

# The Impact of Using Artificial Intelligence (AI) on Academic Administrative Task Efficiency in Private Educational Institutions in Sri Lanka.

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Abstract: This research proposal sets out to explore how using Artificial Intelligence (AI) in the day-to-day tasks of academic departments in private Institutions in Sri Lanka affects the overall performance of the institution. The research aimed to understand what people directly involved in academic delivery and academic administration tasks think and feel about AI as a solution to increase the efficiency of daily tasks. To get these insights, information was collected from a carefully chosen group of people, including academic staff, non-academic staff, other interested parties, and other stakeholders who are working with the academic department. The ultimate goal of the outcome of this research would be to see the possibilities of using AI to help decision-makers, educators, and those who create policies make better decisions. Also, to answer other problems, students tend to miss important notifications, ignore important details of examination guidelines, and academic teaching staff miss important deadlines, which will create a mess in the entire system. This study aimed to investigate how Artificial Intelligence (AI) can help interfere with the communication gaps between online study facilities and the daily routines of students and academic staff. While AI has shown its potential in areas like healthcare and finance, it's also making strides in education, being used for personalized learning, automated grading, and predictive analytics to boost student performance. Academic administrative tasks in private educational institutes are often complex and have a big impact on how well the institution runs. The results of this research could give practical insights to independent educational institutions in Sri Lanka and add to our overall understanding of how AI plays a role in academic administration. Keywords: Artificial Intelligence (AI), Academic staff, Private Educational Institutions, Administration, Task Efficiency

# I. BACKGROUND STUDIES

In the rapidly evolving landscape of global education, innovation stands as the driving force behind the sustainability and relevance of the industry, especially in the digital age. Despite gaining independence in 1948, Sri Lanka is still classified as a developing country. While the government's commendable initiative of providing free education from grade 01 up to the university level offers undeniable advantages, it also presents certain disadvantages. Consequently, private institutions have emerged as pivotal players in delivering secondary education, particularly for students ineligible for government universities. Subsequently, these students often explore opportunities in private institutions that align with their needs, shaping their educational trajectories. There is a clear advantage enjoyed by graduates of private institutions over those from local universities. The advantages are spread across various critical dimensions, such as curriculum enrichment that meets the needs of contemporary industries, better employment prospects, exposure to diverse circumstances, and exceptional academic staff performance and profiles. The employment industry consensus is that candidates from private institutions have superior capabilities and versatility in their respective fields, making them highly sought-after professionals who are often remunerated with competitive salaries. In 2023, Sri Lanka will have around 200 private non-government universities and institutions that offer professional and academic qualifications. These institutions are mostly located in the Western and Central provinces. Students from all over the country enroll in these institutions for various courses that will pave the way for their future studies. The Ministry of Education (MoE), University Grants Commission (UGC), and Vocational Training Authority (VTA) govern the course curriculum of these institutions to ensure that they adhere to high standards of educational quality. However, some institutions face challenges in handling student requests, liaising with partners, managing student/parent interactions, and optimizing process efficiency due to the lack of adequate mechanisms. The institution operates under the governance of a Director Board or Senior Management, with day-to-day operations overseen by department heads and managers. While essential functions such as marketing, sales, finance, and administration contribute to the overall functioning of the institution, the academic department holds a pivotal role as the nucleus, ensuring the seamless delivery of educational services. Among the key components within the academic structure, the Academic Delivery Monitoring Department assumes a critical position, charged with the responsibility of overseeing class and exam operations, thereby playing a fundamental role in upholding service quality for students. The Academic Department not only manages the institution's human and equipment resources but also leverages its knowledge and information to distribute resources efficiently during the teaching period. The quality of service rendered by the Academic Department is paramount for cultivating positive Word of Mouth (WoM) from students, contributing

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significantly to the enduring success of the institution. Factors such as service quality, delivery quality, resource availability, and additional support emerge as pivotal elements in achieving favorable WoM, highlighting the interconnectedness of operational efficiency and institutional reputation. Inorder to attain these objectives, the Academic Department must establish a seamless operational flow and optimize its processes. Many academic departments adhere to rigorous standards, often aligning with ISO standards, for critical processes including academic record keeping, examinations, student attendance, and graduations. These standards serve as a benchmark for organizational excellence, and adherence to them is integral for obtaining an ISO consistency certificate, reflecting a commitment to quality assurance and operational reliability. It is noteworthy, however, that certain processes crucial to the Academic Department's efficacy may not fall within the purview of ISO or any other certification. Recognition of this distinction emphasizes the need for a comprehensive approach to process optimization. Even within certified organizations, inefficiencies in processes can undermine the positive reputation sought through WoM. Therefore, the pursuit of excellence requires continuous monitoring and enhancement of internal processes beyond certification requirements. In conclusion, the Academic Department stands as the linchpin of the institution, influencing its success through the delivery of high-quality educational services. A strategic focus on operational efficiency, adherence to recognized standards, and a commitment to continuous improvement collectively contribute to the positive Word of Mouth that is essential for sustaining the institution's standing in the educational landscape. In recent years, one of the most groundbreaking innovations in the education sector has been the integration of Artificial Intelligence (AI). This technology, designed to mimic human intelligence and learning, presents a novel avenue that institutions can explore to enhance efficiency in academic administration processes. The central objective of this study is to evaluate the feasibility of implementing an AI-driven system in the academic administration process and explore how institutions can leverage such technology to generate positive feedback from students, thereby ensuring long-term sustainability and success.

# **II. INTRODUCTION**

In this comprehensive study, our focus will encompass a thorough exploration of four pivotal areas that elucidate the significant role of Artificial Intelligence (AI) in both the broader education industry and the specific domain of academic administration. Recognizing that AI represents a burgeoning field of study with transformative potential across various industries, it is imperative to gain nuanced insights into the specific realms where AI can offer utility and the nuanced considerations essential for its judicious implementation as we embark on this exploration. We have witnessed that AI was considered for use in Government staff efficiencies Mikhail et al., (2020) in similar studies and would apply the same in a different methodology. Educational Enhancement through AI Integration-Delving into how AI can enhance the overall educational experience, including personalized learning, adaptive assessments, and the creation of immersive educational content. Examining the potential of AI to identify and address learning gaps, thereby contributing to more effective and tailored educational strategies. Administrative Efficiency in Academic Processes-investigating the application of AI in streamlining administrative tasks within academic institutions, such as student enrollment, scheduling, and resource allocation. Assessing the potential for AI to optimize processes related to student record management, grading, and the overall operational efficiency of academic departments. Student Support and Engagementexploring AI-driven solutions for providing personalized academic guidance and support to students, including virtual tutors and adaptive learning platforms. Analyzing how AI can contribute to fostering student engagement through innovative tools, feedback mechanisms, and interactive learning experiences. Ethical and Responsible AI Adoption-addressing the ethical considerations surrounding AI implementation in education, including issues related to data privacy, algorithmic bias, and ensuring equitable access to AI-driven educational resources. Highlighting the importance of responsible AI adoption, with a focus on transparency, accountability, and the establishment of ethical guidelines for the use of AI in academic settings. By delving into these key areas, our study aims to provide a comprehensive foundation for understanding the multifaceted impact of AI in education and, more specifically, its potential to revolutionize academic administration processes. This understanding will facilitate informed decisionmaking and the development of strategies that align with the evolving landscape of education in the digital age. We seek to provide a holistic understanding of the following key areas,

# 2.1. AI in the Education Industry

The education industry, encompassing primary, secondary, and tertiary education, along with various stakeholders such as schools, teachers, lecturers, students, institutions, universities, and graduates, constitutes a complex ecosystem. Within this intricate web, AI technology has ushered in a new era of possibilities, transforming and enhancing education on multiple fronts. From personalized learning experiences to the automation of various administrative tasks, AI has become a catalyst for positive change in the educational landscape.

AI's impact on education is particularly evident in various key areas,

Personalized Learning Experiences - AI facilitates the creation of personalized learning paths, adapting to individual student needs, learning styles, and pace. Intelligent tutoring systems use AI algorithms to provide targeted feedback and support, enhancing the learning experience for students.

Administrative Task Automation - Automated grading systems streamline the time-consuming process of evaluating assignments and exams, allowing educators to focus on more meaningful aspects of teaching. Attendance monitoring systems powered by AI contribute to efficient record-keeping and help identify patterns that may impact student performance.

Academic Task and Deadline Management - AI tools assist students and educators in managing academic tasks and deadlines, optimizing time management and reducing the likelihood of missed assignments or deadlines.

Announcement Automation - AI-driven announcement systems ensure timely and consistent communication, delivering information to students and faculty members in an efficient and personalized manner.

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Lecturer Class Monitoring Systems - AI-powered systems monitor lecturer performance and class engagement, providing valuable insights for continuous improvement and professional development.

While some universities have already embraced AI in these areas, it's crucial to recognize that the initial investment in implementing these processes may appear daunting. However, over time, these practices are poised to become standard operating procedures, contributing to increased efficiency and effectiveness within academic departments. Moreover, as these processes become ingrained, they will persist even in the face of high employee turnover, ensuring continuity and stability. Beyond the confines of the classroom, AI has permeated into the often overlooked but fundamentally critical realm of academic administration. Independent educational institutions, in particular, stand to gain significantly from recognizing and harnessing the potential of AI to revolutionize their administrative processes. This includes AI-driven solutions for admissions, student record management, resource allocation, and strategic decision-making, ultimately fostering a more agile and responsive educational infrastructure. The transformative power of AI extends beyond teaching and learning, presenting a comprehensive paradigm shift in how educational institutions operate and thrive in the digital age.

# 2.2. Benefits of AI in Education Sector Administration

The benefits of AI in academic administration are numerous. By automating routine administrative tasks and streamlining processes, AI has the potential to significantly reduce the workload of educational institutions. It is observed that employee turnover rates are relatively high in independent educational institutions in Sri Lanka. Additionally, the same workforce frequently shifts jobs within the industry. As a result, employees have short lifespans, and the tasks that they learn are quickly transferred to others over shorter periods. This leads to the risk of missing out on key tasks, which can be problematic for students and other departmental staff. However, using an AI solution will allow administrators and staff to focus on higher-value tasks and strategic decision-making. AI's data analysis capabilities enable institutions to gain deeper insights into their administrative operations, enhancing efficiency and informed decision-making. Key benefits of using AI include its high accuracy in processing data, and its ability to minimize human errors. AI can also help institutions identify the strengths and weaknesses of their academic programs and make timely and informed decisions that benefit everyone.

#### 2.3. Importance of Academic Administration Process

The Academic Department is the starting point for students who register with the institution. Throughout their study period, they will need to interact with the Academic Department for various reasons, such as submitting assignments, contacting lecturers, and dealing with examination and results-related matters. The Academic Department will be in constant contact with different sets of students at any given time. Therefore, it is crucial for an organization to strengthen its academic tasks to ensure that students can complete their studies and graduate successfully. If an institution does not have a clear pathway for students, they may choose to take up new courses elsewhere. The number of students registering for a course will depend on the quality of service provided by the Academic Department. Academic administration processes are the backbone of independent educational institutions. These processes include student admissions, records management, resource allocation, scheduling, and communication. The efficient execution of these tasks is vital for the institution's daily operations and academic mission. Ensuring that these processes are well-organized, streamlined, and responsive to the institution's needs is central to maintaining a competitive edge.

#### 2.4. Importance of Improving Efficiency

Efficiency is a critical factor in an organization's productivity. Improving the efficiency of administrative tasks plays a vital role in achieving the objectives of an independent educational institution. The effective management of academic administration has a direct impact on the quality of education provided. Therefore, ensuring stakeholder satisfaction is crucial for positive word of mouth, which plays a significant role in expanding the institution's market share and earning profits in the highly competitive Sri Lankan market. These elements are fundamental to achieving organizational goals, maintaining high educational standards, and responding effectively to the ever-evolving demands of the education sector.

# 2.5. Integration of AI with Academic Administration Tasks

Integrating AI with academic administration tasks is a process that requires careful consideration. The implementation of AI should be gradual and all stakeholders must be informed about the changes. It's important to involve all relevant parties in the decision-making process, ensuring that the integration process is inclusive. The institution should identify the areas where AI can be useful and customize the implementation process accordingly. Additionally, the institution should ensure that the AI system is in line with its objectives and needs. Adequate training should be provided to staff and students to use the system effectively. It's also important to ensure that the AI system is secure and complies with data protection laws. A contingency plan should be in place in case of system failures or technical glitches. Therefore, the integration of AI with academic administration tasks is a complex process that requires careful planning, execution, and monitoring.

The study collected samples from five major educational providers in the Colombo district using the purposive sampling method. Data was gathered through a multiple-choice questionnaire given to approximately 100 participants in the sample. Most responses came from non-administrative staff, such as lecturers, tutors, and demonstrators working in the academic department. The study incorporates the theoretical model Unified Theory of Acceptance and Use of Technology – UTAUT, which defines the integration of new technology into the organization's tasks. The task owners need to believe that the application of new technologies would enhance the overall performance of their tasks, effort, and social influence. If the task owners have a negative stance towards AI, which is a new technology incorporated with academic tasks, it could be a hurdle in its implementation. It is important to note that the users need to be effective and accurate with inputs even though this study discusses the automation of tasks.

This research can improve the overall quality and effectiveness of educational institutions in Sri Lanka. The study delves into how most private education providers in Sri Lanka use study platforms like Moodle and Blackboard, but these tools might not suit the needs of local students, leading to practical challenges during implementation. Educational institutions are leading in adopting AI's capabilities, which is becoming more common in various industries. In a developing country like Sri Lanka, it is essential to explore new areas for sustainable development in the country's knowledge wealth, and this study focuses on how AI can play a crucial role in the education sector. It is often observed that students who attend private educational institutions have failed to meet the requirements for admission to local universities. Typically, these students have obtained less than three passes, indicating that their subject knowledge is below average or worse. As a result, they may find it challenging to understand the theories, functions, or guidance provided to them at the undergraduate level. Due to their nature, they tend to miss important deadlines, assignment dates, and notifications published by the university. If the institution does not closely monitor these students, it may be challenging to inform them in advance. Some students also tend to challenge the university by claiming that they did not receive the notification. They may come up with various excuses to cover up their negligence. On the other hand, the university may also change the assignment timelines due to various internal or external factors that are non-controllable but need to be considered, such as extreme weather conditions, riots, or crises that hinder students' attention. If the deadlines for a particular subject's task are changed due to one or more of the above-mentioned issues, the change in dates should be adjusted for all other subjects accordingly.

This research aimed to explore the impact of implementing AI in the tasks of the Academic Administration Department. No articles have been published in this area yet, so this study was conducted based on a sample of Administrators, Teachers, Students, Senior Staff, and Independent External Parties in the Educational Industry. The questionnaire was distributed among 100 participants from different categories, including state universities, non-state universities, institutes, and professional bodies in Sri Lanka. The data was collected during the period of December 2023 to January 2024, only in the Colombo Municipal area. The study focused on institutions that work as Partner Study providers for Sri Lankan students. There are assumed to be at least 15 such institutions in the Colombo Municipal Council area, offering foreign degree programs to students with a minimum qualification of GCE Ordinary Level (O/L) 6 passes with the English Language pass. It is estimated that there are over 10,000 students enrolled in these programs. While there were not many Academic Administrators working in the Academic Departments of these institutions, there were many Lecturers and Study Assistants. Therefore, this study also included these observers. The sample was taken from 5 of these partner providers using purposive sampling. Representatives from other departments, including Marketing, Sales, Finance, IT, and Procurement, also provided their input in the questionnaire. Despite being distributed among 100 participants, the response rate was below average.

# III.LITERATURE REVIEW

The integration of Artificial Intelligence (AI) in academic administrative tasks has the potential to enhance the efficiency and effectiveness of the private educational sector. Private institutions are far ahead of government university education systems in adopting new technologies for student assessments, due to the comprehensive and reasonable methods of assessment. In contrast, completion periods and assessments remain static in private institutions, regardless of internal or external factors. However, in government universities, students' completion of studies can be delayed for many months due to disciplinary actions, academic and non-academic staff welfare activities, government interventions, or protests against academic or governing policies etc. Due to these factors, implementing a new assessment scheme based on students' acquired knowledge is not always feasible in the government sector. This negative atmosphere has led to no recent improvements in government education systems, while private educational institutions are flourishing with many developments and improvements. This could be the main reason why the government is reluctant to interfere with this subject. Countries like Sri Lanka need to stop the flow of wealth out of the country by retaining private educational institutions. The main objective of this study is to ensure that AI technology can provide positive energy towards key tasks in the academic department. Despite discouragement from students, the benefits of AI implementation are limitless and worthwhile for institutions. This literature review explores the current landscape of AI implementation in the education sector and draws insights from related fields, shedding light on the impact of AI on administrative task efficiency. During my search for secondary information on the implications of AI on academic administrative studies, I thoroughly scanned multiple sources. However, there was no evidence of work related to my study context. Additionally, I carefully looked for relevant research studies, reference books, and journals that could support the argument in the hypothesis (H1), but I couldn't find any that directly related to the topic.

The use of AI in academic administration has several benefits, such as reducing manual workloads, automating routine tasks, and providing data-driven insights for decision-making. This technology can significantly reduce administrative overhead, allowing administrators and staff to focus on strategic initiatives. AI is widely used in various industries to improve efficiency, and quality, and minimize human errors. For instance, a study conducted by M. Young et al in (2022) observed 785,159 insurance claims and discovered issues with the originality of claims, resulting in the company paying for false claims. The study suggested that organizations could use AI to identify the subset of data where problematic claims are most likely to be found instead of relying on random sampling to audit claims decisions. This proves that AI is capable of understanding patterns and functions more delicately than the human brain and provides solutions based on pure logic. This logical thinking is essential for academic tasks because most of them are based on a timeline (Academic Calendar) that requires alignment with all the academic and other non-academic activities. Furthermore, ChatGPT, a trending phenomenon in academic and other fields, has led to problems in quality, integrity, and accountability. The use of AI for assignments, tests, essays, or letters has contributed to plagiarism, which is common in almost all parts of the world. De Andrade & Tumelero (2022) emphasized the use of chatbots to improve customer service efficiency in a banking system. They introduced AI as a chatbot system and stated that "AI positively contributed to the efficiency of customer service at the chosen bank." The chatbot system was assertive, effective, and fast, acting with agility, availability, and accessibility, saving customers time from halting in customer service call centers. The implementation of AI in the banking system facing customers increased efficiency and standardized the response rate. This case study shows the positive side of AI or Chatbot

technology. Additionally, AI has been implemented for ease of work, as mentioned by S. Yassine et al (2023), who used AI for the prediction of judgment. The system was designed to facilitate the decision-making process by accelerating the jurisdictional processes by implementing machine learning technology to predict the decisions.

The use of Artificial Intelligence (AI) is rapidly increasing in many industries around the world. One of the main benefits of using AI is the minimal margin of error, as the algorithms and outputs are based purely on given facts. In the education industry, there are many ways in which AI can be used, such as in the development of content for assignments, research papers, thesis studies, and other areas. However, it is important to note that the ability to develop different types of content for a given topic can differ significantly. For instance, there can be many variations in the content developed for the same topic given for an assignment, which plagiarism detection tools like "Turnitin" may not capture. A recent study conducted by Livberber & Ayvaz (2023) discussed the development of "ChatGPT", which has been widely used in content development. The study revealed that ChatGPT attracted the attention of over a million users in just one week after being released to the public on November 30th, 2022. The study involved 18 academics from Turkey and was quantitative in nature. The findings of the research indicated that ChatGPT is seen as a potential technology that can shape the future and generate text like a human, which is a positive attribute. Academics believe that ChatGPT will play a supportive role in scientific research and education processes. However, it is important to note that there are some issues that require consistent ethical regulations, accuracy and impartiality of the information, and the potential to reflect and disseminate erroneous or biased information in the education process. For example, some students tend to copy and paste information generated using ChatGPT without even reading the content. At times, they even copy irrelevant text generated by the Chatbot system. This can be caught by the markers or curators who evaluate the content generated using ChatGPT. As we have incorporated AI to assist with academic administration, researchers have explored the use of AI in various tasks within the education sector, such as grading. AIEd, a study conducted by Comesana et al. in 2023, utilizes machine learning, natural language processing, neural networking, data mining, and deep learning methods in education. The researchers conducted a literature review study based on published articles about the use of AI in educational systems. Out of 641 articles, they identified nine that highlighted the usefulness of AI in student assessments for primary and secondary level studies. After filtering, the study confirms a positive outlook for using AI in education assessments. The use of AI in specific tasks is a crucial aspect that requires examination. Particularly in the healthcare industry, when it comes to mental health care, it is important to document workers' tasks such as monitoring patients' behaviors, prescribing medication and therapies, offering emotional support, and more. These documents can include four main types of data: (1) health history, (2) medication, (3) diagnosis, and (4) treatment. They can also contain information about the patient's mental state, including one or multiple diagnoses, cognitive abilities, skills, and emotional issues, in a way that allows patients and/or their caregivers to better understand their mental functioning Rebelo et al., (2023). It is crucial to methodically record the continued progress of the given medicines and therapies and to replace healthcare workers' tasks to minimize human errors and maximize efficiency. To achieve this, 46 out of a total of 117 articles have discussed the replacement of human tasks with AI. The articles suggest providing the necessary training for staff and increasing support in using AI as a solution for record-keeping.

The integration of academic tasks with AI will be a challenge for institutional management unless the tasks are identified thoughtfully. There are many publications on the use of UTAUT, Venkatesh et al., 2003 and the adoption of technology to task efficiency discussed broadly as in Aygul Donmez, (2019). The mediation of adoption readiness about reversing the negative effect of user resistance and user anxiety on personal attitudes toward using a system into a positive attitude has critical importance in the adaptation of the users to a new system. There are many studies done on UTAUT for application for task efficiency, in Maryam, (2021) which examined Massive Open student courses (MOOC) system for educational purposes for students, and it finalized the correlation between study constructs with behavioral intention. During 2020 the COVID-19 pandemic dominated the world, and it had a bad impact on many sectors in the world economy. There were dominant changes adopted by the educational field explained by Abdulwahab, (2022). This is a clear indication of academic staff and students' transformation according to a given situation and what kind of attitude they have toward such sudden changes in the old system.

In conclusion, AI is a powerful tool that can be used in the education industry to develop content, but it is important to use it ethically and with caution to ensure that the information provided is accurate and impartial. Consistent ethical regulations must be maintained to prevent the dissemination of erroneous or biased information.

# **IV. METHODOLOGIES**

The use of AI has been proven to improve process efficiency and minimize errors caused by human factors such as ignorance, fatigue, and emotions. This research aims to explore the potential benefits of implementing AI in the Academic Administration Department to enhance efficiency and improve the student experience. Although replacing or modifying the current system might be challenging, it is an interesting topic to discuss. The academic administrators will be the key players in this process. The hypothesis of this research is to determine the correlation between AI and academic administration tasks. The research questionnaire comprises various points that examine the relationship between the workers, the system, and the worker's mindset with the implementation of AI. The study will be conducted across 15 private educational institutions, and the evaluation of the questionnaire will be based on a qualitative analysis since it is an impression analysis. The questionnaire was distributed during December and January to private educational institutions. However, response rates were low during this time due to the holiday season and the start of the new year. While the questionnaire was accepted by the participants, the number of responses received was lower than expected. Many participants lacked interest in the topic and found the questions difficult to answer. As a result, the questionnaire was redistributed to external participants. In total, we received 91 responses from the sample, which is less than 100. The response rate from academic and administration staff was only 40%, possibly due to their lack of interest or awareness in the subject of AI. Most participants were from the Marketing, Finance, and IT departments, accounting for 46% of the responses. The remaining 24% were from various other departments. Interestingly, some non-related participants expressed a great deal of interest in the subject of AI, even though it was not directly related to their field of study or occupation. Around 40% of the participants had over 10 years

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of experience in their relevant field, while 20% had more than 5 years of experience. The remaining participants had less than 5 years of experience in their field. Out of the participants, 39% identified themselves as Lecturers, while the rest held different positions within their respective occupations. We have extracted the following tables from the questionnaire responses. This table (Table 1.1) presents the demographic data of the respondents. The questionnaire was answered by a total of 91 individuals. The demographic data mainly covers three areas that I considered relevant for this study. Since the target group was academic administrative staff, we also gathered the occupational information of the respondents to ensure the accuracy of the figures. Question one focused on the department of the respondents. As expected, most of the respondents were from the Academic Administration department. The second largest group of respondents were from the IT department, which highlights the importance of studying AI. Nowadays, many organizations in the IT industry use AI as a tool to improve task efficiency and accuracy. The third largest group of respondents were from various unrelated industries, but still had an interest in the AI subject area. From question two, we can conclude that most of the respondents from the Academic department have been working for more than 10 years or have been in the department for more than 5 years. This is a positive fact for this study. Question three covers the capacity of the respondents. 38% of the respondents were lecturers or senior lecturers, and 26% were executive-level staff, indicating that they were likely from the Academic Administrators group. After analyzing the demographic information of the respondents, we can conclude that the objective of this study was fulfilled. The research study comprises 18 questions that delve into the hypothesis of the relationship between academic task efficiency and the implication of AI. This qualitative study aims to explore the positive relationship between AI and academic administrative task efficiency, focusing on the positive perception of academic staff and the improvement of academic quality for the student community in private educational institutions located in Sri Lanka. For this research, a questionnaire was created using a Likert scale model. This model is a popular survey tool that includes a series of statements, and respondents are asked to indicate their level of agreement or disagreement with each statement. The purpose of this model is to gather data on the perceptions of academic staff towards the use of AI in academic tasks. The data collected is then organized into a table and separated according to the hypothesis. If a question covers two hypotheses, it is included under both criteria. The final question in the questionnaire was an open-ended discussion, which allowed respondents to freely express their thoughts and opinions on the subject. This will provide valuable insights into the perceptions of academic staff and add depth to the study. Respondents were not required to answer this question, but most did, and the outcomes will be discussed in the research article's discussion section.

The hypothesis discussed in this study is that the implementation of AI in academic tasks will have a positive impact on academic task efficiency, leading to improved academic quality for the student community in private educational institutions located in Sri Lanka. The study aims to explore this hypothesis by analyzing the data collected from the questionnaire and the discussion question. In Table 2.1, the criteria for academic efficiency are discussed in detail, with a focus on five key questions - 04, 08, 09, 12, and 18. These questions are rated on a scale of 1 to 5, with only one response required. It is important to note that all questions in this section are compulsory and must be answered. The total number of responses received for these questions was 455. From the responses, it was found that 50% of the participants expressed agreement (Agree) with the questions, indicating a positive response. It is also worth noting that 20% of respondents strongly agreed (Strongly Agree) with the questions, which is a significant number. However, it is interesting to observe that 16% of the respondents were neutral or undecided (Neutral) on the questions. This could indicate that these questions require further clarification or that respondents may have lacked sufficient information to make a decision. Finally, a small percentage of respondents (10%) gave negative responses (Strongly Disagree/Disagree) to the questions. It is important to note that this is a normal distribution of answers and does not necessarily reflect poorly on the questions themselves. Overall, the data reveals valuable insights into the perceptions of academic efficiency and highlights areas that may require further attention or clarification. The perception and understanding of AI by staff or employees is an essential aspect that needs to be considered in any organization. To gain insights into these two points, this research designed seven questions numbered 05, 06, 10, 11, 13, 17, and 19 to investigate the staff or academic administrator's perception of the implications of AI. These questions are mandatory and have five options, from which the respondents must select only one. The researchers collected a total of 638 responses to these seven questions. Out of these, 43% of the respondents agreed (Agree) with the questions or the points mentioned, while 18% Strongly Agreed. This indicates that more than half of the respondents had a positive perception of AI. However, around 23% of the total responses, which is approximately 150 respondents, did not rate the questions. This could be due to their unawareness of the questions, indecision, or other reasons. Negative responses accounted for 15% of the total, indicating that some respondents had a negative perception of AI. A total of 98 respondents did not agree with the questions, indicating that they may have a different perception of AI than the majority of the respondents. These findings are highly relevant to the organization's decision-makers as they provide valuable insights into the staff's or academic administrator's perception of AI. The data presented in Table 2.2 can help the decision-makers identify areas where they need to focus their efforts to improve the perception of AI among the staff or employees. This passage pertains to a set of questions regarding the improvement of academic quality within the student community. The questions in this set include questions 07, 10, 14, 15, and 16, which are identical to the previous set of questions. The respondents were presented with five scales, where they had to choose only one answer. Although the discussion focuses on the student's perspective, the responses were not collected from the students themselves. Instead, the research study is intended for the academic administration side of things. Table 2.3 presents a comprehensive analysis of the responses, where a total of 465 respondents participated. Out of these, 48% agreed with the questions presented in the questionnaire, which represents 227 responses. The number of respondents who strongly agreed with the questions was low, representing only 15% of the total responses. Around 23% of the respondents were undecided and were unsure of their answers. This represents a level of unawareness that was consistent throughout all the questions. Moreover, 12% of the respondents gave negative responses to the five questions. However, the research study's overall response was positive, with more than 50% of the responses being positive towards the criteria. This indicates that the majority of the respondents are optimistic about the study's objectives, which bodes well for the future.

#### V. DISCUSSION

Based on the findings of the study, it appears that there is a positive attitude among participants towards implementing AI for academic administrative tasks. In total, there were 1558 responses to the questionnaire, with 66% (1023) of them being positive and indicating that participants are in favor of the proposed improvements to academic quality. This positive response aligns with the growing recognition of AI's potential to enhance efficiency and effectiveness in educational settings. Under concerns and negative responses, only 13% (203) of the total responses were negative. While this percentage is relatively low, it signals the presence of concerns or reservations among a subset of participants. Understanding the nature of these concerns is crucial for addressing potential barriers to successful AI implementation. This suggests that most participants are optimistic about the potential benefits of using AI in academia. However, there were also 332 neutral responses, which is a concern. This represents 21% of all responses, and the reason for this is not entirely clear. One possible explanation is that around 20% of the respondents were in the "Other" category, which means they may not have a relationship or awareness of academic administrative tasks. Another possible reason is that the demographic section of the questionnaire showed some scatteredness of responses, with a significant number of participants being executives and managers. This could suggest that these participants may not have direct involvement in academic administrative tasks, which may explain why they were more neutral in their responses. In addition, there might be a lack of awareness about the implications of AI for any industry, particularly in developing countries like Sri Lanka, where most industries are still recovering from the economic impact of the COVID-19 pandemic. It's also worth noting that the questionnaire was distributed among 150 people, but around 10 emails were undeliverable. As a result, the number of people who did not respond is estimated to be around 20-30, which is a relatively small number and is not likely to affect the overall results of the study. In conclusion, while the majority of participants express optimism about the potential benefits of implementing AI for academic administrative tasks, the presence of neutral responses raises concerns. Addressing the underlying reasons behind these neutral sentiments is crucial for ensuring the successful and inclusive implementation of AI in the future. Strategies to enhance awareness, tailor communication, and engage participants from diverse roles will be essential in mitigating uncertainties and fostering a more informed and positive stance toward AI integration in academic settings.

The responses for question number 21, which the answer can a discussion discussion-based one the responses are given under the Annex section of this article.

#### VI. CONCLUSION

The findings of the study indicated that a significant majority of participants had a positive attitude toward the use of AI for academic administrative tasks. The positivity is in line with the potential of AI to enhance efficiency and effectiveness within educational contexts in Sri Lanka. The study also identified some noteworthy considerations in the responses obtained. While the overall sentiment was positive, less than 20% of the responses were negative, suggesting that some participants had reservations or concerns about the use of AI. It is crucial to understand these concerns to address potential barriers to successful integration. Some participants expressed apprehensions about AI's impact on employment, with concerns that it might lead to job losses or devalue human contributions. Other participants expressed concerns about the autonomy of AI and its potential to make decisions that could negatively affect academic quality. The study also found that a significant number of responses were neutral responses. Further analysis revealed two possible explanations: some participants were not directly engaged or aware of academic administrative tasks, while some executives and managers did not have direct involvement in these tasks. Additionally, the economic impact of the COVID-19 pandemic in developing countries, particularly in Sri Lanka, may have contributed to a lack of awareness about the implications of AI among some respondents.

In conclusion, while most participants were optimistic about the potential benefits of AI, the presence of negative and neutral responses raised concerns. To ensure successful implementation, it is imperative to address these concerns, particularly among those less engaged or aware of academic administrative tasks. Future strategies should prioritize enhanced awareness, tailored communication, and targeted engagement to foster a more informed and positive stance toward AI integration in academic settings. These considerations will contribute to the effective and inclusive adoption of AI technologies in the academic realm.

# **Research Through Innovation**

# VII. ACKNOWLEDGMENTS

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# IX. ANNEX

Question	Academic &	IT	Marketing &	Finance	Other
	Examination		Sales		
01. "I'm currently working in department"	37	10	16	8	20
Average	42%	11%	18%	9%	22%
Question	<mark>6 Mon</mark> ths	1 <mark>-3 ye</mark> ars	3-5 years	5-10 years	More than
					10 years
02. "I have experience in the department"	14	19	10	14	34
Average	15%	21%	11%	15%	38%
Question	Executive/Senior	Manager/Senior	Lecturer /	Professor/	Other
	Level	Manager	Senior	Dean of	
			Lecturer	Studies	
03. " I'm currently working in the capacity of"	23	24	35	ſ	8
Average	26%	26%	38%	1%	10%

Table 1.1. Demographic Data Study

Criteria & Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Improving the administrative task efficiency					
04. "New technologies are useful in improving the efficiency of my day-to-day work".	5	0	2	24	60
08. "Using AI technology to replace human tasks is preferable due to the higher accuracy in decision-making that it provides"	6	17	32	28	8
09. "I believe that implementing AI technology in the Institution will help optimize resource usage."	3	4	15	59	10
12. "Using AI technologies to automate routine tasks will enhance departmental efficiency."	1	1	8	66	15
18. "Implementing AI technology can simplify the duties of non-academic administrative staff."	2	8	16	56	9
Total	17	30	73	233	102

Table 2.1 Data study for Improving Administrative Efficiency

Criteria & Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
The implication will create a positive perception of the academic staff					
05. "I'm benefiting from using AI technologies for day-to-day work."	4	2	19	37	29
06. "I am open to learning and adapting to AI technologies to improve our daily work processes."	2	2	5	43	39
10. "Use of AI technologies can reduce human errors caused by forgetfulness."	1	5	13	56	16
11. "There is a positive correlation between the use of AI technologies and the level of customer satisfaction."	2	9	34	40	7
13. "Using AI for private educational institutions with existing study platforms such as Moodle and Blackboard would be an unnecessary expense."	7	30	31	19	4
17. "After implementing AI, non-academic administrative staff may be less willing to comply with the changes."	2	21	30	33	5
19. "Before implementing the AI implications to Academic Administration processes, it was necessary to gather feedback from students."	3	7	18	49	14
Total	21	76	150	277	114

 Table 2.2 Data Study for Academic Staff Perception

Criteria & Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
This implication will improve the academic quality of the student community						
07. "Our team uses AI tools like ChatGPT to simplify writing communication."	3	13	24	37	14	
10. "Use of AI technologies can reduce human errors caused by forgetfulness."	Rei	5	13	56	16	
14. "I suggest imposing strong sanctions on individuals who misuse AI tools."	5	4	23	43	16	
15. "Even with th <mark>e use of AI, students may still intentionally overlook crucial notifications and emails."</mark>	3	5	28	46	9	
16. "AI Tools are being used by students to compile assignments and write-ups, which has negative implications."	12	8	21	45	15	
Total	24	35	109	227	70	

Table 2.3 Data Study for Improving Academic Quality of Students

21. "AI can improve task efficiency in an institution." briefly provide your feedback.

- 1. Absolutely! AI technologies can enhance task efficiency in institutions by automating repetitive tasks, streamlining processes, and providing data-driven insights. From administrative tasks to data analysis, AI can optimize workflows, allowing institutions to focus on more strategic and impactful activities.
- 2. Absolutely, AI has the potential to significantly enhance task efficiency in institutions by automating repetitive tasks, streamlining processes, and providing data-driven insights for better decision-making.
- 3. Ageed. AI will bring down the human errors in evryday task and it will also save the time of the users significantly, which will enhance the overall efficiency.
- 4. Agree
- 5. Agree..but always need a human touch just like a icing on a cake..
- 6. AI can assist institutions in transforming and improving the student life cycle as well as academic staff. AI provides support to gather wider range of information as an one roof
- 7. AI can improve aspects of information management such as data integration, data quality and data security. Moreover, AI can free up staff time to work on more engaging tasks for example; focus on strategic, high-value tasks.
- 8. AI can improve efficiency some parts of the institute work. Others are done by involving human beings. If it is not may have been facing lot of problems. Sometimes may be damaged the hole process of the institute. Therefore apply AI, to the institute should be think carefully.
- 9. AI could improve the efficiency at the same time people have to change the attitudes and bad day today routines and behaviours
- 10. AI has the ability to improve the efficiency of the tasks if you use it in correct manner.
- 11. AI has the potential to enhance task efficiency by automating routine processes and streamlining workflows.
- 12. AI has the potential to enhance task efficiency within an institution.
- 13. AI is not an enemy. We should have an idea of what it is. We are able to use AI to make timetables, allocate rooms, and group students for various tasks. From a human perspective, these are very complex tasks with a higher chance of making errors. However, AI can accomplish them in less than a minute and can easily adapt to changes. Results analysis and feedback can also be efficiently handled using AI. We can achieve a lot using AI.
- 14. AI is the tool which is available in present time. However user should have a good understanding on what, where and how to use as we use other tools as well. As long as you have a clear idea. On above questions you will benefit from the advantages of the tool, including efficiency as a one benefit
- 15. AI should be used as a secondary tool to assist timely tasks. Human decision making should be prioritized.
- 16. AI still has a lot of drawbacks. It needs further improvement before applying it in a context like administration
- 17. AI tools can improve the efficiency of work .. better people are open to use new technologies without doing the same workload every day.. Al tools can easily implement to the people who have open mindsets to improve work efficiency..
- 18. AI will support the efficiency in administration field, not in academic field. The purpose of academic activities will not be done effectively using AI.
- 19. Al can be used as usefully when we input creative idea and prepare that as a perfect ooutput. So it is reduce the time taken to prepare most of documents at the office. But the efficiency will be high if we use only this benifit
- 20. As the improvement of technology AI has become a major role in every feild. But as a human we should get only positive things from it to improve the institutional development in the country.
- 21. Based on the proper requirement analysis of all parties involved, it can be improved the efficiency.
- 22. By automating mundane activities, AI can free up staff time to work on more engaging tasks.
- 23. Definitely, improves efficiency and saves a lot of time, which could be used for other tasks.
- 24. Depends on the scope of work.
- 25. For simple and more repetitive tasks AI can be more efficient as it allows these tasks to be automated and streamlined
- 26. Generative AI can boost worker productivity
- 27. Good Option
- 28. I agree with that, AI as a tool to improve efficiency but it should not be misused.

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- 29. Improve employee experience
- 30. In an education institute, it cn only be used as a record keeping and automated mode of communication in my opinion.
- 31. Inevitable, institutions that can adopt the AI to reach business goals, acedemic targets and optimize resource utilization will be able to come out on top.
- 32. It can be use for risk management and data analysis especially for health care providers where we can use AI in maintaining personal health records.
- 33. It can help by streamlinning processes and eliminating repetitive tasks. AI improve productivity and cost reduction
- 34. It can improve efficiency in most of the tasks and some tasks may need human involvement deeply
- 35. "It can improve efficiency within it's boundaries and can improve employees performance but ethical side should be taken into consideration.Further fully implementation of AI in the operation area of org should be limited to certain areas, example, Customer service: human interaction is necessary.
- 36. When it comes to course assessments, take home assessments should be reduced and in class assessments should be increased to reduce the AI influence in students writing..."
- 37. It can improve task efficiency but it should never be used to replace humans
- 38. It can work better in a country lie Sri Lanka where employees tend to get lazy
- 39. It could reduce the time spent on a task by a considerable amount. It is efficient to get reports drafted using an ai and reshaping according to the needs.
- 40. It will depend, AI canâ€<sup>TM</sup>t do everything as human do but AI can do some level and definitely want some human interaction for level up AI efficiency
- 41. It will simplify the processes
- 42. It's true to some extent. But prople can't solely rely on AI for efficiency. It lacks feelings which is very important to deal with people in an organisation. Eventhough the taska can be automated with AI, you will need human interference to get a complete output from it. AI gives you the amswer from what it got trained and from the things it is learning. So in case if there is a new problem, then AI can't give an appropriate solution, thus there will be a big question mark about efficiency.
- 43. "More over ai can have more various type of many staff time may reduce from so much work and hard-working.
- 44. It's feel better to make less time lot work so staff works may less time more effective working.
- 45. Some errors might happen in understanding ai or person so care full to make it can have a human full fill
- 46. "
- 47. Most probably, it can
- 48. My idea is use of AI will improve efficiency but solely relying on AI to do all the activities can become a bit problematic

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