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To cite this article: Lailul Mursyidah *et al* 2021 *J. Phys.: Conf. Ser.* **1764** 012074

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# PPDB Online As Innovation of Education Services

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**Abstract.** Education is the most important aspect of the process of empowering and developing the quality of the State. Innovations in education services must be made to keep up with technological developments and the demands of society. One of the innovations in education services is PPDB Online. PPDB online is an electronic-based service system used in the process of admitting new students in high school. This paper explains the application of PPDB Online as an educational service innovation in East Java Provincial Education Office, Surabaya Branch. The application of PPDB Online in East Java Provincial Education Office, Surabaya Branch, as innovation in education service defined through the five e-service dimensions there is ease of use, e-scape, customization, responsiveness, and assurance. Ease of use means that the application of PPDB online makes it easy to register online. E-scape means that the application design created by East Java Provincial Education Office, Surabaya Branch provides comfort and convenience for PPDB users online. Customization means that the application makes it easy for users to convey constraints regarding PPDB online. Responsiveness means that the consumer inquiries and requests can be responded to quickly. Assurance means the data of the user is safe because to access the user must register and have a password to access PPDB online.

## 1. Introduction

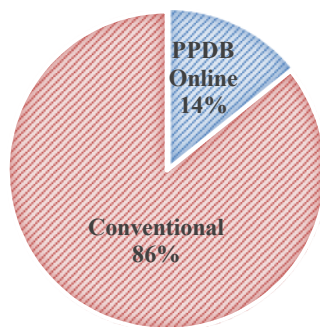
The development of technology causes people to need fast, accurate, instant, and efficient information. Information technology that is increasingly easy to access by anyone, anytime, and anywhere is supported by the availability of sophisticated information and communication media [1] The development of information technology has entered various fields, including government. E-government is kind of information technology to provide services that are more convenient and efficient. E-government can be defined as all actions in the public sector (both central and local) involving information and communication technology with the aim of optimizing the process of public services that are efficient, transparent, and effective [2].

Indonesia has begun to utilize e-government in service delivery in various fields, including education. The legal basis for E-government in Indonesia is Presidential Instruction of the Republic of Indonesia Number 3 of 2003 concerning National policies and strategies for e-Government Development. The Presidential Instruction is intended to develop e-Government nationally by referring to the National Policy and Strategy for E-Government Development. The implementation of e-government in education has been carried out by the East Java Province, through East Java Provincial Education Office, Surabaya Branch. One of the applications of e-government in education is in the process of new student registration, which known as PPDB services. Previously, PPDB services were conducted conventionally. The use of information technology in the new student registration (PPDB) is a concrete step to encourage the creation of good governance in education [3].



New student registration (PPDB) was chosen because it became the initial input of the education management process carried out by the school. The next process can run well if the input is well managed. Good governance is oriented on how to achieve goals effectively and efficiently. If the implementation of PPDB online program runs effectively and efficiently, it can create good governance in education [4]. E-government in service delivery is called e-service which is an innovation in public service. The application of e-service in PPDB or PPDB online is conducted starting in 2018. PPDB online aims to provide the most possible opportunity for students to obtain the best service easily through online media. PPDB online also aims to make it easier for people to get access to information related to education carried out by the East Java Provincial Education Office, Surabaya Branch.

PPDB online is used to serve students who will continue their education at senior high school and vocational high school in Surabaya. Senior high schools and vocational high schools that registered in PPDB online specifically for senior high schools and vocational high schools that run by government. The number of senior high schools and vocational high schools registered in PPDB online compared to the whole senior high school and vocational high schools in Surabaya can be seen in Figure 1.



**Figure 1.** Percentage of Senior High Schools and Vocational High Schools in Surabaya 2018. Senior High Schools and Vocational High Schools which run by the government are registered in PPDB Online.

Source: East Java Provincial Education Office, Surabaya Branch (2019)

Figure 1 shows that 14% of 225 senior high schools and vocational high schools in Surabaya are registered in PPDB online and 86% are conventionally implemented. The data means that there are 32 high school and vocational high schools owned by the government in Surabaya registered in PPDB online with details in table 1.

**Table 1.** Number of Senior High Schools and Vocational High Schools Registered in PPDB Online 2018

Level	Number
Senior High School	22
Vocational High School	10
<b>Total</b>	<b>32</b>

Source: East Java Provincial Education Office, Surabaya Branch (2019)

Table 1 shows that there are 22 high schools and 10 vocational high schools in Surabaya that are registered in PPDB online. In 2018, data from East Java Provincial Education Office, Surabaya Branch show that of the 32 schools, 14,700 prospective students registering through PPDB online with details of 7,800 students registering for senior high school and 6,980 students registering for vocational high schools.

PPDB, which used to be carried out conventionally through prospective students must come to the destination school to take the form, so that it causes long queues. The problem is tried to be solved through PPDB online so that prospective students only come to the destination school to take the PPDB PIN. Furthermore, PPDB PIN can be used to register online anywhere according to the

schedule determined by East Java Provincial Education Office, Surabaya Branch. PPDB online can be access from website via ppdbjatim.net.

The application of PPDB online has become an innovation to solve problems in conventional PPDB services. The success of implementing PPDB online can be measured through e-service quality. There are five dimensions of e-service quality [5] that are (1) Ease of use is level of ease of a site to be used by consumers. (2) E-scape is the appearance of a site starting from the colours used so that users feel comfortable and not disturbed by the colours displayed, then the design chosen to facilitate consumers in using the site. (3) Customization is the adjustment of the level of service that provided by the website according to consumer's desires and needs. (4) Responsiveness is the speed of the company in responding to questions or requests submitted by consumers (5) Assurance is the security of a site in maintaining data that has been provided by consumers and also overall information held by consumers.

The problem of implementing PPDB Online in East Java Provincial Education Office, Surabaya Branch is that not all people can access the internet, both from the network and the lack of skills. In some areas, internet connection disruptions still frequently occur, which prevents PPDB officers from entering data online and students cannot check announcements real time. Based on these problems, this paper aims to explain the application of PPDB Online as an educational service innovation in the East Java Provincial Education Office, Surabaya Branch.

## 2. Methods

This research is qualitative descriptive research. The location of this research is East Java Provincial Education Office, Surabaya Branch. Data collection techniques has done through interviews, observation and documentation. The technique of determining informant has done by using purposive sampling technique. The key informant in this study was the Staff of East Java Provincial Education Office, Surabaya Branch. Data analysis techniques use an interactive model [6] that consists of data collection, data reduction, data display and conclusion drawing.

## 3. Results

Changes in providing services to the community are the desired impact in implementing e-government. The way to provide services to the population can be provided by the government by utilizing information and communication technology [7]. In public services, e-government is also called e-service. To find out how far the success of e-service in service delivery can be measured through e-service quality. E-service quality is defined as the ability of a site to provide effective and efficient facilities for online shopping, online purchasing, and in the acquisition of goods or services [8]. In the study of the application of PPDB Online as an educational service innovation in East Java Provincial Education Office, Surabaya Branch can be explained through five dimensions that are ease of use, e-scape, customization, responsiveness, and assurance.

### 3.1. Ease of Use

Ease of use is the level of ease of a site to be used by consumers. Determining aspects in it are the level of functionality, accessibility to information on the site (whether information is easy to obtain), ease of ordering, and ease of navigation. Based on observations at East Java Provincial Education Office, Surabaya Branch, it is known that PPDB online has provided a level of convenience in the process of accepting new students.

The new student registration system that is currently different from the previous new student admission process. The use of PPDB Online to register through the web application so that new students are not required to go to the destination school to take the registration form. Accessibility is very easy because East Java Provincial Education Office, Surabaya Branch has collaborated with Telkom. Telkom is government company that operate communication technology. This collaboration accelerates and makes it easier for new students to access the web when registering online.

This PPDB online makes the process of accepting new students faster than conventional systems which require approximately 30 minutes or even up to 1 hour. Prospective students who are online

PPDB students are very enthusiastic about registering because they can be accessed anywhere and at any time according to a predetermined schedule.

PPDB online has been implemented according to the applicable SOP. PPDB online also received a good response from the community because it provides convenience in registering new students online. Ease of use of PPDB online at East Java Provincial Education Office, Surabaya Branch as Reibstein's theory [9] that this site has a level of ease of use by consumers. The level of convenience is seen from the level of functionality, accessibility of information that is easily obtained in ease of navigation.

### 3.2. E-Scape

E-scape is the appearance of a site starting from the colour used so that users feel comfortable and does not depend on the colours displayed and the design chosen to facilitate consumers in using the site. The application of PPDB online at East Java Provincial Education Office, Surabaya Branch displays colours and designs that are comfortable for users, making it easier to use. PPDB online users are interested in site colours and simple designs so that they are not boring when registering. Colour display and PPDB online design can be seen in Figure 2.



Figure 2. Website for the Acceptance of New Students in Surabaya, East Java 2018

Source: East Java Provincial Education Office, Surabaya Branch (2019)

The appearance of e-service in PPDB online service at East Java Provincial Education Office, Surabaya Branch has followed the development of increasingly modern technology and information. This can be seen in the selection of PPDB site design that is not boring online. E-Scape in PPDB online is according to Ribbink's theory [5], which shows the colour and design makes it easy, comfortable and not tend to be boring for users to do the site.

### 3.3. Customization

Customization is the adjustment of the level of service that provided by the website according to consumer's desires and needs. The adjustment of the level of service provided by PPDB online officers is according to the wishes and needs of each user so that it helps in registration of new students going well. Feedback and information provided by users were responded well by PPDB Online officers from East Java Provincial Education Office, Surabaya Branch.

PPDB Online officers are able to receive and manage the results of inputs given by users well, so that East Java Provincial Education Office, Surabaya Branch is able to provide the best for the needs and desires of users. Customization in PPDB online is suitable with Ribbink's theory [5] that the level of service provided by PPDB online officers of East Java Provincial Education Office, Surabaya Branch is according to the wishes and needs of users as seen from the display menus in PPDB Online.

### 3.4. Responsiveness

Responsiveness is the company's speed in replying to questions or requests raised by consumers. PPDB online is a facility provided to new students to make it easier to choose a school when they graduate. PPDB online conducted with this online system is indeed a sophistication that was developed based on the speed and advancement of technology. The speed of East Java Provincial Education Office, Surabaya Branch in responding to questions or requests submitted by users is optimally. Responsiveness in the application of PPDB online according to Ribbink's theory [5] that is the speed in responding to questions from consumers and users of PPDB online.

### 3.5. Assurance

Assurance is the security of a site in maintaining data that has been provided by consumers and also overall information held by consumers. East Java Provincial Education Office, Surabaya Branch is responsible for maintaining data and overall information that is owned by the user when accessing PPDB Online. East Java Provincial Education Office, Surabaya Branch collaborated with Telkom to oversee data in anticipation of losing PPDB Online user data. Each PPDB online user has a PIN with a personal password. PPDB Online assurance is suitable with Ribbink's theory [5] that the site guarantees the safety of PPDB Online users data. Data that has entered into the site has been backed up by the server so that if there is data loss there is data backup.

## 4. Conclusion

PPDB Online as innovation in education service has 5 indicators including: a) Ease of use has been done well by providing convenience in the form of online registration. It means that the application of PPDB online makes it easy to register online; b) E-scape means that the application design created by East Java Provincial Education Office, Surabaya Branch provides comfort and convenience for PPDB users online.; c) Customization makes it easy for users to submit constraints regarding PPDB online. It means that the application makes it easy for users to convey constraints regarding PPDB online; d) Responsiveness is done quickly according to questions and requests given by consumers. It means that the consumer inquiries and requests can be responded to quickly; e) Assurance is East Java Provincial Education Office, Surabaya Branch works closely with third parties to maintain the safety of consumer data. It means that the data of the user is safe because to access the user must register and have a password to access PPDB online.

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**Acknowledgments**

We are thankful to our colleagues in Faculty of Business, Law, and Social Sciences Universitas Muhammadiyah Sidoarjo who provided expertise that greatly assisted the research, although they may not agree with all of the interpretations provided in this paper.