Online School Management Model for Supported Fullday School Management in Industrial Revolution 4.0

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ABSTRACT

The existence of internet in modern era makes society easy to do their activities. All aspect of human life is based on online or connected to internet. The development of e-administration in school administration is one of them. This study was descriptive qualitative which aims to describe and to explain school administration concept based online to ease school management in digital era. Source of data divided into two, including document and informants referring to education expert, education implementer unit and society as education user. Technique of collecting the data were content analysis and in-depth interview. Triangulation of source of data technique were used to validate the data. The result shows that there are some school administration system based online to ease school administration process. They are school registration based online (e-registration), school payment based online integrated with certain bank account (e-school payment), teaching journal based online (e-journal), and student achievement report based online (e-raport). Besides, school is also facilitated by school administrator which can be contacted via whatsapp and telegram applications to ease education user on asking for information about school and education.

Keywords: *School Administration, Online System, School Management, School Based Online System, Technology Development*

1. INTRODUCTION

In globalization era, human life in which all aspects become modern cannot be separated from the easiness of information and communication access phenomenon. The development of technology recently facilitates some tools for information delivery medium. Tools or application can easily show information based on the proceed data. If the data needed have been saved in database, like student data and their academic achievement integrated in database, the database can cope with the problem of difficulties in accessing and integrating data [1]. With technology development, it directly and indirectly will affect human life style into digitalized life style. It indicates that human life style is the effect and reason of technology utilization itself [2].

The easiness of information and communication access cannot be separated from internet which can reach wide range area in the world. In education area, the influence of technology development can be utilized to facilitate academic activities in school. Modernization in education make everything smoother and easier, like internet, Wi-Fi facility and computer can be used as supporting progression in education [3]. Education institutions are demanded to always follow science and technology development which increase gradually, because

education based curriculum instructional will only lead imbalance of unavoidable technology development.

Internet is utilized to ease school management process. All this time, school management process still uses conventional system operated manually. Conventional system has been operated during some periods in some schools. However, it still shows weaknesses like too difficult procedure, spending much time, requiring many personnel, restricted time, and ineffective, so error system sometimes still occur [4]. Consequently, the more effective, efficient and practical school management system is needed. School management system based online or mobile is one of them.

Mobile development gradually increases by the sophistication and completeness of features which is updated continually and makes consumers easy to access information anytime and anywhere. Mobile utilization in daily life used by society, industry and education ease them to deliver and access information related to academic through mobile phone or mobile network [5]. Mobile system can be used in terms of registration, school payment management, journal management, school administration, and student achievement report systems.

Smartphone technology and mobile application began developed by using android platform based Linux, which also more excellent than Symbian platform generally used. The benefit of using android platform are complete (complete platform), open (open source platform) and free (free platform). Mobile operation system based android is rapidly developed than Symbian platform of JME technology [6]. Hence, there is an opportunity for android user to make application which can access freely and widely. Moreover, android user can make a new system for organization or institution need to increase work effectiveness. Besides, android application can cope with some operational problems related to website and short message service (SMS) media usage, by creating certain application based mobile, simpler, fast and effective bandwidth, more informative and operated anywhere and anytime [7].

Discussing about smartphone technology system and mobile application which gradually get increased, those can also be used to facilitate and to ease school management process. Technology development make many education organizations and institutions utilize technology based website to spread information because of its effectiveness and efficiency [8]. Therefore, this study will describe mobile system utilization deeply to ease school management system including registration management, payment, administration system and raport or student achievement report based online systems.

2. METHOD

This study was descriptive qualitative. It was a case study to describe in detail and depth about condition of what truly happen. Descriptive qualitative research mostly focus on naturalistic principle [9]. The aim of this study is to describe and to explain school administration concept based online to ease school management in digital era. Source of data divided into two, including document and informants referring to education expert, education implementer unit, society as education user. Technique of collecting the data were content analysis and in-depth interview. The data were reduced and then analyzed by using flow model of analysis and interactive analysis model. Data analysis included data reduction, data display and conclusion in which all of them are simultaneously connected and continuously conducted

in data collection process of flow model of analysis [10]. Triangulation technique of source of data were used to validate the data.

3. RESULT AND DISCUSSION

This part will discuss about some mobile features systems utilized to ease school management system, including registration system based online (E-Registration), payment based online system (E-School Payment), administration based online system (E-School Administration) and student achievement report based online system (E-Raport)

3.1. Registration Based Online System (E-Registration)

School registration system is known as New Student Enrollment (PPDB). All this time, PPDB mechanism still used conventional system. This system requires new student candidates directly to come to school destination for proceeding registration. This system certainly has many weaknesses such as lack of control and conditioning the candidates. This results from manual registration which needs many personnel to accommodate candidates in school. This system is also not effective in terms of cost and time. However, system must be able to be accessed anytime and anywhere and to produce information automatically without manual count which sensitively get error and wrong information [11].

In digital era, school registration based online system has been developed. It has been applied in some schools. The process of online PPDB has been done to ease society as education user on proceeding online registration [12]. The process of online PPDB known as E-Registration collaborating with department of education and culture in district (Dinas Pendidikan dan Kebudayaan Daerah) and province (Dinas Pendidikan dan Kebudayaan Provinsi) levels are connected to e-registration page. The benefits are cost, time and personnel effectiveness because all system and registration documents has been based online.

3.2. School Payment based Mobile System (E-School Payment)

School payment is one of administration requirement to fill by student candidates. School cost payment is utilized for school operational cost including electric bill, office stationery purchase budget, internet bill, transportation, references purchase budget and other services. In digital era, payment system can be done through online. Online payment system is directly connected to collaborated bank [13]. Collaborated bank get school cost payment from candidates and re-registered student for next semester.

Payment based online is more effective and practical in term of funding management, because payment is directly saved in school saving account. It also can minimize corruption practice in school funding management. If payment system is still manual, the probability of corruption practice and human error must be great rather than payment based online system which directly connected to bank and school saving account [14]. Besides, payment based online system give a positive effect to school finance count and management because payment is based online or e-school payment directly counted by bank system which has a great accuracy.

3.3. School Administration based Mobile Application System (E-Mobile Administration)

Education cannot be separated from administration system because it is one of academic documents supporting education process in school. Administration can be considered as a process or as task (duty) which must be fulfilled [15]. Administration as task (duty) which must be fulfilled in education activities as proposed by Usman [16] includes student; educator, staff and organization structure; finance; tools and infrastructure; school and society relationship; special service (counseling guidance, student health unit, school cooperation unit, and extracurricular activities) administrations.

School administration must be well-ordered and well-regulated to increase education management ability. To make activities more effective and efficient needs sufficient information. Information system in education relates to important things including recording and reporting system [17]. Consequently, there is a need of administration based mobile system to ease school administration management system. Regarding to this condition, there has been application and features developed in smartphone and gadget to ease administration process. They are SIMAKAD (School Academic Information System) to manage academic data, Finance Module to facilitate school finance; Teacher based Online Module as a means of information and communication between teacher and student in school; Employee Affair Module is an information system of employee data management; Inventory Module to record goods as school inventory; and Report Module to ease headmaster on monitoring finance development, student achievement, teacher attendance and other functions.

3.4. Student Achievement based Online System (E-Raport System)

The internet can also be used to facilitate school in developing information based web (online) system in terms of student achievement and data managements. Consequently, parents can always monitor student learning development by accessing website or school information system anywhere like office, warung internet (internet service shop) or house as long as internet access is available [8]. Raport (student achievement report) based online usage or e-raport originally results from impracticality of raport distribution in class, so school needs to build academic information system to ease student and parents on accessing information [18].

With E-raport application, the process of study assessment become easy. This system has been designed by formula suited with student achievement management system [19]. It can ease teacher in managing student grade, which previously must be done manually in which the formula is complex enough. Now, with e-raport system teacher only needs to submit student grade in provided columns. E-raport application can also facilitate teacher to print raport directly or to save it in PDF file. Besides, the benefit of using e-raport is student achievement report can be accessed through website anywhere by available internet access. Therefore, parents can easily access student achievement file through website [20].

4. CONCLUSION

The development of technology increased extremely, results in easier and more practical human life. The easiness of communication access cannot be separated from internet function as a medium in communication access. As a consequence, almost all aspects of human life now use system based online which is connected to internet. In education, internet can be used to

ease school management system. Some features of utilizing internet on school administration process include school payment based mobile system (E-School Payment), administration based mobile system (E-Administration) and student achievement report based website system (E-Raport). These features has positive functions in school management process which makes activities management process easy, effective, cost effective, not spend much time and many personnel, decrease human error, more accurate and practical, and information dissemination fast, especially student achievement report which can be accessed by parents.

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