Identification of higher education administration applications efforts to improve digital-based academic services

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Abstract---The authors believe that the presence of technology, especially digital applications, has not only made it easier for the work of a limited group such as business and banking and other businesses, but this digital application has also provided extraordinary convenience to educational administration matters especially universities. We have collected evidence of researchers' findings in technology effectiveness in administrative services at universities. Furthermore, this information requires a comprehensive study to summarize the data as a discussion material to identify how the ease of providing high-quality applications can be improved with digital technology application services. In this field, we use a coding application form for a comprehensive data evaluation and conclude that the data findings are significant in answering the problem on the principle of high validity. Based on this, we can understand that technology has revolutionized administrative services at universities, including managing student literacy both from study entry and graduation, it is also helpful for academic services, financial affairs, academic development management. We believe this data is in answering problems and the existence of these findings is an essential
input for efforts to develop the application studies using applications to improve the quality of high change services in the future.

**Keywords**---academic service, administration, higher education, identification, quality improvement.

**Introduction**

Since digital technology entered the world of higher education, researchers note that there has been a considerable change in academic work and services with an administrative system integrated with technology (Lea & Jones, 2011; Putra et al., 2020; Aslan, 2020). This can be seen how since the emergence of the Wah pandemic, which coincidentally hit the world of education, it can also be seen how education leaders are trying hard to improve services and efficiency of education delivery due to government policies and also other business institutions to stop for a moment. The moment of virtually optimizing services and traditional interventions and routines has slowly come to a halt (Becker et al., 2017; Putra et al., 2020a; Manullang et al., 2021). Simultaneously, there is also a process of moving large amounts of data from desktop to desktop, from mobile to mobile. With this transition, academia, primarily administrative services, must work hard to move the traditional way of working by changing to a transition to a unique computing environment that is super-fast and instantaneous. This is the impact of technological advances on employment in academic services and university administration compared to the previous way, which only relied on working with paper and simple machines (Picciano, 2012). In other words, this is the era of big data that is very innovative and highly productive.

It must be admitted, the presence of information technology has changed the teaching and learning process and administration, starting not from elementary schools but at universities around the world (Firmansyah & Maulana, 2021; Suroso et al., 2021; Aslan, 2021). This technology has not only revolutionized data processing, but the task of administrative governance has also made various forms of communication more interpersonal. At this time, the opportunity to connect has proven to be something insight where technological developments and scientific developments are increasingly becoming real (Fahyuni et al., 2020). In addition, the presence of social media, which is a technology that has also innovated in the way students learn and how they view education in a very traditional way, which is very much a backpack, will be an exciting thing where innovation has allowed education to enter an era of transformation into education new. It is not difficult to admit that this is the reality of a campus where information is instantaneous (Fauzi et al., 2018).

Indonesia, one of the developing countries with the ability to manage technology, the more universities in the archipelago, the easier it is to provide essential services to develop communication that used only to happen conventionally. However, now elements of universities have been able to create programs to maximize administrative services that are available better and faster (Rahiem, 2020). In the early days of the presence of social media, many thought that this was how application after the application was developed and adapted, becoming a
necessity not only in terms of friendship, work but also services and adoption of educational administration services, especially in universities (Rahiem, 2020). With the presence of this technology, critical phases become very important; this will be more integrated into the virtual admin application, where considerations are fast, precise, and most importantly, efficiency will occur where the community becomes an opportunity to meet virtually. They have not been able to integrate work within the agency. However, since this technology has become something significant, innovations in data studies and various facilities used to create various applications have now become like social media to double task functions. Moreover, administrative applications at the university level are becoming more creative and innovative in reality (Leong et al., 2020).

Along with global education policies that seek to improve service quality with the help of technology, a configuration of higher education services, it has provided the necessary results to realize an increase in administrative services that are transparent, efficient in the reverse service matrix method (Ball, 2012). Various software with much experience from previous academic services and educators and curriculum development with this understanding collaboration build virtual higher education tools that are adjustments to improve higher education academic services (Coenen et al., 2012). Of course, in their service, these various virtual software offer solutions from many functions into one roof with a mechanism to manage all activities and administrative service processes needed for academics and prospective students to get an integrated one-stop data entry acceptance solution. Secure and with an improved user experience (Ball, 2012). It must be admitted that since technology emerged, virtual software for higher education administration services is a tool that can reach all existing networks, both in terms of maintaining the modern accounting student registration process as well as assessment and evaluation (Blouin et al., 1988; Ghavifekr et al., 2013). Online student exams include regulations and other logistical strategies, which used to be a highly complex thing, compared to now it is an easy thing, a bit of a challenge (Elmoselhy, 2013).

Now with the advent of technology, it is hoped that various college majors with integrated systems and automation with virtual software make higher education administration functions fair and data-based (Pucciarelli & Kaplan, 2016), which is safe and saves pepper because everything is finished integrated with this screenshot makes it easy to operate with a transparent system in where high has admin rights and gets the transparent services that everyone needs (Johnson, 2002). By installing a high-level office administration service system using this technology is something that can be done instantly, time-efficient, very energy and cost-efficient which; when pressed, this service makes all of the above things easy and accessible so that the campus that used to be considered something complex (Becker et al., 2017). With the complexity of imitation that is so difficult, technology can now readily offer something very flexible, speedy, accurate and is a client service dream that provides solutions for both students and parents as well as everyday acceptance covering a wide range of applications and mobile connectivity systems and better service, management that is centered on managing student data from the induction faculty and also student attendance electronically (Huang & Lin, 2017).
After everything was done with an online system, distance education services were no longer impossible because of the development of feed technology so that everything was well integrated and measurable (Eckerson, 2010). Thoughts and ideas that prioritize the development of a virtual administration service system are becoming a trend increasingly because they create a new paradigm in education and other academic services (Pakhomova et al., 2021). This continues to share experiences in terms of administrative services by integrating all other reacting software so that integrated services based on data and the internet are no longer impossible. However, services in underdeveloped countries can slowly follow adopting the system educational application services in developing countries (Brown et al., 2020). The hope of a university, like any other institution, is to obtain orderly administrative services. Using a public participation model that is increasingly reaching the wider community is very useful in completing previously impossible work but is now very possible with the principle of technological agility so that literacy in humanitarian services can become real (Krishnaveni & Meenakumari, 2010).

Today, digitalization transformation services in all fields have stated that agility and speed are the new breath that will succeed the university paradigm as an agent of change for other organizations, both public and government (Siebel, 2019). This is an approach that allows it to be implemented along with the presence of technology that is increasingly difficult to develop to provide valuable services and conveniences not only for a limited group but also for the wider public where IT is something that is needed by organizations, including universities and schools in general (Lepeley, 2020). To that end, they replied, however, that they must have the support and participation so that the virtual literacy-based Indonesian government becomes a reality, not only profitable for achievement but also for the community for academics, employees, the public, and the environment. where the university is located so that everything will be profitable and breathe sustainability (Lang et al., 2012). Finally, based on the facts and problems above as well as solutions that approach the answers to these problems need to be studied and researched, and disseminated because organizational administration service efforts, especially high-level roles, are digital-based academic services that continue to strive to improve efficiency, flexibility, and productivity (Wognum et al., 2011). With extensive data exploration supported by field study findings that are continuously updated, this research will get convenience and benefits so that it will make it easier for experts, especially the academic community and the academic community in general, to get the convenience of digital services as part of university administration services. More innovative, creative, transparent, and bold (Criado et al., 2013).

With the commitment and purpose to the problems above, this study will optimize the search for data from some complications and existing databases that raise the themes of identifying high administrative applications (Diachenko et al., 2021), efforts to improve administrative services will become an exciting and essential discussion to continue to be researched and shared with the community. It is hoped that all of them will become valid findings supported by facts and reality to answer the problems raised in this study (Starr & Van Wassenhove, 2014).
Method

Researcher will explain the study’s flow and systematics in this method section. First, the problem formulation identifies innovative admittance applications universities can use to digitally improve academic services. We believe that through extensive data exploration, the discussion of this study will become more exciting and comprehensive (Tiangco, 2020). Therefore, we have optimized several databases of journal publications, books, websites, and all related literature sources to find answers to the problems of studying high village administration. As for the data sources, we mean some publication journals such as ERIC, Taylor and Francis, Google, Academic publication, and several domestic publication journals that have raised discussions of technological innovations and their benefits for the smooth administration of services in high rooms. We need to optimize secondary data from some applications mentioned above. We will then examine with the broadest exploration approach to obtain findings to answer the hypotheses and problems of this study with the validity and reliability of the data (Bengtsson, 2016).

The analysis process that we have taken here is coding the data, analyzing it in depth, and making a very critical interpretation so that it is easy for us to understand the question and at the same time get a valid answer (Edwards, 2020). We use a keyword search system such as education, administration application, improved services, and digital-based admittance to get the online data. We designed this study entirely in descriptive qualitative data by following several previous studies that have successfully carried out and reported high educational and administrative findings (Suter, 2012). So that the data that we present are indeed updated, this situation focuses on finding information and data published. The number of publications in both journals and books, namely from 2010 to 2002, is one, so we believe the data is. As stated above, this study is accurate, which relies on secondary data (Widana et al., 2020; Kanca et al., 2021). Therefore we did not search field data considering that this study was carried out when Indonesia was still in the application era to respond to the 2021 pandemic with all government policy programs on public restrictions (Glesne, 2016).

Discussion
Definition of college administration

First of all, we need to clarify the meaning of administrative applications, especially in a university environment (Seo, 2013). Here we mean an administrative application that is used to get, save and report all data and information; the problem is in terms of scheduling campus activities, receiving information and student applications, arranging and transferring students, making financial claims, and handling student financial literacy billing tasks and setting arrangements. Other administration related to student academic service tasks and financial administration in the high room (Erskine, 2013). A broader administration is when university executives where management governance works within the scope of high administration by managing a process of providing fair and open literacy, such as the implementation of public services at a certain
intensity after passing various policies and regulations of their respective high changes (Slack et al., 2010).

All of that should aim to give authority to the partner party by the university who must be responsible for all maintenance and supervision of institutional investment tasks, which are of course separate from the part of the investment, separate from the affairs of the academic faculty, and even matters of a public relations nature that have each responsibility but one goal (Ducuing et al., 2018). In terms of high-required administrative tasks, this means that the organizers of university administrative tasks certainly have the task of maintaining, developing, coordinating, and evaluating various programs run by universities, both public and private. With various types of administrative tasks, all of them have to be responsible for the tasks assigned, from university assistance and support, so that academic activities can continue (Carey, 2013). In other words, administrative officers at universities certainly have the authority to control how our day-to-day operations are carried out, including supervising lecturers' employees and in charge of preparing budgets and can also be liaisons between outside parties and the campus so that the duties of the administrative management can work with tasks with academic student assignments and other administrative staff (Oleszewski et al., 2012).

In simple terms, it can be concluded that the execution of executive administrative duties in this investment is managed by working within the scope of the university, where services and granting pardons are for the sake of balance and justice in the workplace and are responsible for all public administration (Kerzner, 2017). Service matters are, of course, with regulations and policies from high leadership. For example, we can provide that each must refer to a working group tasked with presenting and enforcing rules and regulations or admin officers in the position of chairman of the leaders who complete essential tasks at the university (Andert, 2011). An example of this leadership is if in foreign education concepts such as America and other Commonwealth countries, people who are intended to support university governance by adhering to the most important aspects of being defeated by diversity, must have one concept and have the ability to carry out all literacy tasks successfully (Caraher, 2016). So, for example, a high school administrator has the right to oversee student services, services to academics, services for research assignments, and work in various ways with the focus of the high policewoman area they manage such as student admission duties, academic, cultural life tasks. Moreover, registration tasks and tasks related to the academics of rectors and deans are all categorized under high administrators (Schneijderberg & Merkator, 2013).

The existence of information and communication technology in higher education has gained added value over the last 15 years. It has brought reforms in higher education in completing activities and processes to improve the quality of services, administration, and teaching. Pessôa & Trabasso (2017), understand technology as a tool that supports all high-change administration activities starting from acquiring information storage, calculations, analysis, application, and use to complete tasks that were once considered very difficult but now with the presence of laptop computer infrastructure and internet networks. All of which enable university penetration to run efficiently and stably (Gettys, 2011).
This is possible because various studies and research have fully understood that exceptionally high service administration technology effectively handles all complex problems easily. After all, with the ability of technological innovation, it can integrate a concept into applications. It is oriented towards achieving the final product made the popularity of technology among high-ranking officials (Sadeh et al., 2019).

In other words, the administration is a planned process integrating human resources to achieve organizational goals, namely technology to regulate higher education institutions. The administrative function, of course, requires the administrator’s ability to function all tasks and make the right decisions quickly following the given authority; therefore, the arrangement and imitation given high has been expanded as a service activity through a goal of a predetermined process (Nikitenko et al., 2017). That is how in completing administrative tasks at the technology colleges applied in this task developing electronic applications so that the management of all transactions and writing as well as providing academic services related to them quickly and adequately starting from the electronic registration process, electronic curriculum services, digital teaching modules, monitoring and evaluation, all can be done virtually (Kalar & Antoncic, 2015). Furthermore, several technologies used in tall tree administration applications can improve service efficiency and reduce unnecessary bureaucratic mechanisms in educational administration management. Therefore, technology will simplify the administrator’s task and optimize the use to solve all problems that are never finished today. So in carrying out literacy tasks at universities related to information systems, choosing a digital application system has an influential role in reducing community challenges and problems. Administrative and staff work in analyzing and serving students and academies a lot of time and money can be handled (Muscio, 2010).

This digital technology also helps manage daily tasks and the annual admission of new students, recording job managers, exam tests, automatic evaluation of staff, all of which are programmed to be developed by a working system that prioritizes accuracy, including financial information management. Moreover, the distribution of data and promoting progress between the university and the community was essential for high interaction with partners (Hilbert & López, 2011). Therefore, all of the things we mentioned above are attempted to improve the efficiency of administrative work, both teaching internal student services and public services, all of which are carried out to identify problems and straighten problems into coordinated coordination and targeted orders (Hershatter & Epstein, 2010).

**Evidence of the use of technology in administration**

Seeing the concept of digital technology in the application of the corporate world, including handling administrative technology, this is a breakthrough that is technically designed and supported by human resources capable of processing and handling online data storage, maintaining, and disseminating information smoothly (Tidd & Bessant, 2020). The capabilities possessed by technology, especially in handling migration, can be considered a triumph of machines that break progress. Name the tools that strengthen support for high-change work
activities in finding work which consequently is very beneficial for universities (Pérez Jr, 2012) in preparing to make changes that have an impact and achieving economic value from this is a dream rather than a high sacrifice to be able to carry out its service functions with exciting rules and mechanisms in carrying out their duties (Selznick, 2011).

This digital technology application is indeed designed with data with application programming on a computer, such as how to freeze the presentation page, how to display poetry and then display information, which is a need needed by every institution, such as significant changes and industrial industries that require a solid and solid administrative service arrangement (Theodorakopoulos, 2017). Perhaps the system’s incompetence in many institutions requires more attention than university employees in handling data related to providing information to other parties such as guards, controllers, and universities that want to change accurately (Chilima, 2019). It can decide after evaluating a set of quality-keeping certifications in its development for high-quality work. With this extraordinary technological capability, every job, such as supervision, supervision, and other evaluations, is used for new decision-making (Larson et al., 2010), so that the quality of investment services can be categorized as worthy of obtaining a weighty certification as well as university leaders who have enough critical information.

In this case, the desire to know the condition of students’ progress, teaching staff, administration. These are several unified systems to assist experts in decision-making while monitoring how the circulation of human resources can optimize the effectiveness of administrative tasks (Abrahams, 2010). Here, the role of technology in higher education administration tasks cannot be doubted because it is clear that information technology, in this case, supports how universities can be developed into a vital institution in the guidance area. Where is it located (Aris et al., 2019)? In other words, the progress that can take place around the university cannot be separated from the support of human resources owned by the institution in terms of dealing with how technology can function and support all jobs that were previously impossible to do (Andersen & Rocabado, 2021). However, with the presence of this technology, it is written something right for the development of technology that is handled and to record and simplify how the administration of higher education runs on the expected track. Progress in a solid administrative effort can rely on how attendance and mandatory attendance can provide an atmosphere for new records to facilitate the increasingly open nature of work (Doppelt & McDonough, 2017). So that the parties can get archives and automatically save space and style, all of which are a form of the effectiveness of technological innovations that allow the development of literacy to save human and financial resources. Moreover, it has the forefront of designing applications needed in administrative tasks (Radjou et al., 2012).

**Conclusion**

In this final section, the study will present essential points from the study’s results to identify how digital application technology can provide innovation and renewal in academic services, especially literacy. The authors believe that the findings supported by the evidence of previous studies are very relevant to answer this question on this salary with valid values and considering that all the data we
present are the most recent data published from 2010 to 2021. Under our phenomenological approach, we have explored several data and evidence of previous studies so that the problems and challenges faced by investment, especially other investments, have given a new light wherewith the ability of innovation power and high speed in providing services, finally all parties do not hesitate to make sure that the existence of this technology is truly an innovation and also an effort to accelerate the achievement of academic service goals.

In recent times, technology has provided effective services for limited business circles. It has also provided convenience in many ways, especially high-required administrative services, both from registration services and all administrative functions that have been described in terms of technological capacity. Well, the point as for the points that we describe, among other things, we provide an understanding of the definition so that the admiration that is owned by the significant change here is indeed in the context of an effort to record for services to provide information quickly, so in this technological era the presence of spotted provides ease and acceleration of dissemination. Work and various functions harmonize with a very transparent and open process. Other conveniences that the application has and the accuracy of its use, among others, are supported by the number of hidden ones as evidenced by previous studies where the concept of digital technology is to work with an application system that it includes handling administrative tasks in tall trees which were technically done manually in the past with rappers. However, with the support of these extraordinary human resources, the existence of this final technology aims to provide high-speed and very accurate services so that the aspiration of investing in developing well-supported application services can be realized with the application of today's digital technology innovations.

We believe that the presentation of the data has given new light to the discussion of the theme they are referring to. We are sure and believe that this finding from secondary data certainly has weaknesses and limitations. Therefore we hope for constructive input and criticism so that further studies will get significant input.

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