focus on building a skilled AI workforce may naturally lead to the application of AI within university operations, including admissions. The strong national emphasis on digital

transformation and technological advancement provides a powerful top-down impetus for universities to embrace innovative technologies like AI. Additionally, as application volumes at Vietnamese universities continue to grow, the potential of AI to help streamline administrative processes and improve the overall efficiency of admissions could become increasingly attractive. However, several barriers may also hinder the widespread adoption of AI in this context. Vietnam currently faces a shortage of experienced AI professionals, which could limit the capacity of universities to develop and implement sophisticated AI tools for admissions [55]. Infrastructural limitations within some Vietnamese universities and the substantial financial investments required for technology adoption could also pose significant challenges [50]. Moreover, addressing concerns related to data privacy, security, and the ethical implications of using AI in the specific cultural and legal context of Vietnam will be crucial. Finally, a potential resistance to change within some traditional educational institutions could also slow down the pace of AI adoption in university admissions [58].

4.2.4. Broader AI Integration in Vietnamese Higher Education

Beyond the nascent adoption of AI in university admissions, there is evidence of a broader integration of AI technologies across various aspects of Vietnamese higher education. University lecturers in Vietnam are increasingly applying AI in their teaching methodologies. This includes leveraging AI tools to aid in curriculum development, personalize learning paths for individual students based on their needs and progress, utilizing virtual teaching assistants to provide students with immediate support and answer their queries, and analyzing learning data to gain insights into student performance and identify areas where students may be struggling [60]. Furthermore, AI is being employed to track students' learning progress in real-time, automatically adjusting the difficulty and pace of learning materials to suit individual needs. AI-powered systems are also being used to evaluate the effectiveness of learning through the analysis of learning data and even to automate the grading process, providing personalized feedback to students [55]. The broader digital transformation efforts within Vietnamese higher education also involve the development and implementation of sophisticated online teaching and learning platforms. These platforms often incorporate advanced features designed to support personalized learning experiences, facilitate computer-based and online examinations, and seamlessly connect with existing school management systems and Internet of Things (IoT) networks, aiming to establish a comprehensive digital transformation ecosystem within educational institutions [63].

In response to the growing importance of AI in the global economy, several Vietnamese universities have taken proactive steps to develop dedicated AI-related academic programs. This initiative is primarily driven by the recognized need to address the increasing demand for skilled technology professionals within the country [55]. Notably, four economics-focused universities in Ho Chi Minh City have launched AI programs, including the Ho Chi Minh City University of Banking (HUB), the HCMC University of Economics and Law (UEL), the HCMC University of Economics (UEH), and the National Economics University (NEU) [55]. These programs are designed to equip students with foundational AI knowledge, essential programming skills, expertise in data analysis, and practical experience in training AI models. Furthermore, many of these programs also aim to provide students with insights into the application of AI within specific domains such as business, finance, and banking [55]. Fulbright University Vietnam has also made a significant commitment to advancing AI research and education by receiving a substantial grant from Google. This funding will support the integration of AI into all of Fulbright's academic programs, the development of specialized major and minor undergraduate programs in AI, and the

creation of general education courses designed to equip all students with the necessary skills to effectively utilize AI applications in their future careers [65]. These developments highlight a growing commitment within Vietnamese higher education to not only adopt AI in administrative and pedagogical functions but also to actively contribute to the development of AI talent within the nation.

4.2.5. Market Analysis of AI in Higher Education Admissions

The global market for AI in education is currently experiencing substantial growth, indicating a strong and increasing demand for AI-powered solutions across the entire education sector. Projections from various market research reports highlight the significant potential of this market. One report estimates that the global AI in education market is expected to reach a staggering USD 25.7 billion by the year 2033, demonstrating a robust compound annual growth rate (CAGR) of 32% from 2024 to 2033 [67]. Another analysis places the market size at USD 5.88 billion in 2024, with an anticipated growth to USD 32.27 billion by 2030, reflecting a similarly impressive CAGR of 31.2% [62]. Furthermore, it is projected that the market for education-related AI will reach USD 6 billion by as early as 2025 [69]. While these figures represent the broader AI in education market, encompassing various applications from personalized learning to administrative tools, they strongly suggest a significant market opportunity for AI solutions specifically tailored for university admissions as well. As universities worldwide increasingly recognize the benefits of AI in streamlining their processes and enhancing their recruitment efforts, the demand for AI-powered admissions tools is expected to grow in tandem with the overall market.

The burgeoning market for AI in higher education admissions is supported by a range of established technology companies and specialized EdTech providers who are actively developing and offering relevant solutions. Major players in the broader AI in higher education market include prominent technology giants such as Google, IBM, Microsoft, Pearson, and Amazon Web Services (AWS) [68]. These companies offer a wide array of AI-powered tools and platforms that can be adapted for various educational applications, including admissions. Specifically within the realm of university admissions, several companies are providing tailored AI solutions. Acuity Insights, for example, offers a suite of admissions assessment, program management, and analytics solutions that leverage AI to improve efficiency and maintain holistic review standards [43]. Element451 specializes in providing AI-powered Customer Relationship Management (CRM) and chatbot solutions specifically designed for the needs of college admissions offices [46]. Liaison International offers sophisticated AI-enhanced application tracking systems and predictive analytics capabilities aimed at optimizing admissions and enrollment processes [48]. These examples illustrate a maturing market landscape where universities have access to an increasing number of specialized AI tools designed to address the unique challenges and opportunities within university admissions.

4.2.6. Ethical and Policy Implications for AI in University Admissions

The increasing integration of AI into university admissions processes brings forth a complex set of ethical and policy considerations that demand careful scrutiny. One of the most significant ethical concerns revolves around the potential for bias in AI algorithms. These algorithms are typically trained on historical data, and if this data reflects existing societal inequalities or biases, the AI systems may inadvertently perpetuate or even amplify these biases in their evaluations of applicants [45]. Research has even indicated that AI-generated college admissions essays tend to exhibit characteristics associated with male students from more privileged socioeconomic

backgrounds [71]. Therefore, ensuring fairness and equity in AI-driven admissions requires rigorous testing and validation to identify and mitigate any inherent biases within the algorithms.

Another critical ethical consideration pertains to data privacy and security. University admissions processes involve the collection and handling of vast amounts of sensitive personal information from applicants. As AI systems become more involved in these processes, it is paramount to ensure that robust data privacy and security measures are in place to protect this information from unauthorized access or misuse [45]. Transparency in how AI is being used in admissions decisions is also crucial for maintaining fairness and building trust among prospective students and the broader public [47].

4.3. Leveraging AI for Predictive Admissions Analytics: Global and Vietnam Market Trends

4.3.1. Executive Summary

The integration of artificial intelligence (AI) into higher education is rapidly transforming various aspects of institutional operations, with predictive admissions analytics emerging as a key application. This report examines the market trends associated with leveraging AI for predictive admissions analytics, providing a quantitative overview of its adoption both globally and within Vietnam. Findings indicate a significant global surge in the adoption of AI in university admissions, driven by the need for enhanced efficiency, reduced bias, and improved enrollment outcomes. While Vietnam currently exhibits a more nascent adoption rate compared to the global average, increasing government support and a growing focus on digital transformation within the education sector signal a promising trajectory for future integration. The global market for AI in education is experiencing substantial growth, and the segment focused on AI-powered admissions solutions is poised for significant expansion. This report identifies key solution providers in both the global and Vietnamese markets, concluding with an outlook on the continued growth and potential recommendations for stakeholders.

4.3.2. Global Adoption of AI in University Admissions

The landscape of university admissions is undergoing a significant evolution, with AI technologies increasingly being incorporated into various stages of the process. Evidence suggests a strong global trend towards the adoption of AI in higher education admissions offices. According to a 2023 survey conducted by Intelligent, a notable 50% of higher education admissions offices worldwide reported utilizing AI in their application review processes [74]. This figure underscores the growing recognition of AI's potential to streamline and enhance traditional admissions procedures. Projections indicate an even more widespread integration of AI in the near future, with estimates suggesting that as many as 80% of higher education institutions will incorporate AI into their admissions process by the end of 2024 [75]. This anticipated surge reflects a growing confidence in the capabilities and benefits offered by AI-driven solutions within the academic community. Further supporting this trend, another report indicates that 48% of university admission processes globally have already integrated AI to achieve more efficient decision-making

[78]. This signifies that nearly half of the world's universities are already leveraging AI to optimize their admissions workflows.

While the overall adoption of AI in admissions is substantial, the specific application of predictive AI for these purposes offers a more nuanced perspective. A survey conducted by Liaison, as referenced in available material, indicates that approximately 40% of administrators currently utilize predictive AI for admissions and enrollment-related tasks [79]. This suggests that while a significant portion of institutions are employing AI in some capacity within admissions, the adoption of sophisticated predictive models might be slightly lower. This difference could stem from the complexity associated with implementing and managing predictive analytics, the necessity of having access to robust historical data for accurate model training, and potential concerns surrounding algorithmic bias and the overall accuracy of predictions. It is plausible that institutions are initially adopting AI for more straightforward tasks, such as application sorting and initial screening, before fully embracing the more intricate predictive capabilities.

Several compelling factors are driving the increasing adoption of AI in university admissions globally. One of the primary drivers is the potential for significant efficiency gains. AI technologies can process vast quantities of applications at a much faster rate than human reviewers, thereby saving considerable time and resources for admissions officers [74]. Given that the average time spent reviewing a single application can be as short as six minutes, the need for tools that can quickly analyze and categorize applications becomes evident [74]. Furthermore, AI offers the prospect of bias reduction in the admissions process. By employing algorithms that analyze data objectively, AI can help to mitigate the unintentional biases that human reviewers might inadvertently introduce based on their subjective opinions [74]. This can lead to a more equitable and fair evaluation of applicants from diverse backgrounds. Another key driver is AI's ability to identify key traits in prospective students that are indicative of future success in higher education. Through keyword searches and sophisticated analysis of application materials, AI can pinpoint personal qualities such as leadership skills, teamwork abilities, perseverance, and intrinsic motivation, which are crucial for navigating the challenges of university life [74].

Moreover, optimizing enrollment strategies is a significant motivator for adopting predictive analytics. These tools enable institutions to identify the most effective recruitment approaches for different segments of prospective students, ultimately leading to a higher enrollment yield [79]. A notable example of this effectiveness comes from a private, mid-sized university that partnered with an AI company. By utilizing predictive and prescriptive AI to target a specific subset of applicants deemed likely to respond to phone calls from faculty, the university experienced a preliminary 15% increase in its enrollment yield [79]. This tangible result serves as a powerful testament to the potential of AI to positively impact enrollment numbers. Strengthening retention rates is another crucial benefit driving AI adoption. By analyzing various data points, AI can help identify incoming students who might face challenges in adjusting to college life, allowing institutions to proactively offer targeted support and resources to improve their chances of success and reduce attrition [79]. Finally, AI empowers institutions with data-driven decision making

capabilities. By extracting actionable insights from the vast amounts of data collected during the admissions process, universities can make more informed decisions regarding financial aid allocation and overall enrollment management, leading to more strategic and effective outcomes [79].

The implementation of AI in university admissions has yielded several notable benefits for institutions worldwide. These include the aforementioned increased enrollment yield [79], as demonstrated by the university that saw a 15% improvement. Furthermore, universities are reporting improved student retention rates through the use of predictive analytics to identify and support at-risk students [79]. The enhanced efficiency in application review is another significant advantage, allowing admissions staff to process a larger volume of applications in a shorter timeframe and focus on more complex aspects of the evaluation [81]. AI also enables the more accurate identification of at-risk students early in their academic journey, facilitating timely interventions and support [81]. Beyond admissions, predictive analytics can contribute to the better allocation of resources within the institution by forecasting enrollment trends and identifying areas of need [84]. These reported benefits collectively underscore the transformative potential of AI in reshaping university admissions practices and contributing to overall institutional success.

4.3.3. AI in University Admissions in Vietnam

While the global trend indicates a significant uptake of AI in university admissions, the adoption rate within Vietnamese higher education admissions presents a slightly different picture. Research suggests that AI adoption in Vietnam is still in the initial stages when compared to the global average [85]. A 2021 report focusing on Southeast Asia indicated that approximately 49% of respondents in Vietnam were still in the pilot phase of AI initiatives, rather than having achieved full-scale implementation across various sectors [86]. This suggests that while there is an awareness and exploration of AI's potential, widespread adoption is yet to fully materialize.

However, it is important to note that the utilization of AI in higher education within Vietnam is gaining momentum and becoming increasingly prevalent [87]. A 2024 study, based on a survey of 275 accounting students in Ho Chi Minh City, revealed a positive correlation between several factors, including perceived usefulness, ease of use, AI literacy, social influence, facilitating conditions, and technology readiness, and the adoption of AI among these students [89]. This finding is significant as it indicates a growing acceptance and a positive disposition towards AI among the future workforce, which could potentially drive further adoption within university administrative functions, including admissions. The initial focus on accounting students might reflect an early recognition of AI's value in fields requiring substantial data analysis and process optimization.

Specific data regarding the exact number of Vietnamese universities currently using AI for admissions is not explicitly available in the provided material. However, there is evidence of AI being employed in Vietnamese higher education for various purposes, such as automating administrative tasks and managing enrollment processes [82]. For instance, the Ho Chi Minh City

Department of Education and Training has piloted the integration of GPT Chat, an AI-powered chatbot, to address enrollment inquiries from parents and provide automated guidance. This initiative, while at the pre-university level, demonstrates an initial step towards leveraging AI to enhance enrollment-related communication and efficiency [91]. Furthermore, four economics-focused universities in Ho Chi Minh City have recently launched dedicated AI programs [92]. These institutions, including the Ho Chi Minh City University of Economics and Law (UEL), the Ho Chi Minh City University of Economics (UEH), the National Economics University (NEU), and the Ho Chi Minh City University of Banking (HUB), are strategically investing in AI education, which could eventually lead to the application of AI within their own administrative operations, including admissions. Additionally, a collaboration between Hallym University in South Korea and Dalat University in Vietnam for an AI-based K-University project includes joint research and development of AI education solutions, hinting at potential future applications in areas like university admissions [93]. The Vietnam Aviation Academy has also organized courses centered on the application of AI in both teaching and research, signifying a growing awareness and the development of AI capacity within Vietnamese higher education institutions [94]. While direct evidence of widespread AI usage specifically for university admissions in Vietnam is limited in the provided snippets, these developments suggest that adoption in this area is likely to increase as the necessary infrastructure and expertise are further cultivated.

The Vietnamese government is actively promoting the adoption of AI and digital technologies across various sectors, including education. Recognizing the importance of AI for national development, the government unveiled the 'National Strategy on R&D and Application of Artificial Intelligence' in 2021 [95]. This strategic initiative aims to position Vietnam as a leading AI innovation hub within the ASEAN region by the year 2030 [96]. While Vietnam's investment in AI between 2015 and 2019 was relatively low, totaling less than a dollar per capita, there was a significant surge in 2021, with total investments reaching \$77.5 billion [95]. This substantial increase underscores the government's commitment to fostering AI development. Furthermore, the 'National Digital Transformation Program until 2025 orientation to 2030' specifically prioritizes digital transformation within the education sector. This program includes objectives such as providing schools and students in rural areas with access to the latest digital technologies and developing digital literacy and competencies for both teachers and students [97]. Government initiatives also aim to expand Vietnam's information and communication technology (ICT) industry, targeting an annual growth rate of 10% to 15% [99]. This strong governmental support and investment in both AI and digital transformation create a conducive environment for higher education institutions to explore and implement AI-powered solutions, including those for university admissions.

Despite the growing interest and government backing, several challenges and opportunities exist for the adoption of AI in Vietnamese university admissions. One of the primary challenges is that AI adoption in Vietnam is still in its early stages compared to the global average [85]. This means that the infrastructure, expertise, and established best practices might not be as readily available as

in more advanced markets. Another significant challenge is the shortage of AI experts within Vietnam [90]. A limited pool of skilled professionals could hinder the development and implementation of sophisticated AI solutions for admissions. Furthermore, some Vietnamese higher education institutions may face limited access to advanced AI technologies and possess insufficient technological infrastructure to effectively deploy and utilize these tools [90]. Concerns regarding data privacy and security also present a challenge, as the collection and analysis of student data through AI systems require robust safeguards and ethical considerations [83]. Additionally, there might be resistance to change from educators and administrators who are more accustomed to traditional admissions methods and may be hesitant to embrace new technologies [83]. Finally, the adoption of learning analytics and assessment tools, which often form the foundation for predictive AI applications, is still in its infancy within Vietnam [99].

Conversely, several significant opportunities can facilitate the increased adoption of AI in Vietnamese university admissions. The strong government support and investment in AI and digital transformation provide a crucial foundation for growth in this area [95]. The increasing popularity and acceptance of AI among university students suggest a receptive user base for AI-powered administrative tools [87]. AI offers a significant opportunity to streamline administrative tasks and improve overall efficiency within the admissions process, freeing up staff to focus on more strategic initiatives [82]. By leveraging AI, Vietnamese universities have the opportunity to enhance the quality of their educational offerings and better align them with the evolving demands of society and the global economy [87]. Collaborations with international universities for AI education and research can provide valuable knowledge transfer and accelerate the development of local expertise [93]. These opportunities, coupled with the growing global trend, suggest a positive outlook for the future adoption of AI in university admissions within Vietnam.

4.3.4. Market Size and Growth

The global market for AI in education is experiencing a period of substantial growth, reflecting the increasing recognition of AI's potential to transform learning and administrative processes. According to one report, the global AI in education market was valued at £2.5 billion in 2022 and is projected to reach \$6 billion by 2025 [103]. Another estimate places the global market size at USD 5.88 billion in 2024, with projections indicating a rise to USD 8.30 billion in 2025 and a remarkable USD 32.27 billion by 2030, representing a compound annual growth rate (CAGR) of 31.2% [104]. Mordor Intelligence offers an even more optimistic outlook, estimating the market size at USD 6.90 billion in 2025 and forecasting a surge to USD 41.01 billion by 2030, with an impressive CAGR of 42.83% [105]. MarketsandMarkets™ anticipates a growth from USD 2.21 billion in 2024 to USD 5.82 billion by 2030, at a CAGR of 17.5% [106]. Finally, PS Market Research estimates the global market size at USD 5,440.5 million in 2024, expecting it to reach USD 55,444.6 million by 2030 with a robust CAGR of 47.2% [107].

These varying estimates, summarized in the table below, highlight the significant investment and anticipated expansion within the AI in education sector globally. The differences in projections likely stem from variations in market segmentation, research methodologies, and the scope of the

included technologies and applications. However, the overarching trend across all reports clearly indicates a strong upward trajectory, underscoring the widespread belief in the transformative power of AI within the educational landscape.

While specific market size data dedicated solely to AI-powered admissions solutions is not explicitly provided in the research material, the substantial growth of the broader AI in education market and the increasing adoption of AI within admissions processes strongly suggest a significant and expanding market segment. Notably, the institutional segment is identified as a leading application area within the AI in education market, with a focus on identifying trends and predicting enrollment patterns [106]. This indicates that a considerable portion of the market is driven by solutions directly related to admissions and enrollment management. Therefore, it is reasonable to infer that the market for AI-powered admissions solutions represents a significant and growing subset of the overall AI in education market, fueled by the clear advantages these technologies offer to higher education institutions in terms of efficiency, effectiveness, and strategic decision-making.

Turning to the Vietnamese market, the potential for AI in education, including admissions analytics, is also significant. The Vietnam Artificial Intelligence Market was valued at USD 470 million in 2022 and is projected to grow to USD 1520 million by 2030, exhibiting a CAGR of 15.8% for the forecast period between 2023 and 2030 [108]. Furthermore, the higher education market in Vietnam is estimated to experience substantial growth, increasing by USD 616.5 million from 2025 to 2029, with a CAGR of 15.6%. This growth is partly attributed to the market evolution powered by AI technologies [99]. While the CAGR for the overall Vietnamese AI market appears lower than the global AI in education market's projected growth, the significant expansion within the higher education sector, influenced by AI, highlights the promising market potential within Vietnam. This suggests that as adoption rates increase and the local AI ecosystem matures, the market for AI-powered admissions solutions within Vietnam is likely to witness considerable expansion in the coming years.

4.3.5. Key Solution Providers

The global market for AI in education and specifically within university admissions is supported by a range of technology companies, both large and specialized. Several major global players offer comprehensive AI solutions that can be applied to various aspects of higher education, including admissions. These include prominent technology giants such as Amazon Web Services, IBM Corporation, Microsoft Corporation, and Google LLC [106]. These companies provide the underlying infrastructure and AI platforms that enable the development and deployment of predictive analytics and other AI-powered tools. Ellucian, a leading provider of technology solutions for higher education, also plays a significant role in this market [109]. Furthermore, specialized EdTech companies like Liaison offer surveys and potentially solutions related to AI adoption in admissions [79]. Ocelot provides AI-powered text messaging and chatbots that are utilized by nearly 500 universities, often for addressing admissions-related inquiries and streamlining communication with prospective students [112]. Technavio's reports on the higher

education market in Vietnam identify key companies operating within that space, which could include potential AI solution providers, although specific AI offerings for admissions are not detailed [99].

Within Vietnam, a growing ecosystem of AI development companies is emerging, some of which are likely to offer or are developing solutions relevant to the education sector, including predictive analytics. The top Vietnamese AI development companies identified

V. Market Survey

5.1. Survey Overviews

The comprehensive survey, encompassing over 200 respondents including high school students, current university students, parents, and admissions officers, undoubtedly indicates a strong perspective of society towards the imperative of higher education. Additionally, an overwhelming (93%) of surveyed parents expressed a desire for their children to pursue university studies. This aligns with the objectives of (77.1%) of high-school student respondents, who reported having plans to attend university. Furthermore, the data highlights the critical role of parental involvement in the university selection process, with (91.1%) of parents indicating active participation. This high level of engagement underscores the perceived value of higher education as a key determinant of future success, and the significant investment that families dedicate to this process.

While both parents and students place high importance on university education, their specific priorities exhibit notable divergence. Parents prioritize established indicators of institutional quality, including reputation (68.9%), quality of education (80%), and, most significantly, post-graduation job opportunities (82.2%). Interestingly, tuition fees appear to be a secondary concern relative to these long-term outcomes. In contrast, high school students, while also highly prioritizing future employment prospects (77.1%), place greater immediate emphasis on the specific field of study and the quality of teaching. This difference likely reflects the parents' long-term perspective versus the students' more immediate focus on the learning experience and career alignment.

Moreover, a critical finding of the survey reveals a significant information gap and dissatisfaction within the university admissions process. Over (60%) of parents reported feeling overwhelmed by the sheer volume of admissions-related information. (66.7%) of the student quantity express a lack of sufficient information about schools and academic programs. This deficiency is further compounded by the strikingly low percentage (only 4.1%) of students who found it easy to locate necessary admissions information. The difficulty in verifying online information, experienced by (40%) of students, adds another layer of complexity and potential for misinformation. These findings suggest a significant systemic inefficiency and a pressing need for improved information accessibility and clarity.

In addition, the necessity for an AI-powered admissions consulting system, evidenced by over (90%) of current university students indicating advantages, highlights a demand for

personalized, efficient, and reliable guidance. The survey also reflects the concern of current university students involving the job opportunity, the programs, and school facilities.

5.2. Survey Results

5.2.1. Parents

Con có định hướng học đại học không?

45 responses

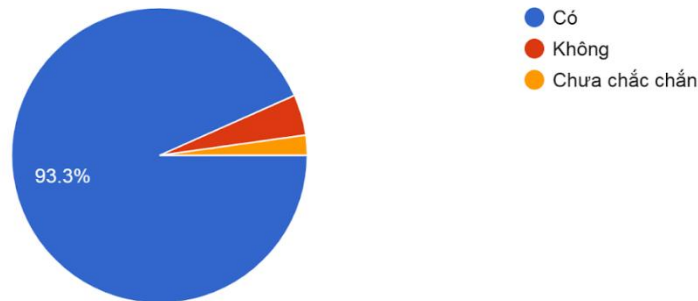


Figure 1: The proportion of student want to go to university

Ông/bà có tham gia vào quá trình hỗ trợ con em mình lựa chọn trường đại học không?

45 responses

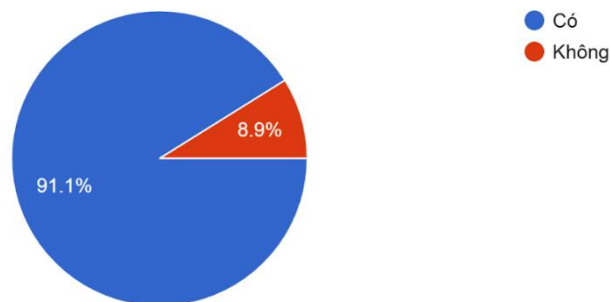


Figure 2: The proportion of parent supporting their child in selecting school

Figures 1 and 2 indicate a strong parental interest in higher education, Specifically, with (93.3%) expressing a desire for their children to attend university. Furthermore, parental involvement in the university selection process is notably high, at (91.1%). These data suggest a positive correlation between the development of society and parental engagement in their children's educational pathways.

(Nếu có) Vai trò của ông/bà là gì? (Có thể chọn nhiều đáp án)

45 responses

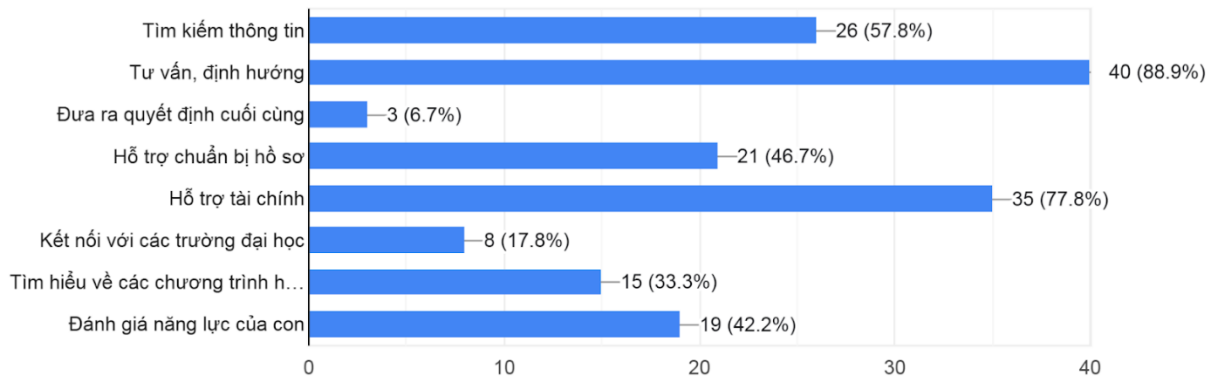


Figure 3: The role of parents in helping their children choose schools

Ông/bà tìm kiếm thông tin tuyển sinh từ những nguồn nào? (Chọn tối đa 5 nguồn)

45 responses

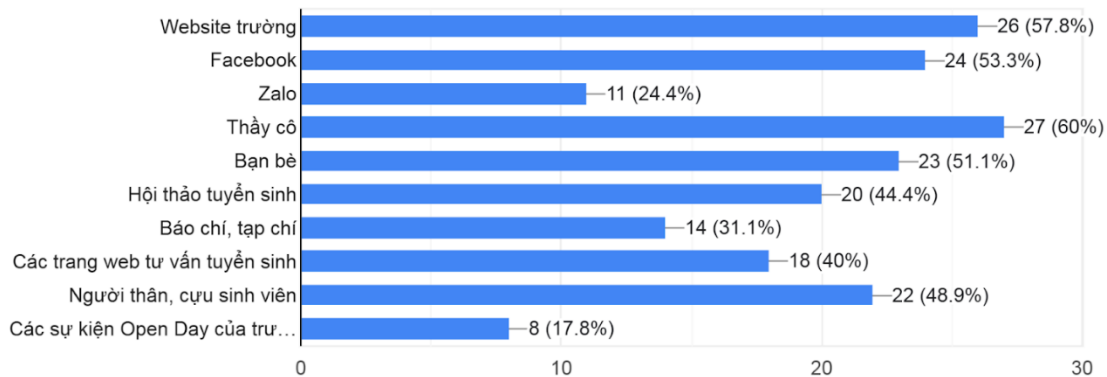


Figure 4: Information sources for parents regarding admissions

As perceived in Figure 3 and Figure 4, the survey data reveal high levels of parental engagement in both information-seeking (57.8%) and the provision of advice and guidance (88.9%) regarding their children's university choices. Parents predominantly rely on school websites (57.8%), Facebook, teachers, and friends for information.

Ông/bà quan tâm đến những yếu tố nào khi lựa chọn trường đại học cho con em mình? (Chọn tối đa 5 yếu tố)

45 responses

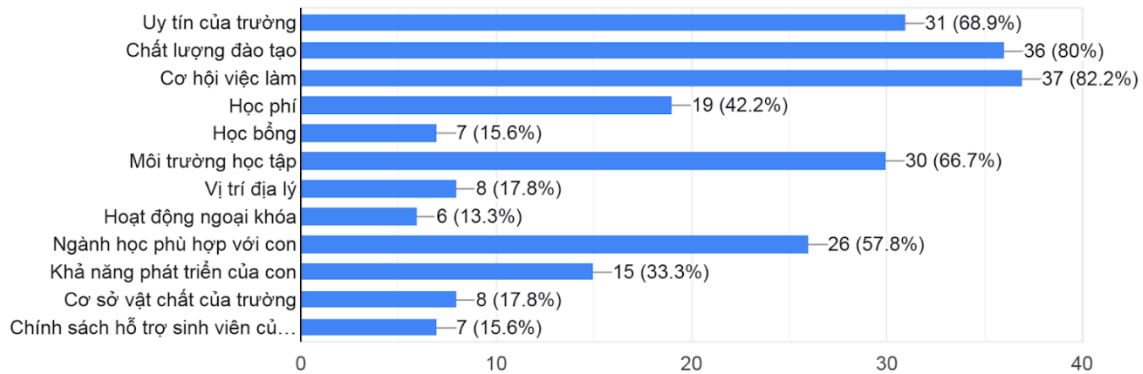


Figure 5: Parents' concerns when choosing a school for their child

Additionally, the priorities of parents in university selection encompass a set of criteria including academic program suitability (57.8%), the learning environment (66.7%), institutional reputation (68.9%), academic training quality (80%), post-graduation employment opportunities (82.2%). Notably, tuition fees were ranked sixth in the parental concerns, indicating the quality of education and future career opportunities are considered more critical.

Ông/bà đã từng gặp phải khó khăn nào trong quá trình tìm kiếm thông tin về các trường đại học và ngành học cho con em mình? (Có thể chọn nhiều đáp án)

45 responses

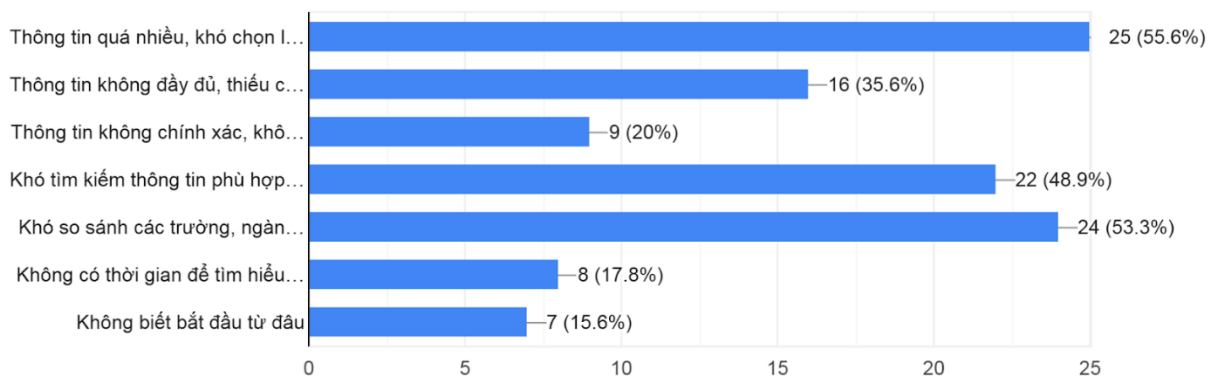


Figure 6: The struggles parents have finding information

Despite their active engagement, Figure 6 and Figure 7 reveal the significant challenges in the university information-gathering process. These challenges include information overload and difficulty in selection (55.6%), incomplete or insufficiently detailed information (35.8%),

irrelevant information (48.9%), and difficulty in comparing and synthesizing information (53.3%). The overwhelming volume of information hinders the identification of accurate and complete resources.

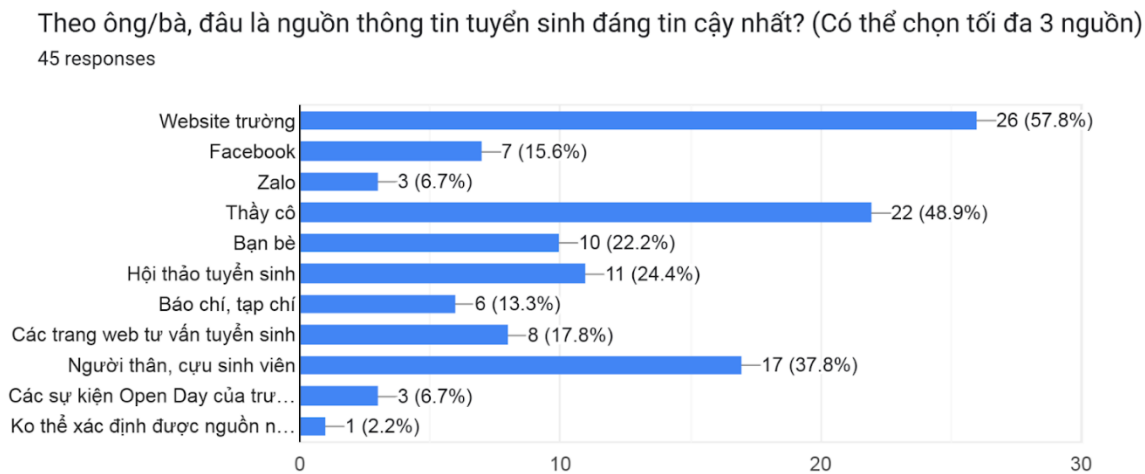


Figure 7: Information sources that parents trust

While parents utilize diverse sources, including Facebook and personal networks, they place greater trust in official channels such as school websites and teachers with the percentages of (57.8% and 48.9%, respectively). These difficulties underscore the complexity of navigating the university selection landscape.

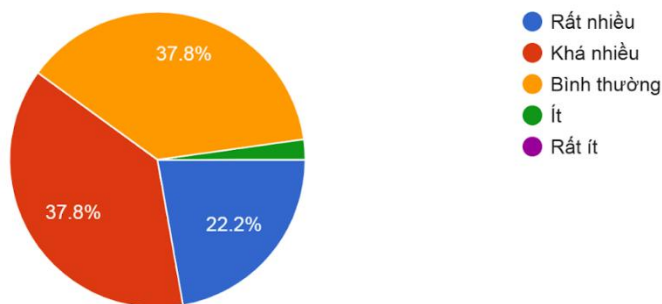
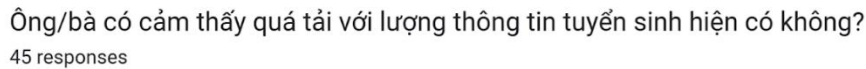


Figure 8: Parents' perception of the amount of admissions information

Ông/bà có mong muốn nhận được sự hỗ trợ nào từ các trường đại học trong việc cung cấp thông tin tuyển sinh? (Có thể chọn nhiều đáp án)

45 responses

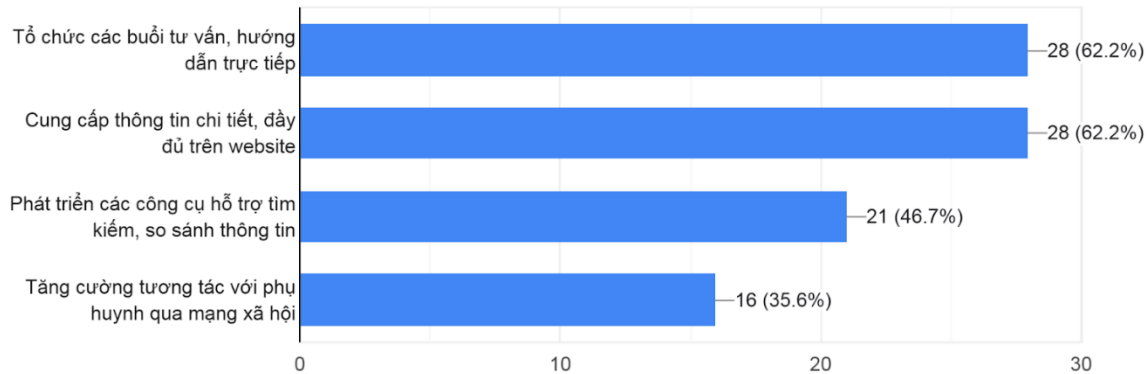


Figure 9: The types of assistance parents seek from universities regarding admissions information

The vast quantity of university admissions information contributes to a sense of overload among parents, with over (60%) expressing a need for support and solutions from universities. Parents indicate a preference for direct counseling and guidance sessions (62.2%), and the provision of comprehensive information (46.7%). This underscores the demand for accurate and detailed information resources. To address these challenges, the survey proposes an integrated AI chatbot for admissions, designed to meet the diverse needs of users.

Ông/bà mong muốn có một công cụ hỗ trợ nào để giúp con em mình lựa chọn trường đại học phù hợp? (Chọn tối đa 3 công cụ)

45 responses

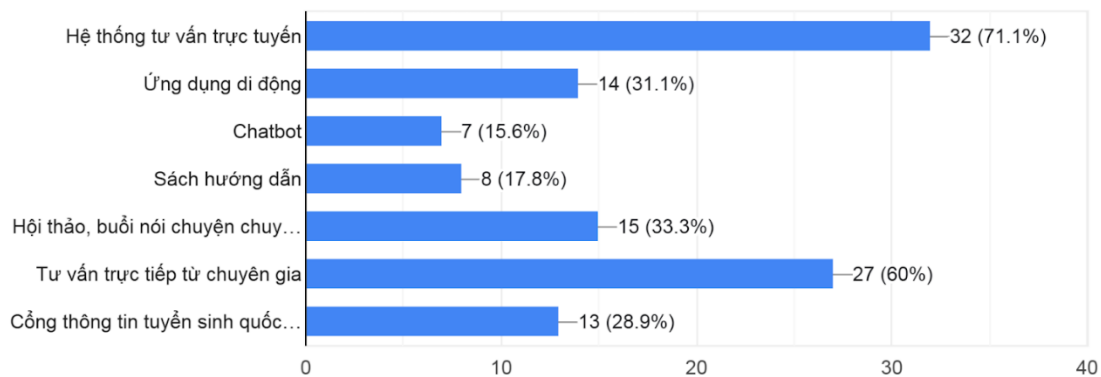


Figure 10: Support tools parents want from universities

Theo ông/bà, một hệ thống tư vấn tuyển sinh cần có những tính năng gì để đảm bảo cung cấp thông tin chính xác và đáng tin cậy? (Chọn tối đa 5 tính năng)

45 responses

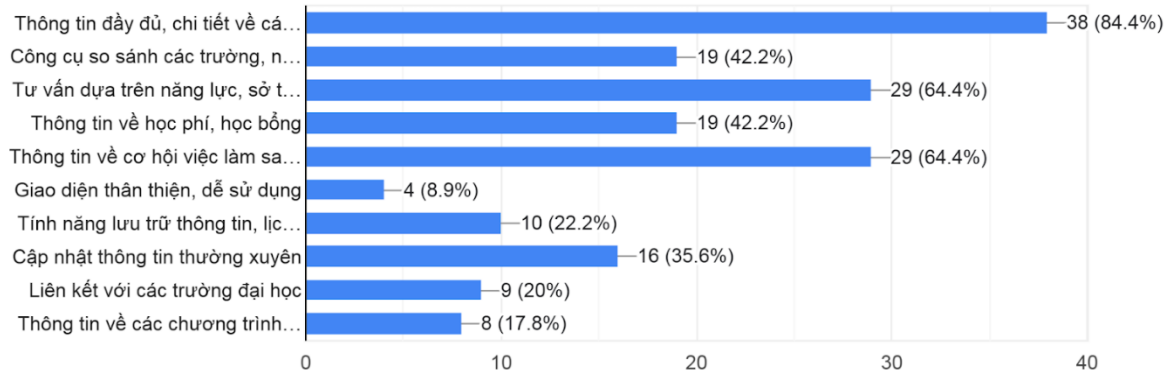


Figure 11: Information delivery features that parent find reliable

Illustrated in Figure 10 and 11, the research findings indicate that a percentage of (84.4%) of parents desire a support tool offering high-quality, accurate, and relevant information from the admissions consulting system or experts. This information should be correlated to their children's individual circumstances and address their specific questions. An AI chatbot, capable of providing accurate, timely, and personalized responses, along with appropriate suggestions, could potentially fulfill this parental need and alleviate concerns regarding the university selection process.

5.2.2. High school students

To provide a multifaceted perspective, the survey also incorporated data from high school students, primarily at Yen Khanh A High School, a leading institution in Ninh Binh province.

Bạn có định hướng cho việc học tại ngôi trường đại học sắp tới chưa?

96 responses

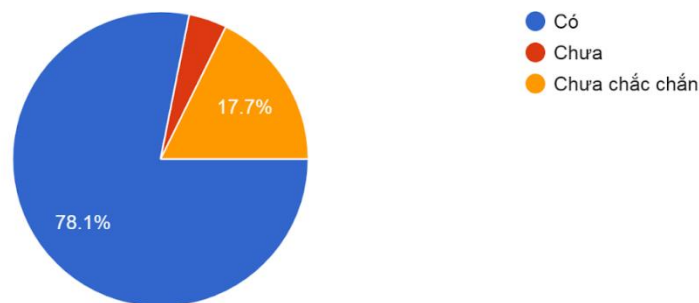


Figure 12: Guidance for high school students on college/university studies

While (78.1%) of surveyed high school students in Figure 12 report having a plan for university, the depth of their understanding regarding their chosen institution, career path, future job prospects, and the rationale behind their decisions remains to be explored. Further investigation is needed to determine the suitability of these plans.

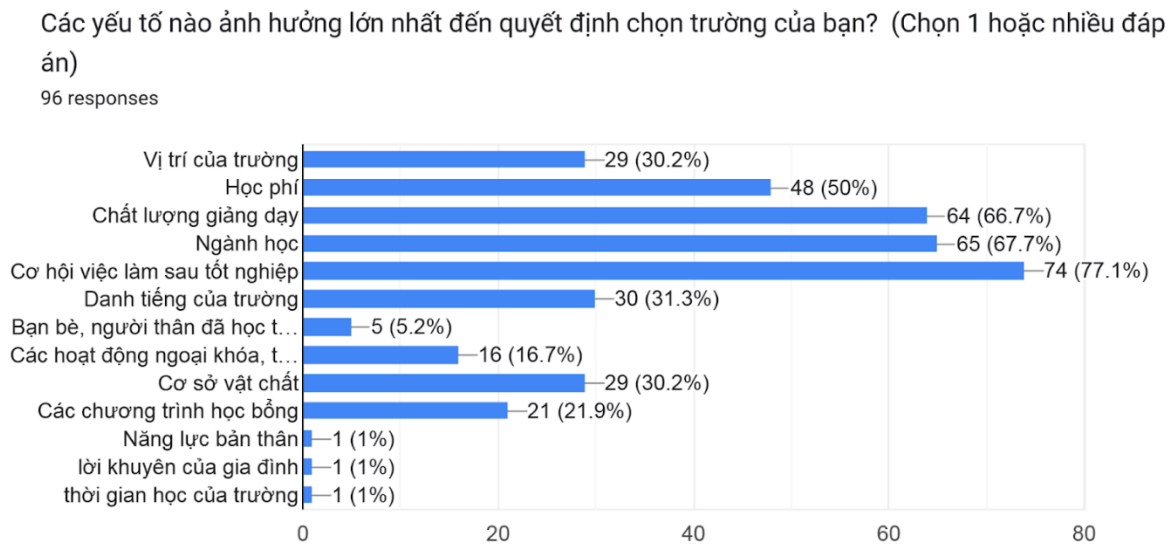


Figure 13: Factors influencing high school students' choice of school/university

Among the various factors affecting university selection for high-school students, future employment opportunities are crucial, evidenced by (77.1%) of respondents in Figure 13. Following this, students consider the field of study and the quality of teaching at the institution.

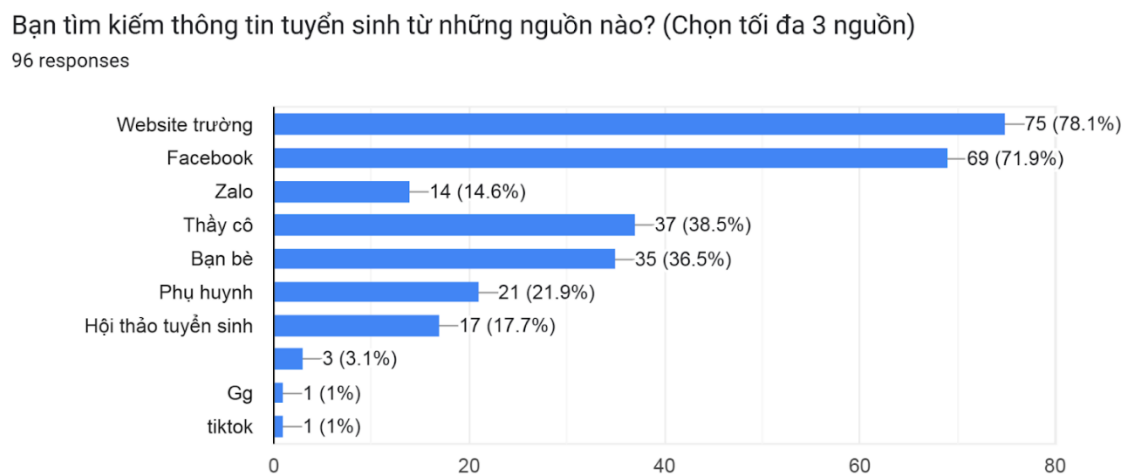


Figure 14: Information sources for high school students

Over (78%) of high-school student population primarily rely on school websites and Facebook for admissions information. However, the sheer volume of online information from

various institutions can make it challenging for students to locate the specific details they require, and the accuracy of information obtained through unverified channels is not always guaranteed.

Bạn đã từng gặp khó khăn gì trong việc tìm kiếm thông tin tuyển sinh chưa?

96 responses

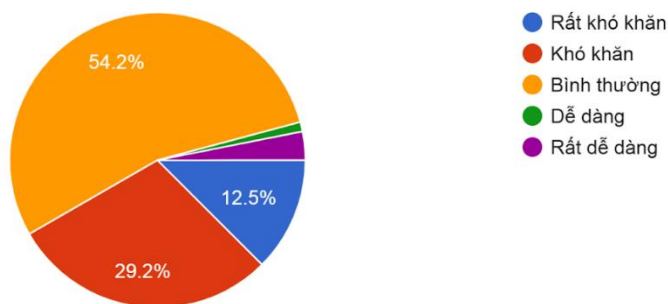


Figure 15: Difficulties high school students face in finding information

The remarkably low percentage of students (4.1%), in the finding of Figure 15, who find accessing university admissions information easy or very easy raises serious concerns, as this process is crucial for shaping their future academic and professional trajectories.

Bạn có cảm thấy mình đã nhận được đủ thông tin về các trường đại học, cao đẳng và ngành học chưa?

96 responses

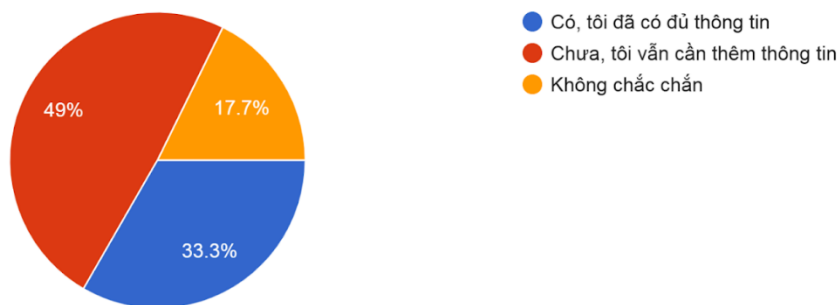


Figure 16: The extent of information received from universities and colleges.

Furthermore, the fact that (66.7%) of students feel inadequately informed about schools and majors underscores a substantial deficiency in the information dissemination process. This indicates a significant barrier to effective university selection.

Bạn muốn nhận thêm những hình thức hỗ trợ nào trong quá trình tuyển sinh? (Chọn 1 hoặc nhiều đáp án)

96 responses

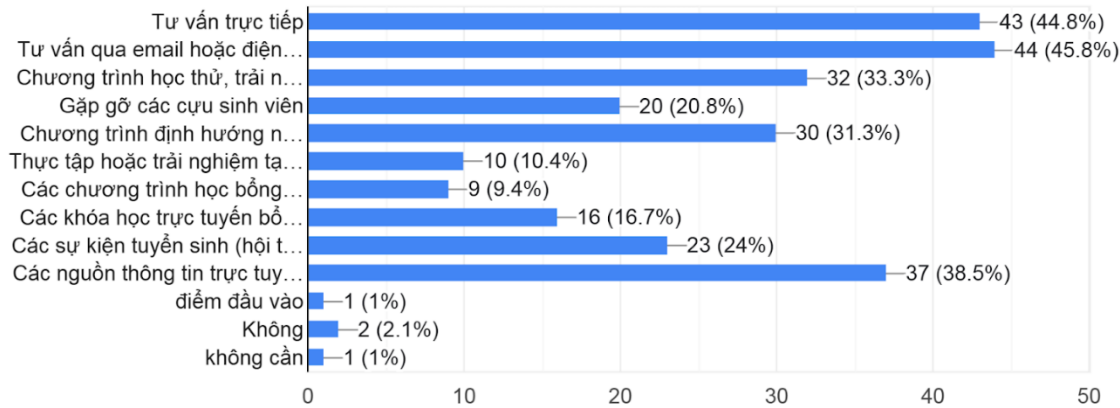


Figure 17: Admissions formats that are necessitated for high-school students

The Figure 17 reveals diverse student preferences for enrollment support mechanisms including direct consultation (44.8%), email and phone consultation (45.8%), and online resources (38.5%). A crucial element across these preferences is the demand for verified and direct sources of information. Therefore, an AI chatbot, designed to provide accurate and immediate responses at any time and location, is proposed as a means of fulfilling these expectations.

5.2.3. Undergraduate students

Recognizing that current university students possess firsthand experience with the former admissions process, the survey team prioritized their insights to gather relevant evaluations and identify desired improvements. To achieve a broader representation of student perspectives, the survey was administered across a range of universities in the Northern region.

Những thông tin nào bạn đã từng tìm kiếm trước khi đưa ra quyết định vào trường hiện tại?

60 responses

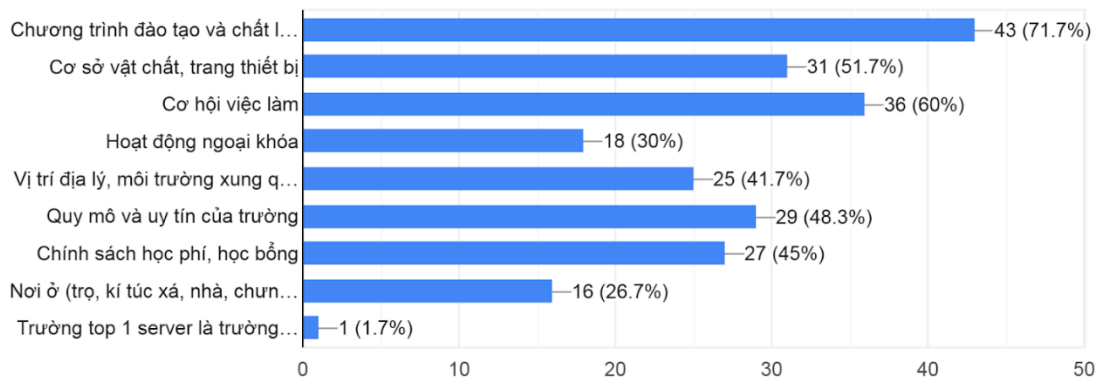


Figure 18: Information students sought before making their decision

Sau khi tìm hiểu những thông tin đó, điều gì khiến bạn thấy ổn thỏa để quyết định theo học trường hiện tại? (Chọn tối đa 5 yếu tố)

60 responses

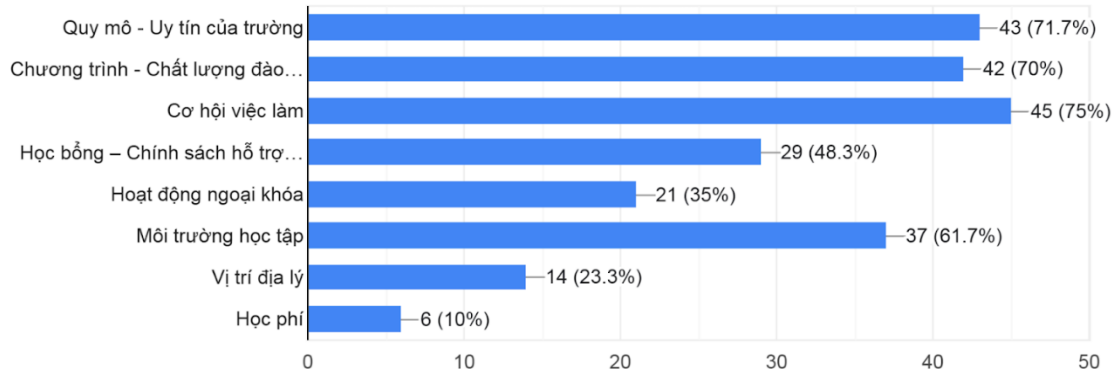


Figure 19: Satisfying factors for deciding to attend their current school

While enrolled university students have diverse concerns encompassing geographical location (23.3%), program quality (70%), institutional reputation (71.7%), and job opportunities (75%), their initial university selection is predominantly driven by job prospects, institutional prestige, academic program offerings, and the overall learning environment. Admissions departments should therefore emphasize these prominent factors in their outreach efforts.

Bạn đã từng tìm kiếm những thông tin của trường khi nhập học từ những nguồn nào? (Chọn tối đa 4 nguồn)

60 responses

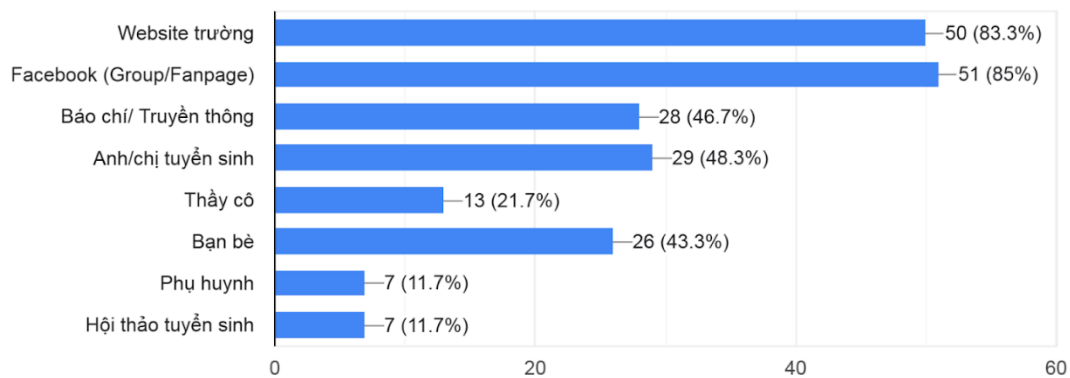


Figure 20: The resources students use to get information

Bạn đã từng thấy khó khăn trong quá trình tìm hiểu thông tin của trường đại học không?

60 responses

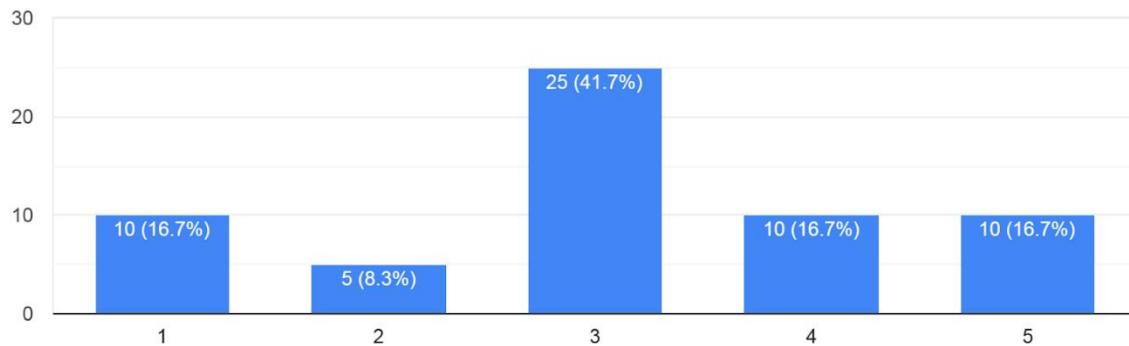


Figure 21: Difficulties students face when searching for admissions information

Figure 20 indicates that the majority of undergraduate students rely on the social media platform such as official university websites (83.3%) and Facebooks (85%) to access admissions information. Nevertheless, Figure 21 demonstrates the challenges that (75%) of enrolled university students encounter in navigating these sites and identifying the specific information they require. This represents a long-standing and pervasive problem across numerous universities.

Bạn đã từng bị "ngợp" bởi quá nhiều nguồn thông tin khác nhau liên quan tới trường không?

60 responses

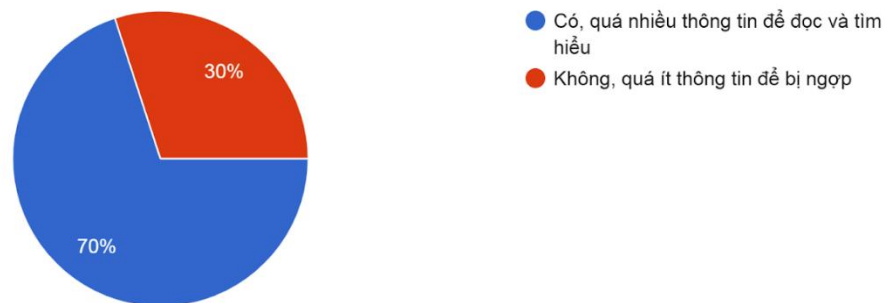


Figure 22: The degree to which students feel overloaded with information

Bạn có từng dành thời gian để tự tổng hợp những nguồn thông tin đó để quyết định theo học trường không?

60 responses

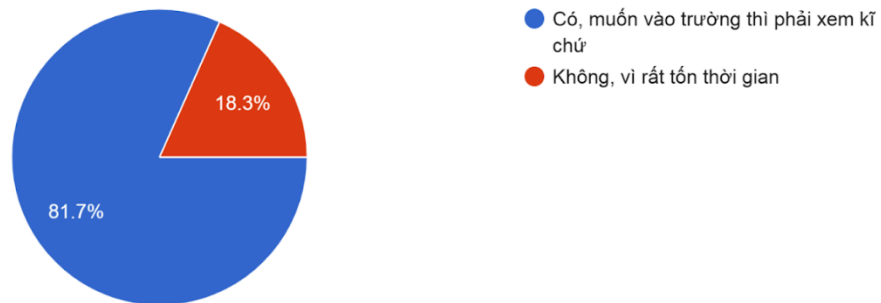


Figure 23: The amount of time students spends searching for admissions information

Moreover, illustrated in the Figure 22 and Figure 23, the overwhelming amount of uncategorized admissions information places a significant burden on over (70%) number of students, requiring them to independently analyze and synthesize the explored information to make informed decisions.

Bạn đã từng gặp khó khăn trong việc xác minh những thông tin đã tìm kiếm trên mạng với những người học/làm việc ở trong trường không?

60 responses

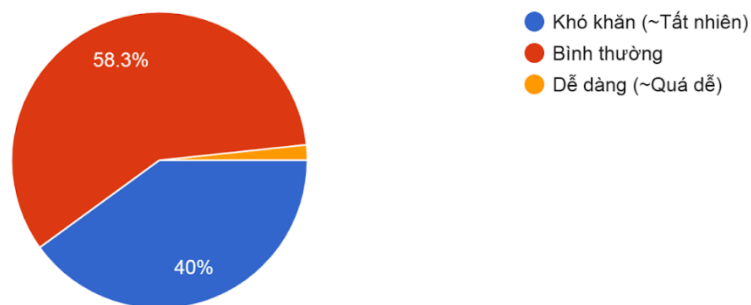


Figure 24: Challenges in verifying accurate information

Nếu lúc đó bạn nhập học mà có 1 hệ thống tư vấn tuyển sinh 4.0, thì bạn nghĩ có thể giải quyết được những vấn đề lúc đó chúng ta gặp không?

60 responses

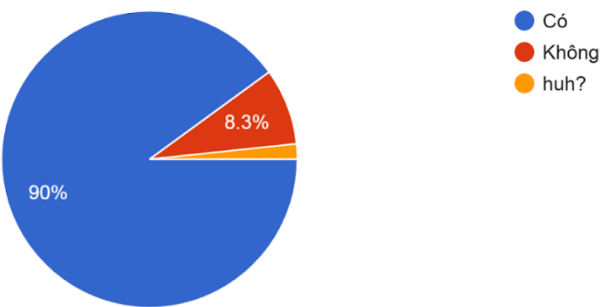


Figure 25: A proposal to use ChatBot AI 4.0 for admissions to address outstanding issues

Beyond the issue of information volume, information verification presents a significant challenge, with (40%) of students struggling to authenticate online information. A substantial majority (90%) believe an AI-powered admissions consulting system like ASSAP could address these challenges. Besides providing accurate and timely information, including study paths, tuition fees, and career prospects, ASSAP could serve as a centralized platform, reducing human resource demands and ensuring consistent, high-quality responses during peak admissions periods.

5.3. Customer Personas

Table 2: Customer Personas for parent

Parents			
General information	Information seeking behavior	Difficulty in finding information	Wants and needs

<p>-Parents whose children are preparing for or are in the process of enrolling in university.</p> <p>-Most of them live in provinces and cities, concentrated in the North and major cities.</p>	<p>-School reputation, training program and job opportunities after graduation Press, school website, acquaintances or consultation from parent groups</p> <p>-Training quality (82.4%)</p> <p>-Job opportunities after graduation (79.4%)</p> <p>-School reputation (76.5%)</p> <p>-Learning environment (73.5%)</p> <p>-Study field suitable for children (58.8%)</p>	<p>-Parents are often busy and find it difficult to spend time researching schools in depth.</p> <p>-There is a lot of conflicting information and reviews from many different sources, making it difficult to make a decision.</p> <p>-Concerns about tuition fees and whether financial aid policies are transparent or not.</p>	<p>-Parents want official, easy-to-understand, and clearly summarized information sources to help support their children's orientation process.</p> <p>-Need real reviews from alumni, statistics on post-graduation employment.</p> <p>-Want consulting seminars, online consulting sessions to help answer questions quickly.</p> <p>-Clear, accessible financial support policies are the biggest concern of parents. 97.1% of parents said their children are planning to go to university, only 2.9% are not sure.</p>

Table 3: Customer Personas for High School Student

High School Students			
General information	Information seeking behavior	Difficulty in finding information	Wants and needs
<p>Classes: Mainly from grade 10 to grade 12.</p> <p>-University orientation: Most have university orientation, some are not sure.</p> <p>-Desire to study abroad: Some intend to study abroad, but not all.</p>	<p>-Sources of information: School website, Facebook, Zalo, teachers, friends, admission seminars, newspapers/magazines, relatives, alumni.</p>	<p>-Too much information, difficult to filter.</p> <p>-Information is not detailed, incomplete.</p> <p>-Difficult to find information suitable for abilities and interests.</p> <p>-Not knowing where to start.</p> <p>-Difficult to compare</p>	<p>-Provide detailed information on the website.</p> <p>-Organize direct consultation and guidance.</p> <p>-Develop search engines and compare information.</p> <p>-Increase interaction with parents via social networks.</p> <p>-Provide information on</p>

-Special talents: Some students have talents in music, painting, sports...		between schools and majors.	tuition fees, scholarships, and job opportunities.

Table 4: Customer Personas for Undergraduate Students

Undergraduate Students			
General information	Information seeking behavior	Difficulty in finding information	Wants and needs
<p>-Students need to learn more about universities before enrolling, Especially in big cities and the Northern region.</p> <p>-Their main concerns are the quality of teaching, the reputation of the school and future career orientation.</p> <p>-They actively seek information to ensure the right choice.</p>	<p>-Students use a variety of sources to find information, with school websites and social media being the most popular.</p> <p>-The curriculum, job opportunities, and school reputation are factors that greatly influence students' decisions.</p> <p>-They are not only interested in theory, but also want to know about the practical aspects of their studies and future career opportunities.</p>	<p>-Information overload is the biggest problem, making it difficult for students to verify the accuracy and synthesize information.</p> <p>-The difference between official information and information from many unverified sources causes confusion, especially for students who do not have a clear direction.</p> <p>-There needs to be a support system to help students access more accurate information more easily.</p>	<p>-Students want a smart admissions consulting system that helps them filter information and make decisions more easily.</p> <p>-Technology plays a key role, with high demand for AI chatbots, school review systems, and live-streamed consulting.</p> <p>-They want more online seminars, official support channels, and university comparison tools to get a more objective view.</p>

VI. Competitor Analysis

6.1 Competitor Introduction

- **TeacherKit** is a popular classroom management app designed to help teachers organize and manage their daily tasks effectively. The app offers features such as student information management, attendance, score tracking, lesson planning, and parent communication. TeacherKit works across multiple platforms (iOS, Android, web), helping teachers save time, increase productivity, and focus more on teaching.
- **ApplyBoard** is an international education technology platform that simplifies the study abroad application process for students, admissions partners, and universities worldwide. It provides a centralized marketplace that connects students with thousands of programs and institutions, and facilitates the application, visa, and related services. ApplyBoard's goal is to make international education more accessible.
- **Unify (formerly Campus Management)**: While primarily known for its comprehensive student information system (SIS), Unify has increasingly incorporated AI-driven features into its platform, including predictive analytics for enrollment management and some chatbot functionality for student engagement. They serve a wide range of institutions, from small colleges to large universities, primarily in North America and Europe, but are expanding globally. Their focus is on providing a complete, integrated platform for all aspects of student lifecycle management.
- **SMAS (School Management System)** is a school management system developed by the Military Industry - Telecommunications Group (Viettel), widely used in Vietnam. This software provides comprehensive tools to manage student and teacher information, scores, report cards, timetables, and other school activities. SMAS helps schools digitize management processes, enhance interaction between schools, parents and students, and support educational management at all levels.

6.2. 4P Strategy Comparison

Table 5: 4P analysis on competitors in the market

4P Element	TeacherKit	ApplyBoard	Unify	SMAS	ASSAP
Product	Mobile-first classroom management; Core features: student info,	Platform connecting int'l students with universities;	Comprehensive SIS with integrated AI features for admissions	Comprehensive school management system (web-based);	AI-powered admissions platform; Chatbot, personalized recommendations,

	attendance, grading, lesson planning, parent communication	Program search & comparison, application support		Modules for student/teacher info, scheduling, grading, etc.	automated application processing, analytics dashboard
Price	Freemium model (free & paid versions); School/District licenses with custom pricing	Free for students; Charges universities a commission per recruited student; Premium services for partners	Likely a modular pricing model based on institution size and features used (e.g., separate fees for predictive analytics, chatbot module, etc.)	Likely a combination of license fees, module-based pricing, customization fees, and support fees; Pricing varies by school size and modules	Tiered subscription model for students (Pay-as-you-go, Premium, Ultra-Premium); Product License for universities (per document upload, per application fee)
Place	App Stores (iOS, Android); Website	Online (website, mobile app)	Direct sales through Unify sales team; Partnerships with education consultants	Direct sales targeted at schools and educational authorities in Vietnam; Viettel network	Primarily online (website, social media); Direct partnerships with universities; Potential partnerships with ed. organizations
Promotion	App Store Optimization (ASO); Social media marketing; Email marketing; Content marketing; PR; Free trials	Online marketing; Participation in int'l ed fairs; Partnerships; Direct marketing	Online marketing (SEO, SEM, content marketing); Conferences and trade shows; Direct sales & relationship building with universities; Potentially	Government partnerships (Ministry of Ed.); Leverages Viettel's network; Case studies & testimonials; Training & support	Content marketing (blog posts, articles, videos); Targeted advertising (Google Ads, social media); Webinars & workshops; Direct university partnerships; PR

			some freemium model or trials		
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6.3 Technology Comparison

Table 6: Technology analysis of existing products

Technology Aspect	TeacherKit	ApplyBoard	Unify	SMAS	ASSAP
Platform Architecture	Mobile-first; Limited web functionality	Web-based platform; Mobile app likely secondary	Primarily web-based; Integration focus for existing systems	Web-based; Likely monolithic architecture	Modern, scalable web architecture; Designed for API integrations and future mobile expansion
AI Capabilities	Basic data tracking and organization; No AI/ML apparent	Data-driven insights and matching algorithms (level of sophistication unclear)	Integrating AI into traditional SIS features; Focus on predictive analytics and some student engagement	Limited or no AI capabilities	Core AI engine for chatbot, personalized recommendations, and advanced analytics
Data Management & Integration	Limited data storage; Basic integrations with other classroom tools	Focus on application and admissions data; Integrations with university partners likely limited	Robust data management within SIS; Extensive integration capabilities with other university systems	Data management within the Vietnamese education system; Integrations likely limited	Flexible data import/export; Designed for integration with existing university systems (APIs, etc.)

Scalability & Security	Limited scalability; Primarily designed for individual teachers/classrooms	Scalability to handle large numbers of applications; Security measures unclear	Highly scalable enterprise platform; Robust security infrastructure	Scalable within Vietnam; Security measures aligned with government regulations	Cloud-based architecture for high scalability and robust security; Compliance with data privacy regulations
Key Technology Strategy	Incremental feature additions to existing mobile-first platform	Leveraging data and algorithms to improve matching and efficiency	Integrating AI into existing workflows and systems	Modernizing traditional school management processes	AI-first approach; Focus on personalization, automation, and data-driven insights; Scalability and security paramount

ASSAP offers a distinct advantage over competitors by providing a **specialized, AI-driven solution purpose-built for the Vietnamese university admissions market**. Unlike general school management systems or international platforms with limited local adaptation, ASSAP combines a sophisticated AI chatbot, personalized recommendations, and automated application processing to address the unique needs and challenges faced by both Vietnamese students and universities. This targeted approach, combined with a focus on seamless integration with existing university systems and a commitment to data security and privacy, positions ASSAP as the ideal solution for modernizing and enhancing the admissions experience in Vietnam. Our tiered pricing model caters to diverse budgets, and our phased rollout strategy ensures sustainable growth and market penetration.

VII. Bussiness Model Canvas

This section outlines the key components of our business model using the Business Model Canvas framework, providing a comprehensive overview of how we create, deliver, and capture value which is illustrated in the figure below.

Key partner Universities and Colleges Organizations and Individuals in the Education Sector Other service provider such as food provider, tenant, entertainment ...	Key activities Provide information and advisory service. Develop, maintain and update system Marketing for partner and good service	Value proposition Recruitment and advisory automation Information and Data Management In-depth Data Analysis for strategic marketing Personalized Counseling and Improved Enrollment Experience Easy Access to Information for student and parent	Customer relationships Personal Assistance Automated Services Help Center Forums, Facebook Groups	Customer segments Businesses: University College Educational organization Normal customer: Student and parents
	Key resources Software Development Team Marketing and Sales Team Support from FPT university		Channels Project Website Sales Team Social Media Marketing Partners	
Cost structure Product Development Costs Marketing and Sales Costs Operations and Support Costs Management Costs			Revenue stream From University, College and Education organization: Per-User Fee, Fee per application, Tiered Service Packages From normal customer: Premium advisory service for student and parents	

Figure 26: Bussiness Model Canvas of ASAAP project

7.1. Customer Segments

Our primary customer segment comprises universities and colleges across Vietnam. We will prioritize institutions with significant enrollment numbers, those actively expanding, or those seeking to enhance their admissions processes through technological innovation. Recognizing the diversity within this segment, we further categorize potential clients into three tiers: Tier 1 consists of leading universities with established reputations and a willingness to invest in cutting-edge technology; these are our ideal early adopters. Tier 2 includes mid-tier universities seeking cost-effective solutions that demonstrably improve admissions efficiency and broaden their applicant pool; value and a clear return on investment are paramount for this group. Tier 3 encompasses newly established universities that need a robust, scalable, yet manageable admissions system to build their brand and attract students. While our initial focus remains on these primary segments, we also acknowledge the potential for future expansion by partnering with admissions counseling centers and educational organizations, offering our platform as a value-added service to their student clients.

7.2. Value Propositions

Our platform delivers distinct and compelling value propositions to both universities/colleges and prospective students (accessed through the institutions). For universities and colleges, we offer process automation, significantly reducing the administrative burden on admissions staff by automating repetitive tasks. This includes answering frequently asked questions, verifying application documents, and sending routine communications. This automation frees up valuable

staff time and resources, enabling a focus on higher-value activities like personalized student engagement and strategic recruitment planning. Our AI-powered chatbot enhances personalization by providing tailored information and guidance to each prospective student, based on their individual interests, academic background, and career goals. This results in higher engagement and improved conversion rates from inquiry to application. Furthermore, by targeting the right audience with personalized messaging and streamlining the application process, we improve overall admissions efficiency, leading to increased qualified applications and higher enrollment yields. Our platform also provides data-driven decision-making capabilities through comprehensive analytics dashboards and reports, offering valuable insights into applicant trends, preferences, and behaviors. This empowers institutions to make informed, strategic decisions regarding recruitment and resource allocation. By implementing our cutting-edge Admissions 4.0 solution, institutions demonstrate a commitment to innovation and student-centricity, thereby strengthening their brand image and attracting top-tier talent. Finally, our system streamlines data management, assisting universities and colleges in efficiently inputting and managing admissions data, minimizing paperwork and improving overall data accuracy.

For students (accessing the platform through participating institutions), we provide easy access to information. They can quickly and easily find and compare admissions details from multiple institutions in one centralized location. The AI chatbot offers personalized guidance, providing tailored recommendations and support based on each student's unique profile and aspirations. Ultimately, we deliver an improved admissions experience, reducing the stress and anxiety typically associated with the university application process and empowering students to make informed decisions with greater confidence.

7.3. Channels

We employ a multi-channel strategy to reach our target audience and effectively deliver our value proposition. This includes direct channels such as a dedicated project website serving as the central hub for information about our platform. The website features product details, benefits, pricing, case studies, and a demo request form. A dedicated sales team will directly engage with universities, offering personalized consultations, product demonstrations, and contract negotiation. We will also actively participate in industry events, including education conferences, trade shows, and workshops, to showcase our solution, network with key decision-makers, and build relationships.

Our online channels encompass a comprehensive digital marketing strategy. This includes Search Engine Optimization (SEO) to ensure our website and content rank highly in search engine results for relevant keywords. We will also utilize Search Engine Marketing (SEM), running targeted advertising campaigns on Google Ads. Social Media Marketing will be crucial, building a strong presence on relevant platforms (Facebook, YouTube, TikTok, Zalo) to engage with institutions and students. Email marketing will be used for targeted campaigns to nurture leads, share valuable content, and promote the platform. Content Marketing will focus on creating high-quality blog

posts, articles, white papers, and videos on university admissions and the benefits of AI. Finally, indirect channels will involve strategic partnerships with educational organizations, admissions counseling centers, and high schools to leverage their existing networks and reach a broader audience.

7.4. Customer Relationships

We are committed to cultivating strong and lasting relationships with our clients, combining personalized support with efficient automated services. Personalized support will be provided through dedicated account managers for key accounts, offering ongoing assistance, addressing specific needs, and ensuring client satisfaction. We will also offer consulting services to assist institutions in implementing and optimizing their use of the platform. Automated services include the 24/7 AI chatbot, the core of our platform, providing instant answers and personalized guidance. An online help center will offer comprehensive documentation, FAQs, video tutorials, and troubleshooting guides. We will foster community building through online forums and groups, creating spaces for university representatives to connect, share best practices, and provide feedback. Finally, we embrace co-creation, actively soliciting feedback from institutions to continuously improve our product and develop new features, and offering flexible customization options.

7.5. Key Activities

Our core activities revolve around the development, marketing, support, and ongoing improvement of our platform. Product development encompasses Research and Development (R&D), continuously researching and integrating the latest AI technologies. Software development maintains and updates our web platform, mobile application (future development), and APIs. Rigorous Quality Assurance (QA) and testing ensure the platform's stability, security, and performance. Marketing and sales activities include brand building, developing and maintaining a strong brand identity. Marketing and promotion involve executing online and offline marketing campaigns. Sales and contract negotiation focus on engaging with potential clients, providing demonstrations, and securing contracts. Operations and support ensure the platform's continuous availability and optimal performance, while customer support provides timely and effective assistance to institutions and students. Data updates involve continuously updating the platform's database with current admissions information. Finally, management and development include partner management and Data Analysis.

7.6. Key Partners

Strategic partnerships are integral to our success. These include universities and colleges, our primary customers and partners, who provide essential admissions data and collaborate on platform development. We will also partner with educational organizations (admissions counseling centers, study abroad agencies, and high schools), serving as distribution channels and sources of market insights. AI and technology providers will supply cloud infrastructure, AI algorithms, and other relevant technologies. Education experts, consultants, and researchers in education and AI,

will provide expertise and guidance. Finally, we will collaborate with service providers around the university to form a trust group of service providing which serves the student and university staff demand.

7.7. Key Resources

Our key resources are the essential assets that enable us to create and deliver our value proposition. These include our proprietary AI platform, encompassing machine learning, natural language processing, and other AI algorithms, forming our core technology. IT infrastructure, including robust and scalable servers, networks, and databases, is crucial. Our software includes the web platform, mobile application (future development), and APIs. Human resources are paramount, encompassing a skilled software development team, an experienced marketing and sales team, a dedicated operations and support team, and education and admissions experts. Comprehensive admissions data, including up-to-date information on universities, programs, requirements, tuition, and scholarships, is vital. User data (anonymized and aggregated) provides insights into student preferences, behaviors, and trends. Sufficient investment capital is required for product development, marketing, and operations. Finally, our brand and reputation, built on trust and credibility, are essential intangible resources.

7.8. Cost Structure

Our cost structure encompasses several key categories. Product development costs include R&D expenses, salaries and benefits for the development team, and any outsourcing costs. Marketing and sales costs involve advertising expenses (online and offline), event participation costs, sales commissions, and salaries for the marketing and sales team. Operations and support costs include infrastructure costs (servers, bandwidth), system maintenance and upgrades, and salaries for the support team. Administrative costs cover office rent and utilities, general administrative expenses, and legal and accounting fees. Other costs include software and technology licenses, and contingency funds.

7.9. Revenue Streams

Our primary revenue stream will be generated from fees charged to universities and colleges, based on a subscription model. This includes registration fees, either one-time or recurring (monthly, quarterly, or annually), for access to the platform. User-based fees, charged based on the number of students using the system within an institution, provide scalability. Tiered service packages (Standard, Advanced, Premium) offer different pricing tiers with varying features and levels of support. Customization fees will be charged for custom development or integration requests. Finally, per-application fees, a small charge for each application processed, offer another revenue stream. Potential future revenue streams include advertising, displaying targeted advertisements from relevant partners on the platform. Value-added services, such as premium career counseling or study abroad consultation, could be offered. Finally, data analytics services, providing anonymized and aggregated data insights to interested parties, represent a potential future revenue source.

VIII. Plan 2025

This section details the Minimum Viable Product (MVP) for our intelligent admissions advisory platform. It outlines the MVP's objectives, target users, core features, technology stack, success metrics, and the roadmap for future development.

8.1 Minimum Viable Product (MVP)

8.1.1. MVP Objectives

The primary goals of this MVP are multifaceted. First, we aim to validate our core hypothesis: that there is significant market demand for an automated and personalized university admissions advisory system, addressing the needs of both students and institutions. Second, we will gather direct user feedback, both from students and participating institutions. This feedback will be crucial in informing future development and refining the platform's features and functionality. Third, the MVP will deliver initial value by providing a functional solution that directly addresses immediate pain points in the admissions process. For students, this means tackling information overload and improving accessibility. For institutions, it translates to a reduction in the workload of admissions staff. Finally, we are committed to minimizing development time and cost. The MVP will focus on essential features, enabling rapid deployment and market testing with efficient resource utilization.

8.1.2. Target Users

The MVP will initially target two primary user groups. The first group consists of high school students (primarily in Grade 12) and their parents. These individuals are actively engaged in researching university options and preparing for the college application process. The second group comprises Tier 2 universities and colleges. These are mid-tier institutions that are actively seeking cost-effective solutions to improve admissions efficiency, enhance student engagement, and expand their reach. This group is often more agile and receptive to adopting new technologies compared to larger, more established institutions.

8.1.3. Core Features

The MVP will be delivered as a web-based platform, featuring distinct interfaces and functionalities tailored to the needs of students and institutional administrators.

For students, the platform will offer a user-friendly interface. This means a clean, intuitive, and easy-to-navigate design, with a strong emphasis on user experience (UX). Information will be presented in a clear, concise, and logically organized manner. A central feature is the 24/7 AI-powered chatbot advisor. This chatbot will provide instant answers to a comprehensive range of frequently asked questions (FAQs) related to admissions regulations, university and program information, benchmark scores, tuition fees, scholarship opportunities, application procedures, and deadlines. The FAQ database will be built upon real-world data and admissions expertise. The chatbot will also assist with information search, enabling students to quickly locate specific details using keyword searches. Furthermore, it will offer process guidance, providing step-by-step

assistance on the application and enrollment process. Based on chat history and previous interactions, the chatbot will proactively suggest relevant information. Finally, it will collect preliminary information about student aspirations, interests, and academic performance to lay the groundwork for future personalized features. An admissions information search engine is also included. This allows users to search using keywords, filter results based on various criteria (academic discipline, benchmark scores, tuition fees), and view results in a clear, well-organized, and easily comparable format. Structured Information Provision provides information in the most structured, logical and complete way. The system will provide information suggestion and related information based on user's action.

For institutional administrators, the platform will provide an Admin Panel. This panel will include admissions data management tools, allowing for easy import, editing, and updating of admissions information. Institutions can also manage the chatbot's FAQ database, adding, modifying, and deleting questions and answers to keep the information current. Comprehensive analytics and reporting will be provided. This includes tracking the total number of questions answered by the chatbot, categorizing questions by topic to identify areas of high student interest, and monitoring website traffic (visits, session duration, popular pages). With user consent, basic information about students interacting with the chatbot will be aggregated. Finally, institutions will have access to robust information management features, ensuring data is easily accessible, systematically organized, and securely protected.

8.1.4. Technology Stack

The MVP will be built upon a robust and scalable technology stack. We will prioritize open-source, widely-used, and easily maintainable platforms, such as Python/Django or Node.js/React. This approach offers flexibility, cost-effectiveness, and benefits from strong community support. For the chatbot, we will leverage existing AI chatbot frameworks like Dialogflow, Rasa, or Microsoft Bot Framework. This accelerates development and allows us to utilize pre-built natural language processing (NLP) capabilities. A standard relational database management system (e.g., MySQL, PostgreSQL) will be used for reliable data storage and retrieval. Finally, the platform will be deployed on a cloud service provider (e.g., AWS, Google Cloud, Azure) to ensure scalability, reliability, and cost efficiency.

8.1.5. MVP Success Metrics

The success of the MVP will be rigorously evaluated based on several key metrics. We will track student user acquisition, aiming to achieve a target number of users within a defined timeframe (e.g., 1000 users per month). User satisfaction will be measured through surveys and direct feedback, with a target of, for example, 80% satisfaction rating. Institutional adoption is crucial; we will aim to secure a specific number of participating institutions for the pilot program (e.g., 10 universities). Positive feedback from these institutions regarding the platform's usefulness and impact is essential. The chatbot's success rate, measured by the percentage of questions answered

correctly, will be tracked (e.g., aiming for 70% accuracy). Finally, we will monitor the average session duration, indicating user engagement levels.

8.1.6. Post-MVP Development Roadmap

Following the successful launch and evaluation of the MVP, we will embark on a phased development plan. This includes enhanced personalization, with intelligent recommendations for universities and programs based on student profiles. We will also develop personalized roadmap development, creating customized learning and application preparation plans. Expanded institutional features will be added, such as a fully functional online application and admissions system, and advanced data analytics, including predictive modeling to forecast enrollment trends. Mobile application development will create a dedicated app for improved accessibility. Finally, market expansion will involve targeting additional universities and colleges, and exploring international opportunities.

8.2. Plan first month

This section demonstrates the plan of both product development process and marketing campaign in the first month of ASAAP project.

8.2.1. Product Development Plan

The first month (March 2025) of the ASSAP project is dedicated to an extremely focused and rapid development sprint aimed at delivering a functional Minimum Viable Product (MVP) for a demo on March 30th, 2025. This necessitates a highly prioritized and streamlined approach. The primary goal is not to build a complete system, but rather a demonstrable core that validates the fundamental concept: an AI-powered chatbot assisting with university admissions information.

The month begins with crucial setup activities: configuring the project management tool (Jira/Trello), setting up a basic cloud infrastructure (likely leveraging pre-configured services for speed), establishing version control (Git), and creating a minimal development environment. Simultaneously, the Product Owner will refine the MVP backlog, prioritizing only the essential user stories for the demo. This will likely include a basic chatbot capable of answering a limited set of frequently asked questions (FAQs) related to admissions, and a very simple user interface to interact with the chatbot.

Development will be organized into three short sprints. Sprint 1 focuses on building the core chatbot functionality (using Dialogflow, Rasa, or a similar framework) and creating the bare-bones UI. This means defining key intents and entities for the chatbot, and developing a UI that allows users to type questions and see responses. Sprint 2 concentrates on integrating a basic database to provide some real university data (though this data will be limited in scope for the MVP) and polishing the UI based on internal feedback from Sprint 1. Sprint 3 is dedicated to rigorous testing, bug fixing, and finalizing the MVP for the demo. Daily stand-up meetings (scrums) are crucial throughout each sprint to maintain tight coordination and address any roadblocks immediately. Internal sprint reviews and retrospectives are held at the end of each sprint to assess progress,

gather feedback, and adapt the plan. The final days of the month are spent preparing the demo environment and script, culminating in the MVP demonstration on March 30th. This aggressive timeline demands a highly disciplined, collaborative team, a willingness to make significant scope trade-offs, and a laser focus on delivering a working, albeit limited, product. The emphasis is firmly on demonstrable value, not perfection.

8.2.2. Marketing Plan

Goal:

- Complete the foundational work to prepare for the next marketing activities.
- Start building brand awareness and attracting attention from the target market.

Table 7: Marketing plan table in the first month

Activity	Details	Start time	End Time
Market Research	- Research competitors: Website, social media, pricing, USP. - Research target customers: Search on forums, groups to understand their needs and wants. - Analy	4/1/2025	4/7/2025
Brand Story Development	- Define ASSAP's mission, vision, and core values. - Develop a compelling brand story, highlighting the product's differentiators and benefits.	4/1/2025	4/5/2025
Logo and Basic Brand Identity Design	- Design the logo, select colors, fonts, and other design elements that align with the brand positioning. - Create basic brand identity guidelines (colors,	4/5/2025	4/14/2025
Basic Website (Landing Page) Construction	- Design and develop a landing page introducing ASSAP. - Content: Introduce the product, its benefits, and value, and include a call to action (register for information, contact for consultation). - Focus on user experience (UX).	4/7/2025	4/21/2025
Creating Official Social Media Accounts	- Create accounts on platforms such as Facebook, LinkedIn. - Set up basic information, profile pictures, cover photos, and descript	4/21/2025	4/23/2025

Researching and Compiling a List of Potential Customers	- Research universities and colleges that match the target criteria (Tier 1, Tier 2). - Find contact information for key decision-makers (Presidents, Heads of Admissions, etc.).	4/14/2025	4/30/2025
Creating Marketing Content Plan for the Following Month	- Determine the topics, formats, and frequency of content to be posted on the website and social media. - Create a detailed posting schedule for the following mon	4/23/2025	4/30/2025

8.3. Plan first year

This section demonstrates the plan of both product development process and marketing campaign in the year of ASAAP project in detail.

8.3.1. Product Development Plan

Table 8: Plan for product development in the first year

Phase	Task ID	Task Description	Start Date	End Date	Constrains	Priority
Project Setup	PS-001	Project Kick-off Meeting	2025-03-01	2025-03-01		High
Project Setup	PS-002	Initial Requirements Gathering (MVP Focus)	2025-03-02	2025-03-04	PS-001	High
Project Setup	PS-003	Project Management Tool Setup (Jira/Trello)	2025-03-02	2025-03-03	PS-001	High
Project Setup	PS-004	Cloud Infrastructure Setup (Basic)	2025-03-03	2025-03-05	PS-001	High
Project Setup	PS-005	Version Control Setup (Git)	2025-03-03	2025-03-04	PS-001	High
Project Setup	PS-006	Development Environment Setup (Basic)	2025-03-05	2025-03-07	PS-004	Not Started
MVP Development	MVP-001	MVP Backlog Refinement	2025-03-05	2025-03-06	PS-002	High
MVP Development	MVP-002	Chatbot Framework Setup (Dialogflow/Rasa)	2025-03-06	2025-03-07	PS-006	High
MVP Development	MVP-003	Sprint 1 Planning (MVP Demo)	2025-03-07	2025-03-07	MVP-001	High
MVP Development	MVP-004	Sprint 1 Development (MVP Demo - Chatbot)	2025-03-08	2025-03-14	MVP-003	High
MVP Development	MVP-005	Sprint 1 Development (MVP Demo - Basic UI)	2025-03-08	2025-03-14	MVP-003	High

MVP Development	MVP-006	Daily Scrums (Sprint 1)	2025-03-09	2025-03-13	MVP-004	Not Started
MVP Development	MVP-007	Sprint 1 Review (Internal)	2025-03-14	2025-03-14	MVP-004	Not Started
MVP Development	MVP-008	Sprint 1 Retrospective	2025-03-14	2025-03-14	MVP-007	High
MVP Development	MVP-009	Sprint 2 Planning (MVP Demo Polish & Data)	2025-03-15	2025-03-15	MVP-008	High
MVP Development	MVP-010	Sprint 2 Development (Data Integration)	2025-03-16	2025-03-22	MVP-009	High
MVP Development	MVP-011	Sprint 2 Development (UI Polish)	2025-03-16	2025-03-22	MVP-009	High
MVP Development	MVP-012	Daily Scrums (Sprint 2)	2025-03-17	2025-03-21	MVP-010	Not Started
MVP Development	MVP-013	Sprint 2 Review (Internal)	2025-03-22	2025-03-22	MVP-010	Not Started
MVP Development	MVP-014	Sprint 2 Retrospective	2025-03-22	2025-03-22	MVP-013	High
MVP Development	MVP-015	Sprint 3 Planning (MVP Demo Finalization)	2025-03-23	2025-03-23	MVP-014	High
MVP Development	MVP-016	Sprint 3 Development (Testing & Bug Fixes)	2025-03-24	2025-03-28	MVP-015	High
MVP Development	MVP-017	Daily Scrums (Sprint 3)	2025-03-25	2025-03-27	MVP-016	High
MVP Development	MVP-018	Sprint 3 Review (Final MVP Review)	2025-03-28	2025-03-28	MVP-016	High
MVP Development	MVP-019	MVP Demo Preparation	2025-03-29	2025-03-29	MVP-018	High
MVP Development	MVP-020	MVP Demo	2025-03-30	2025-03-30	MVP-019	High
Full Product Development	FPD-001	Detailed Requirements Gathering (Full Product)	2025-04-01	2025-04-11	MVP-020	High
Full Product Development	FPD-002	Backlog Refinement (Full Product)	2025-04-12	2025-04-15	FPD-001	High
Full Product Development	FPD-003	System Architecture Design (Full)	2025-04-16	2025-04-22	FPD-002	High
Full Product Development	FPD-004	Database Design (Full)	2025-04-23	2025-04-29	FPD-003	High
Full Product Development	FPD-005	API Design (Full)	2025-04-30	2025-05-06	FPD-003	High
Full Product Development	FPD-006	UI/UX Design (Full)	2025-05-07	2025-05-13	FPD-002	High
Full Product Development	FPD-007	Chatbot Design & Training (Full)	2025-05-14	2025-05-20	FPD-002	High
Full Product Development	FPD-008	Sprint Planning (Full Product - Iteration 1)	2025-05-21	2025-05-21	FPD-007	High
Full Product Development	FPD-009	Sprint Development (Full Product - Iteration 1)	2025-05-22	2025-06-04	FPD-008	High

Full Product Development	FPD-010	Daily Scrums (Iteration 1)	2025-05-23	2025-06-03	FPD-009	High
Full Product Development	FPD-011	Sprint Review & Retrospective (Iteration 1)	2025-06-04	2025-06-04	FPD-009	High
Full Product Development	FPD-012	Sprint Planning (Full Product - Iteration 2)	2025-06-05	2025-06-05	FPD-011	High
Full Product Development	FPD-013	Sprint Development (Full Product - Iteration 2)	2025-06-06	2025-06-19	FPD-012	High
Full Product Development	FPD-014	Daily Scrums (Iteration 2)	2025-06-07	2025-06-18	FPD-013	High
Full Product Development	FPD-015	Sprint Review & Retrospective (Iteration 2)	2025-06-19	2025-06-19	FPD-013	High
Full Product Development	FPD-016	Final Testing & Bug Fixing	2025-06-20	2025-06-26	FPD-015	High
Full Product Development	FPD-017	Deployment Preparation	2025-06-27	2025-06-29	FPD-016	High
Full Product Development	FPD-018	Product Launch	2025-06-30	2025-06-30	FPD-017	High
Post Launch & Continuous Improvement	PLCI-001	Post-Launch Monitoring & Support (Ongoing)	2025-07-01	2025-11-05	FPD-018	High
Post Launch & Continuous Improvement	PLCI-002	User Feedback Collection & Analysis (Ongoing)	2025-07-01	2025-11-05	FPD-018	High
Post Launch & Continuous Improvement	PLCI-003	Backlog Refinement (Continuous)	2025-07-01	2025-11-05	PLCI-002	High
Research & New Feature Development	RNFD-001	Research: Personalized Recommendations (Phase 1)	2025-07-01	2025-07-15	PLCI-002	Medium
Research & New Feature Development	RNFD-002	Sprint Planning (Personalized Recommendations)	2025-07-16	2025-07-16	RNFD-001	Not Started
Research & New Feature Development	RNFD-003	Sprint Development (Personalized Recommendations - Prototype)	2025-07-17	2025-07-30	RNFD-002	High
Research & New Feature Development	RNFD-004	Daily Scrums (Recommendation Sprint)	2025-07-18	2025-07-29	RNFD-003	High
Research & New Feature Development	RNFD-005	Sprint Review & Retrospective (Recommendations)	2025-07-30	2025-07-30	RNFD-003	High

Research & New Feature Development	RNFD-006	Research: Enhanced Chatbot Capabilities (NLP Improvements)	2025-08-01	2025-08-15	PLCI-002	Medium
Research & New Feature Development	RNFD-007	Sprint Planning (Enhanced Chatbot)	2025-08-16	2025-08-16	RNFD-006	Not Started
Research & New Feature Development	RNFD-008	Sprint Development (Enhanced Chatbot - Phase 1)	2025-08-17	2025-08-30	RNFD-007	High
Research & New Feature Development	RNFD-009	Daily Scrums (Chatbot Sprint)	2025-08-18	2025-08-29	RNFD-008	High
Research & New Feature Development	RNFD-010	Sprint Review & Retrospective (Chatbot)	2025-08-30	2025-08-30	RNFD-008	High
System Maintenance & Optimization	SMO-001	Performance Monitoring & Optimization (Ongoing)	2025-07-01	2025-11-05	PLCI-001	High
System Maintenance & Optimization	SMO-002	Security Audits & Updates (Regular)	2025-07-15	2025-07-21	PLCI-001	High
System Maintenance & Optimization	SMO-003	Database Optimization (Regular)	2025-08-01	2025-08-07	PLCI-001	Medium
System Expansion	SE-001	Market Research (New Universities/Regions)	2025-09-01	2025-09-15	PLCI-002	Medium
System Expansion	SE-002	Integration with New University Systems (Planning)	2025-09-16	2025-09-22	SE-001	Medium
System Expansion	SE-003	Sprint Planning (University Integration - Pilot)	2025-09-23	2025-09-23	SE-002	Not Started
System Expansion	SE-004	Sprint Development (University Integration - Pilot)	2025-09-24	2025-10-07	SE-003	High
System Expansion	SE-005	Daily Scrums (Integration Sprint)	2025-09-25	2025-10-06	SE-004	High
System Expansion	SE-006	Sprint Review & Retrospective (Integration)	2025-10-07	2025-10-07	SE-004	High
System Expansion	SE-007	Mobile Application Development (Planning & Design)	2025-10-08	2025-10-22	UI/UX designer	Medium
System Expansion	SE-008	Sprint Planning (Mobile App - Base features)	2025-10-23	2025-10-23	SE-007	High

System Expansion	SE-009	Sprint Development (Mobile App - Base features)	2025-10-24	2025-11-04	SE-008	High
System Expansion	SE-010	Daily Scrum (Mobile App Sprint)	2025-10-25	2025-11-03	SE-009	High
System Expansion	SE-011	Sprint Review & Retrospective(Mobile App)	2025-11-04	2025-11-04	SE-009	High

8.3.2. Marketing plan

Our marketing plan in the first years contains the following ideas:

- Build a strong brand identity and establish credibility in the market.
- Attract at least 3 universities and colleges as partners.
- Achieve 15,000 registered users (students and parents) on the platform.

Table 9: Marketing plan table in the first year

Quarter	Activity	Details	Start Date	End Date	Notes
Q1 (4-6/2025)	Building the Platform	Develop basic features, test, and update continuously.	4/1/2025	6/30/2025	Prioritize developing the most important features.
Q1 (4-6/2025)	Content Marketing	Post blog articles, share on social media, create ebooks/infographics.	4/1/2025	6/30/2025	Focus on valuable content that solves customer problems.
Q1 (4-6/2025)	Social Media Market	Increase Facebook, LinkedIn activity, run ads, and organize minigames.	4/1/2025	6/30/2025	Experiment with different ad formats.
Q1 (4-6/2025)	Email Marketing	Build email list, send weekly/monthly newsletters.	4/1/2025	6/30/2025	Personalize email content to increase engagement.

Q1 (4-6/2025)	PR	Send press releases and contact reporters/bloggers.	4/1/2025	6/30/2025	Build good relationships with the media.
Q1 (4-6/2025)	Direct Sales	Contact universities/colleges, send emails, call, and schedule meetings.	4/1/2025	6/30/2025	Target schools with the highest partnership potential.
Q2 (7-9/2025)	Website Optimization and SEO	Analyze best keyword for recommendation.	7/1/2025	9/30/2025	Track keyword rankings and continuously adjust SEO strategies.
Q2 (7-9/2025)	Webinar/Workshop Organization	Organize webinars/workshops.	7/1/2025	9/30/2025	Invite credible experts to add value to the event.
Q2 (7-9/2025)	Participation in Education Fairs	Participate in fairs and exhibits to introduce the product and connect with potential customers.	7/1/2025	9/30/2025	Choose events that align with the target market.
Q2 (7-9/2025)	Product Upgrades	Improve the interface, features, and performance based on user feedback.	7/1/2025	9/30/2025	Prioritize features that are requested the most.
Q3 (10-12/2025)	Influencer Marketing	Collaborate with influencers in education.	10/1/2025	12/31/2025	Select influencers who fit the brand and target market.
Q3 (10-12/2025)	Content Marketing (Advanced)	Create videos, infographics, case studies, and use marketing automation.	10/1/2025	12/31/2025	Focus on engaging and easily shareable content.

Q3 (10-12/2025)	Referral Program	Build a referral program to encourage existing users.	10/1/2025	12/31/2025	Design an attractive and easy-to-participate program.
Q3 (10-12/2025)	Evaluate Effectiveness & Adjust Strategies	Analyze data and adjust marketing strategies.	10/1/2025	12/31/2025	Use results to improve marketing.
Q4 (1-3/2026)	Focus on Sales and Closing Deals	Increase direct sales activities and offer special deals.	1/1/2026	3/31/2026	Create relationships with potential customers.
Q4 (1-3/2026)	Develop Marketing Plan for Following Year	Based on results, develop a detailed plan.	1/1/2026	3/31/2026	Use data and experience.
Q4 (1-3/2026)	Maintain Other Marketing Activities	Continue activities that have proven effective.	1/1/2026	3/31/2026	All related departments

IX. Calling for Investment

9.1. Break Even Point

The ASSAP (AI-Powered Automated Admissions System) project aims to revolutionize the university admissions process in Vietnam by leveraging AI to streamline operations for institutions and provide personalized guidance for students. To ensure the project's financial viability and sustainability, a comprehensive financial model has been developed, encompassing both cost structures and revenue projections. This model is built upon a dual revenue stream, targeting both students as end-users and universities as institutional clients, reflecting the value proposition delivered to each segment. The following analysis examines the projected costs, revenues, and profitability of ASSAP within its first year of operation, highlighting key assumptions and implications, which is illustrated as follow.

Table 10: The salary table for the team

Salary Expense							
No .	Names	Company Positions	Quantity	Days on Work (8h/days)	Monthly Salary	Paid Months (After	Annual Salary

						6 month s)	
1	Mai Phú Trọng	CEO	1	26	10,000,000 đ	6	60,000,000 đ
2	Nguyễn Gia Huy	CFO	1	26	9,000,000 đ	6	54,000,000 đ
3	Nguyễn Công Danh	CMO	1	26	9,000,000 đ	6	54,000,000 đ
4	Dương Minh Tuấn	CXO	1	26	8,000,000 đ	6	48,000,000 đ
5	Nguyễn Hoàng Tùng	CTO	1	26	9,000,000 đ	6	54,000,000 đ
6	Phạm Đức Thắng	CCO	1	26	8,000,000 đ	6	48,000,000 đ
Total Payment in 1 month							53,000,000 đ
Total Payment in 6 Months							318,000,000 đ

This table details the salary expenses that constitute the major portion of the fixed costs from month 6 onwards. It provides a breakdown of the monthly salaries for the six core team members:

- **CEO (Mai Phú Trọng):** 10,000,000 VND/month
- **CFO (Nguyễn Gia Huy):** 9,000,000 VND/month
- **CMO (Nguyễn Công Danh):** 9,000,000 VND/month
- **CXO (Dương Minh Tuấn):** 8,000,000 VND/month
- **CTO (Nguyễn Hoàng Tùng):** 9,000,000 VND/month
- **CCO (Phạm Đức Thắng):** 8,000,000 VND/month

The table indicates that these salaries are paid for 6 months (Months 7-12 of project), resulting in a total monthly salary expense of 53,000,000 VND and a total annual salary expense of 318,000,000 VND. Later, when project gains more profit, the salary of the team will be increased. This table underscores the significant investment in human resources required to operate and scale the ASSAP platform after its launch.

Table 11: The Fixed Costs table

Fixed Costs in the First Year				
Month	Salary Expenses	Internet Fees	Electricity and Water Fees	Total
1st Month	0.00	300,000 đ	400,000 đ	700,000 đ

2nd Month	0.00	300,000 đ	400,000 đ	700,000 đ
3rd Month	0.00	300,000 đ	400,000 đ	700,000 đ
4th Month	0.00	300,000 đ	400,000 đ	700,000 đ
5th Month	0.00	300,000 đ	400,000 đ	700,000 đ
6th Month	0.00	300,000 đ	400,000 đ	700,000 đ
7th Month	53,000,000 đ	300,000 đ	400,000 đ	53,700,000 đ
8th Month	53,000,000 đ	300,000 đ	400,000 đ	53,700,000 đ
9th Month	53,000,000 đ	300,000 đ	400,000 đ	53,700,000 đ
10th Month	53,000,000 đ	300,000 đ	400,000 đ	53,700,000 đ
11th Month	53,000,000 đ	300,000 đ	400,000 đ	53,700,000 đ
12th Month	53,000,000 đ	300,000 đ	400,000 đ	53,700,000 đ
Total (1 Year)	318,000,000 đ	3,600,000 đ	4,800,000 đ	326,400,000 đ

This table provides a month-by-month breakdown of the fixed costs associated with the ASSAP project. Fixed costs, by definition, are those that remain relatively constant regardless of the number of users or the level of platform activity (within a reasonable operating range). The table reveals a distinct two-phase structure:

- **Months 1-5:** During the initial development and MVP launch phase, fixed costs are a modest 700,000 VND per month. These costs are attributed to "Internet Fees" (300,000 VND) and "Electricity and Water Fees" (400,000 VND), representing the basic operational overhead of a small development team.
- **Months 6-12:** A significant increase in fixed costs occurs from month 6 onwards, jumping to 53,700,000 VND per month. This dramatic shift is almost entirely due to the inclusion of "Salary Expenses," which are detailed in a separate table (analyzed below). This reflects the transition from a small, pre-launch development team to a full operational team supporting the launched product, including sales, marketing, customer support, and ongoing development.

The total fixed costs for the first year are projected to be 326,400,000 VND. The two-tiered structure highlights the financial implications of scaling up operations after the initial launch phase.

Table 12: Variable Costs in the First Year

Variable Costs in the First Year (Rate of Increasing Customer = 20%)					
Month	Customer Counts	Cloud Hosting Fees	ChatBot API Fees	Advertising Fees	Total Variable Costs

1st Month	0	0.00	0.00	0.00	0.00
2nd Month	0	0.00	0.00	0.00	0.00
3rd Month	0	0.00	0.00	300,000 đ	300,000 đ
4th Month	0	0.00	0.00	300,000 đ	300,000 đ
5th Month	1000	18,022,439 đ	15,882,068 đ	1,000,000 đ	34,904,507 đ
6th Month	1200	21,626,927 đ	19,058,482 đ	1,200,000 đ	41,885,409 đ
7th Month	1440	25,952,312 đ	22,870,178 đ	1,440,000 đ	50,262,490 đ
8th Month	1728	31,142,774 đ	27,444,214 đ	1,728,000 đ	60,314,988 đ
9th Month	2074	37,371,329 đ	32,933,057 đ	2,073,600 đ	72,377,986 đ
10th Month	2489	44,845,595 đ	39,519,668 đ	2,488,320 đ	86,853,583 đ
11th Month	2987	53,814,714 đ	47,423,602 đ	2,985,984 đ	104,224,300 đ
12th Month	3584	64,577,657 đ	56,908,322 đ	3,583,181 đ	125,069,160 đ
Total (1 Year)		232,776,090 đ	205,131,269 đ	13,515,904 đ	451,423,263 đ

The foundation of any financial projection lies in understanding the costs involved. For ASSAP, these costs are categorized into fixed and variable components. The variable costs, detailed in **Table 12: Variable Costs in the First Year (Rate of Increasing Customer = 20%)**, are directly proportional to the number of users and their engagement with the platform. These costs are further broken down into three key areas: Cloud Hosting Fees, Chatbot API Fees, and Advertising Fees. The initial four months show zero variable costs, reflecting the development and pre-launch phase. Starting in month 5, a projected customer base of 1000 users is introduced, with an aggressive but potentially achievable 20% month-over-month growth rate. This growth directly impacts the variable costs, which are assumed to scale linearly with user adoption. The projected total variable costs for the first year amount to 451,423,263 VND. This table highlights the importance of efficient resource utilization and optimization of the platform's architecture to manage these usage-based expenses.

Table 13: The Selling Product to Customer of Students

The Selling Product to Customer of Students
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N o.	Product	Unit s	Tota l Tok ens	Finding Inform ation	Recommen dation Informatio n	Summary and Recommen dation Informatio n	Price per 10 tokens and per question	Prices per month	Freque ncies
1	Pay-as-you-Go	Tok ens	Dep ent on User s	10	30	50	5,000 đ	-	35%
2	Premium	Tok ens	500				-	250,000 đ	50%
3	Ultra-Premium	Tok ens	900				-	400,000 đ	15%

Table 13: The Selling Product to Customer of Students outlines the tiered subscription model offered to students. This model provides flexibility and caters to different user needs, with options ranging from a "Pay-as-you-Go" plan for infrequent users (charging 5,000 VND per 10 tokens and question) to "Premium" (250,000 VND/month for 500 tokens and additional information) and "Ultra-Premium" (400,000 VND/month for 900 tokens and enhanced support) subscriptions for more frequent users. The projected distribution of users across these tiers (35%, 50%, and 15%, respectively) suggests a strong preference for the mid-tier "Premium" option.

Table 14: The Selling Product to Customer of Universities

The Selling Product to Customer of Universities			
No.	Product	Prices per document upload/month	Price per application
1	Product License	10,000 đ	5% of the first semester tuition fees

Complementing the student-side revenue, **Table 14: The Selling Product to Customer of Universities** details the pricing structure for institutional clients. This model is based on a "Product License" that includes a fee of 10,000 VND per uploaded document and, most significantly, a charge of 5% of the first semester's tuition fees for each application processed through the platform. This latter component directly aligns ASSAP's revenue with the value it delivers to universities, namely, streamlining admissions and potentially increasing enrollment (and thus tuition revenue). This performance-based pricing model incentivizes universities to actively utilize the platform and integrate it deeply into their admissions workflow.

Table 15: Payback Period Table

Payback Period (First Year)								
No. Month	Customer Counts	Variable Costs	Fixed Costs	Total Costs	Sell Premium	Sell Ultra-Premium	Total Income	Profits
1st Month	0	0.00	700,000 ₦	700,000 ₦	0.00	0.00	0.00	- 700,000 ₦
2nd Month	0	0.00	700,000 ₦	700,000 ₦	0.00	0.00	0.00	- 700,000 ₦
3rd Month	0	300,000 ₦	700,000 ₦	1,000,000 ₦	0.00	0.00	0.00	- 1,000,000 ₦
4th Month	0	300,000 ₦	700,000 ₦	1,000,000 ₦	0.00	0.00	0.00	- 1,000,000 ₦
5th Month	1000	34,904,507 ₦	700,000 ₦	35,604,507 ₦	125,000,000 ₦	60,000,000 ₦	185,000,000 ₦	149,395,493 ₦
6th Month	1200	41,885,409 ₦	700,000 ₦	42,585,409 ₦	150,000,000 ₦	72,000,000 ₦	222,000,000 ₦	179,414,591 ₦
7th Month	1440	50,262,490 ₦	53,700,000 ₦	103,962,490 ₦	180,000,000 ₦	86,400,000 ₦	266,400,000 ₦	162,437,510 ₦
8th Month	1728	60,314,988 ₦	53,700,000 ₦	114,014,988 ₦	216,000,000 ₦	103,680,000 ₦	319,680,000 ₦	205,665,012 ₦
9th Month	2074	72,377,986 ₦	53,700,000 ₦	126,077,986 ₦	259,250,000 ₦	124,440,000 ₦	383,690,000 ₦	257,612,014 ₦
10th Month	2489	86,853,583 ₦	53,700,000 ₦	140,553,583 ₦	311,125,000 ₦	149,340,000 ₦	460,465,000 ₦	319,911,417 ₦
11th Month	2987	104,224,300 ₦	53,700,000 ₦	157,924,300 ₦	373,375,000 ₦	179,220,000 ₦	552,595,000 ₦	394,670,700 ₦
12th Month	3584	125,069,160 ₦	53,700,000 ₦	178,769,160 ₦	448,000,000 ₦	215,040,000 ₦	663,040,000 ₦	484,270,840 ₦
Total	16502	451,423,263 ₦	326,400,000 ₦	902,892,423 ₦	2,062,750,000 ₦	990,120,000 ₦	3,052,870,000 ₦	2,149,977,577 ₦

Table 15: Payback Period (First Year) synthesizes the cost and revenue data to project the overall financial performance of ASSAP in its first year. This table integrates the variable costs from Table 1, introduces fixed costs (initially 700,000 VND/month, then increasing to 53,700,000 VND/month from month 5), and calculates total costs. The revenue side incorporates income from both student subscriptions (Premium and Ultra-Premium, based on the pricing and distribution from Table 3) and the university product license (Table 4). The "Total Income" and "Profits" columns are the most critical. The projections indicate a remarkable achievement: profitability is reached as early as the fifth month of operation, coinciding with the initial customer acquisition. This rapid profitability is driven by the aggressive 20% monthly customer growth and, crucially, the substantial revenue generated from the university product license, particularly the percentage of first-semester tuition fees. By the end of the first year, the project is forecast to accumulate a net profit of 2,149,977,577 VND, demonstrating a strong return on investment.

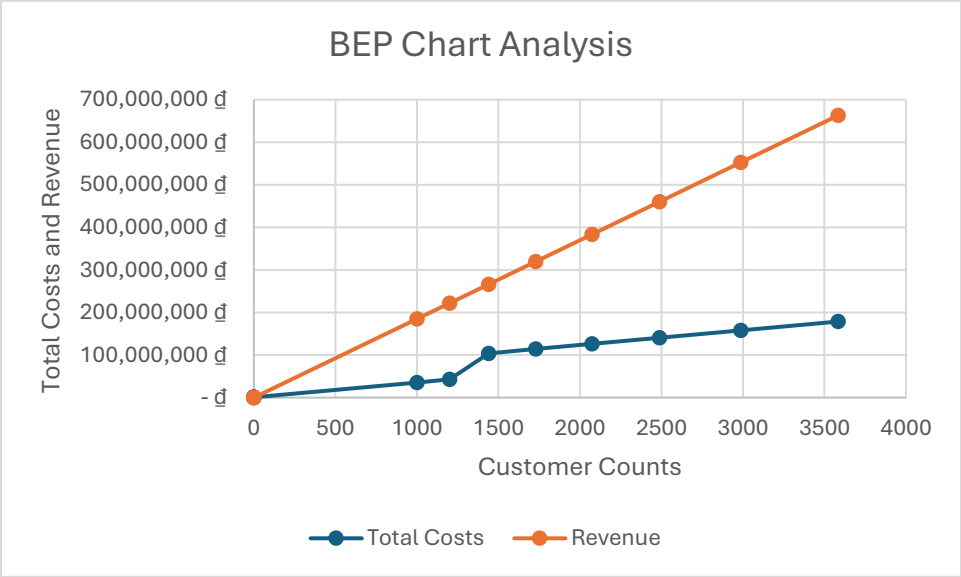


Figure 27: BEP Chart Analysis diagram

The BEP chart provides a crucial visual representation of the project's financial dynamics. It plots "Total Costs" (the sum of fixed and variable costs) and "Revenue" against the number of "Customer Counts". The intersection of the blue (Total Costs) and orange (Revenue) lines is the break-even point. This point visually confirms the previous numerical projections: ASSAP is expected to break even and become profitable between 1000 and 1500 customers, which is projected to occur in the fifth month of operation. The chart also clearly demonstrates the platform's scalability: as the customer base grows beyond the break-even point, the gap between revenue and costs widens, indicating increasing profitability.

The ASSAP financial model presents a compelling case for the project's viability and potential for success. The dual revenue stream, targeting both students and universities, creates a diversified and robust income base. The tiered subscription model for students caters to varying needs and budgets, while the performance-based pricing for universities aligns incentives and emphasizes

the value delivered by the platform. The projected rapid profitability and short payback period (less than five months) are highly encouraging. However, it's crucial to acknowledge the underlying assumptions, particularly the aggressive 20% monthly customer growth and the successful adoption of the platform by universities, including their agreement to the 5% tuition fee share. Continuous monitoring of key performance indicators (KPIs), such as customer acquisition cost, churn rate, average revenue per user, and university conversion rates, is essential. Furthermore, conducting sensitivity analyses to explore different growth scenarios and pricing models will provide a more comprehensive understanding of the financial risks and opportunities. Overall, the ASSAP financial model demonstrates a strong foundation for a financially sustainable and impactful project, but diligent management and proactive adaptation will be key to realizing its full potential.

9.2. Criteria

We believe our project, the AI-Powered Automated Admissions System (ASSAP), represents a compelling investment opportunity based on a strong foundation across all key investment criteria. We present our strengths in the following categories:

9.2.1. Management Team Criteria

- **Experienced and Diverse Team:** Our team comprises individuals with proven expertise in education, technology (specifically AI and software development), business management, marketing, and customer experience. We have a CEO (Mai Phú Trọng) providing strategic direction, a CFO (Nguyễn Gia Huy) managing financial aspects, a CTO (Nguyễn Hoàng Tùng) leading technical development, a CXO (Đương Minh Tuấn) focusing on user experience, a CMO (Nguyễn Công Danh) driving marketing, and a CCO (Phạm Đức Thắng) managing client relationships. This diverse skill set ensures a holistic approach to project execution.
- **Strong Educational Backgrounds and Relevant Experience:** Team members possess relevant academic qualifications and practical experience directly applicable to the project. This includes experience in university admissions processes, AI development, software engineering, marketing within the education sector, and building scalable businesses.
- **Commitment and Passion:** The team is deeply committed to the project's vision of transforming the university admissions landscape. We are driven by a shared passion for improving access to education and leveraging technology for positive social impact.
- **Proven Ability to Execute:** The team has demonstrated the ability to work collaboratively, meet deadlines, and overcome challenges. The development of the detailed project plan, comprehensive market analysis, and the MVP roadmap are testaments to our execution capabilities.

- **Adaptability and Learning Agility:** We recognize the dynamic nature of the EdTech market and are committed to continuous learning and adaptation. We actively seek feedback, stay abreast of industry trends, and are prepared to adjust our strategies as needed.
- **Strong Network:** We have established connections with universities, colleges, educational organizations, and industry experts, providing valuable access to resources, insights, and potential partnerships.

9.2.2. Business & Deal Criteria

- **Clear and Compelling Value Proposition:** ASSAP offers a clearly defined value proposition for both universities/colleges (increased efficiency, cost savings, improved student experience, data-driven insights) and students (easy access to information, personalized guidance, reduced stress).
- **Scalable Business Model:** Our business model is designed for scalability across multiple dimensions: customer base (phased expansion from major cities to provinces and international schools), features (online application submission, career counseling, online trial classes), and geography (Vietnam, Southeast Asia, global markets).
- **Multiple Revenue Streams:** We have a diversified revenue model, including subscription fees (tiered service packages), user-based fees, customization fees, and potential future revenue from advertising and value-added services. This reduces reliance on a single revenue source.
- **Strong Intellectual Property Potential:** Our proprietary AI algorithms and platform design represent valuable intellectual property that can be protected and leveraged for competitive advantage.
- **Clear Exit Strategy Potential:** Potential exit strategies include acquisition by a larger EdTech company, a strategic partnership with a major university or educational organization, or an initial public offering (IPO) in the long term.
- **Favorable Deal Terms:** We are seeking [Specific Investment Amount] for [Specific Equity Stake] and are open to negotiating terms that are mutually beneficial for both the investors and the company. We are committed to transparency and building a strong, collaborative relationship with our investors.

9.2.3. Product/Service Criteria

- **Innovative and Differentiated Solution:** ASSAP offers a revolutionary approach to university admissions, going beyond basic information provision to deliver a truly personalized and automated experience. Our AI-powered chatbot, intelligent recommendation engine, and automated application processing set us apart from competitors.

- **Addresses a Clear Market Need:** Our comprehensive market research (including surveys and analysis) demonstrates a significant and unmet need for a streamlined, efficient, and personalized admissions solution. Students and parents are overwhelmed with information, and universities are struggling with manual processes.
- **User-Friendly and Accessible:** The platform is designed with a strong focus on user experience (UX), ensuring it is intuitive, easy to navigate, and accessible to both students and institutional administrators.
- **Technologically Feasible:** We leverage mature and readily deployable AI technologies, including machine learning, natural language processing, and computer vision. Our technology stack is robust, scalable, and cost-effective.
- **Continuous Improvement and Development:** We are committed to ongoing product development, incorporating user feedback, integrating new features, and staying ahead of technological advancements. Our roadmap includes enhanced personalization, expanded institutional features, and mobile application development.
- **Data Security and Privacy:** We prioritize the security and confidentiality of applicant data, adhering to all relevant regulations and implementing robust security measures.

9.2.4. Financial Criteria

- **Large and Growing Market:** The Vietnamese higher education market is substantial and growing, with over one million students participating in the National High School Exam annually. The EdTech market in Vietnam is also experiencing exponential growth.
- **High Profit Potential:** Our large market size, strong demand, and diversified revenue model contribute to the project's high profit potential.
- **Realistic Financial Projections:** Our financial projections (detailed in Section 9.1) are based on conservative estimates and demonstrate a clear path to profitability and a strong return on investment. [Include key financial metrics here, like projected revenue, expenses, and profitability timelines.]
- **Efficient Use of Funds:** We have a detailed plan for utilizing the investment funds, focusing on product development, marketing and sales, operations, and team expansion. We are committed to fiscal responsibility and maximizing the impact of every dollar invested.
- **Break-even analysis:** We will perform a break-even analysis to project the revenue.
- **Low Burn Rate:** The company has efficiently managed its resources.
- **Traction:** The project has demonstrated early results.

9.2.5. Market Criteria

- **Significant Market Opportunity:** The convergence of a growing student population and a burgeoning EdTech market in Vietnam creates a fertile ground for our platform.
- **Favorable Market Trends:** Our platform is strategically aligned with key market trends, including the widespread adoption of AI in admissions, the growing demand for personalized chatbot counseling, and the rise of omnichannel experiences.
- **Well-Defined Target Market:** We have clearly identified our target market segments (public universities, private universities, colleges, and vocational schools) and have developed strategies for reaching each segment effectively.
- **Competitive Advantage:** Our platform offers several key differentiators compared to existing solutions, including our focus on personalization, automation, and data-driven insights.
- **Strong Market Entry Strategy:** Our multi-faceted market entry strategy includes online marketing, direct university partnerships, participation in education conferences, and a comprehensive marketing plan.
- **Scalability and Market Expansion Potential:** Our business model is designed for significant scalability, with plans for expansion to other provinces, Southeast Asian countries, and global markets.
- **High Barriers to Entry:** It is expensive to recreate the product/service and time-consuming.

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