



ISSN 0852-601X  
e-ISSN 2549-838X

Available online at  
<http://www.pancaranpendidikan.or.id>

*Pancaran Pendidikan FKIP  
Universitas Jember  
Vol. 10, No. 3, Page 63-68, August, 2021*

---

---

**Pancaran Pendidikan**

---

---

DOI:  
[10.25037/pancaran.v10i3.355](https://doi.org/10.25037/pancaran.v10i3.355)

## **SISMART: School Education Application to Create Excellent Human Resource in the Face of the Industrial Revolution Era 4.0**

**Eka Kusuma Hadi Bagus Hanafi<sup>1\*</sup>, Rina<sup>1</sup>, Diah Shafira Yuniar<sup>1</sup>, Kendid Mahmudi<sup>1</sup>**

**<sup>1</sup>University of Jember, Jember, Indonesia**

Email: [ekahanafi28@gmail.com](mailto:ekahanafi28@gmail.com)\*

---

### **ARTICLE INFO**

#### **Article History:**

*Received Date: 1<sup>st</sup> July 2021*

*Received in Revised Form Date:  
10<sup>th</sup> July 2021*

*Accepted Date: 15<sup>th</sup> July 2021*

*Published online Date 01<sup>st</sup> August  
2021*

#### **Key Words:**

***Education; Sismart; Technology***

### **ABSTRACT**

The background is the academic environment is highly demanded to follow the development of the technology because it is intended to create superior human resources and be ready to face the industrial revolution 4.0. One of the objectives of this research is to find out the effectiveness of sismart application based on previous research literature studies. This writing uses the literature study method. The result of this research is the effectiveness of applying sismart based on previous research is very effective and sismart application role for creating superior human resources is with appreciating the timeliness or discipline and having knowledge. The conclusion is in the digital era the use of the sismart application is necessary because to realize superior human resources.

**Copyright © Hanafi et al, 2021**, this is an open access article distributed under the terms of the Pancaran Pendidikan Journal license, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited

### **INTRODUCTION**

Education is a spear that plays a vital role in the development of a nation, along with technological developments that lead to learning must continue to develop following the changing times. The academic environment is highly demanded to follow the development of the technology because it is intended to create superior human resources and be ready to face the industrial revolution 4.0. Excellent human resources are human resources that have more capabilities compared to others (Ningrum, 2016). In creating excellent human resources, the educational environment requires teachers, parents, and schools to guide students in an ethical and practical learning process.

The development of science and technology is one of the results of human productivity that knowledge gained from education (Nurdyansyah, 2017). Therefore training and technology have links to one another. The industrial revolution is a major

technological advance accompanied by significant socio-cultural and economic changes (Syamsuar dan Reflianto, 2019). Judging from the very rapid development of technology in the field of education can take advantage of the application of educational technology. That is the application of Sismart, which can be used in learning and makes the learning process in school and outside school easy and practical to create superior human resources in the face of the industrial revolution era 4.0.

Sismart school education application is a HILOTECH application by Indonesian children. This is a smart application to support the educational process. The school, teachers, parents, and students can easily access school information and find out students' academics directly only by using a smartphone that can be monitored anywhere. Sismart application of school information is systems and learning management with an online platform. That can be accessed through smartphones and websites to facilitate communication between schools, teachers, and parents in the supervision of the teaching and learning process to improve children's learning process in school. Along with the development of educational technology, the use of sismart applications in students' learning process is expected to create superior human resources in the face of the industrial revolution 4.0.

The purpose of this study based on the formulation of the problem is to find out the use of sismart application school education applications, to find out the function of sismart application as one of the learning media, to find out the effectiveness of sismart based on previous research literature studies, and to find out the role of sismart application in realizing superior Human Resources. This sismart application benefits from being tangible as the form can be used for educational process activities and make it easy for teachers, parents, and students to access school and academic information directly in a series of student activities at school.

## **METHODOLOGY**

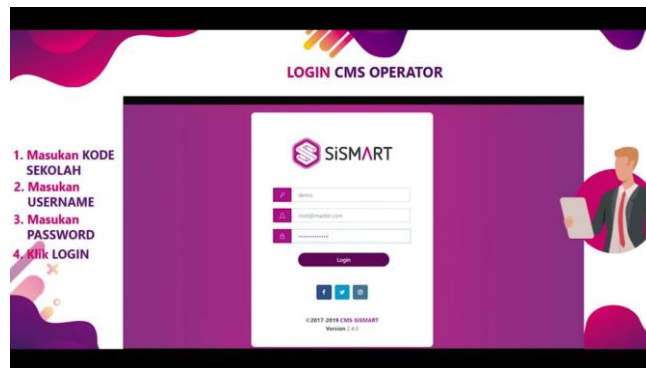
In writing, this scientific paper is using the method of literature study. In this literature, study method has a scope regarding the development of self-potential possessed by students and creative ideas which include among others the steps of the preparation of literary methods including, analysis, data concepts studied, conceptualization, conclusions and suggestions, and introduction (Kartiningrum, 2015)

This literature study research method is collecting data through reading from a variety of good sources such as journals, books, articles, and various other sources to support and as a reference in developing the research following the problems studied. The collection of data is a reinforcement of ideas from a study and material to complement the paper to be more objective so that it can help in the formulation of the problem and be able to develop insight and truth of the data.

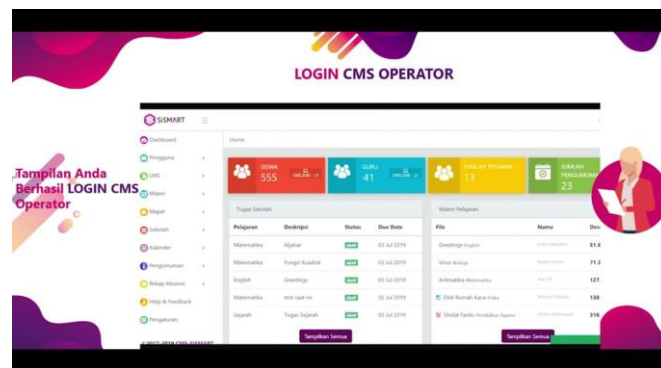
## **RESULT AND DISCUSSION**

In these results and discussion, we will discuss how to use, function, the effectiveness of sismart based on literature studies, and the role of sismart application in realizing superior human resources. The following is an explanation of our results and discussion.

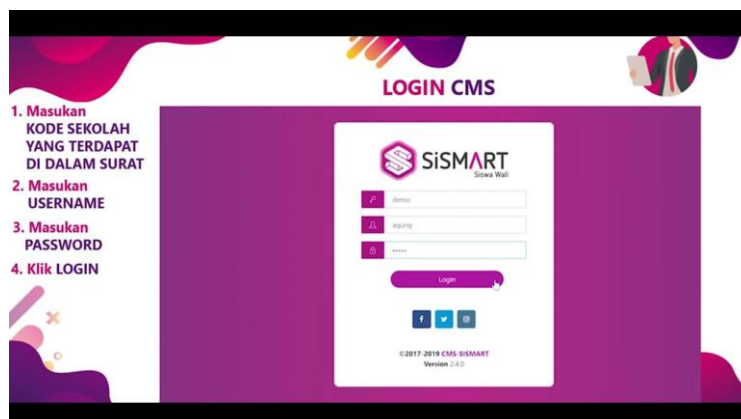
Use of the sismart application. Teacher version:



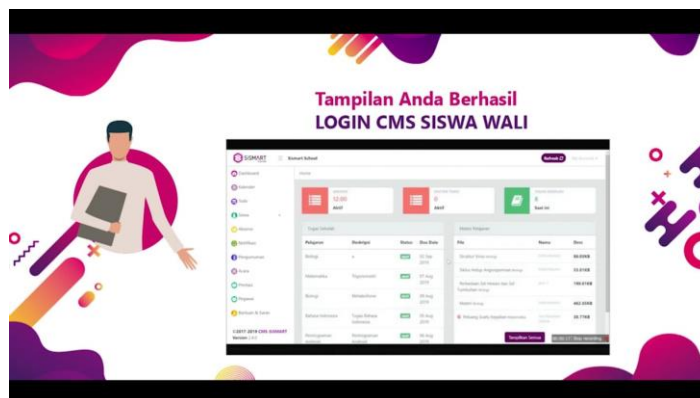
**Figure 1.** Login to sismart enter the school code, username, password in the box provided, then login  
(Source: <https://www.youtube.com/watch?v:K-FM7ncHrr8>)



**Figure 2.** the display after login for the teacher version  
(Source: <https://www.youtube.com/watch?v:K-FM7ncHrr8>)  
Guardian student version:



**Figure 3.** Login to sismart guardian student version, enter the school code contained in the letter, enter your username, password, then login  
(Source: <https://www.youtube.com/watch?v:UG1FlusLcRY>)



**Figure 4.** View sismart guardian student version, after logging in the display for guardian students as follows  
(Source: <https://www.youtube.com/watch?v:UG1FlusLcRY>)

Sismart functions as a school education technology. Sismart as a school education technology and a learning media also has two kinds, namely teacher sismart and guardian student sismart. This application can be accessed by schools, teachers, students, and parents. In sismart use, some menus make it easy for students to take place in the learning process. The learning process will certainly end with student achievement, which will illustrate the success and success of students in learning (Maesaroh, 2013)

Students and parents can also access the sismart educational application of guardian students. This application for students serves to facilitate the learning and learning process anywhere. In contrast, the student sismart, which can be accessed by parents serves as facilitating communication with teachers, knowing information more quickly and precisely, and it's easy to monitor children's development at school. In Sismart, teachers can also be accessed by teachers and schools. For teachers to function, it looks like facilitating the task of teachers in conventional education. As a source of learning teachers, while in the era of technology, teacher education is only a facilitator, in the Sismart educational application, school teachers can also access these applications that function as facilitating the delivery of information and all activities carried out by schools more transparently.

The effectiveness of sismart application is based on previous research literature studies. (1). Definition of effectiveness. The valid word comes from English, which is useful. This means that something has been done successfully. Efficiency is "usability, effectiveness, supporting purpose" (Sejathi, 2011). It can be concluded from the definition above that effectiveness is the program's appropriateness to be achieved by the objectives. (2) The effectiveness of sismart application is based on previous research literature studies. In Indonesia, many digital applications are like

Ruangguru and Zenius. Many learning applications, sismart applications, are known to be one of the best educational applications in Indonesia that introduce easily accessed websites. The sismart form is appropriate for students to use and is also applied daily to students to advance education in school. Services for each student while at school, one of which is a Smart Student Card and will not be found in the same variety of applications as genius application.

The existence of online education applications can add insight into various sciences by means of interesting learning that can increase interest in learning (Setiawati, 2019). Sismart application is very useful and influential for learning systems that, over time, begin implementing digital systems. This sismart application provides an academic calendar to provide more precise information about the best time analysis during learning.

Sismart application role for creating Superior Human Resources. Sismart or an application in the field of education created and developed by Hilotech Karya Anak Indonesia (HKAI) has a significant role in the education system to realize superior human resources. Excellent human resources are people who recognize the rights and obligations of each member and are jointly responsible for humanity, all humanity building a civil society where peace and justice are the highest (Satar, 2012). Several characteristics can be said as superior human resources, namely: (1) Appreciate the timeliness or discipline. On the Sismart application, both the teacher and the student guardian versions have features to check students' attendance at school whether they are on time, late, sick, permission or neglected. With the presence of these features, we can be sure that discipline will be better and improved. With the increasing attitude of the time-honoring and increasing discipline, human resources will also be superior and able to compete in the current era of globalization. (2) Having knowledge. Science is an empirical fact that is built by individuals through experiments and experiences that have proven their truth (Rusuli & Daud, 2015). Through these experiences and experiments, an individual from not knowing at all will become more aware of it, as is the case with the Sismart application. The Sismart form is an answer to the problems faced by parents, teachers, and students. With the Sismart application, parents, teachers, and students from those who don't know will become more aware of current technological developments. they will be easier to do their daily activities such as doing assignments, giving assignments, and knowing student attendance, and so on.

## **CONCLUSION**

Currently, in the world, can not be separated from technological advances that are so rapid. One of them is in the industrial revolution era, almost all of the problems of digital-based human life. Also, humans must be able to realize quality human resources, one of which is educational innovation. In the world of education today, many teachers use technology as a learning medium that can have a positive impact. One of them is online application media, the "Sismart" application.

This Sismart application can be accessed anytime and anywhere, using mobile phones and laptops. The existence of this sismart application in the world of education makes it easy for students to learn and add insights about science and increase their interest in learning so that with enthusiasm, teachers and students using technology can realize superior human resources in the era of the industrial revolution 4.0.

## REFERENCES

- Kartiningrum, E. D. (2015). Guide to Compiling Literature Studies. Guide to Arranging Literatur Study, 3(1), 87. <https://doi.org/10.1017/CBO9781107415324.004>
- Maesaroh, S. (2013). The Role of Learning Methods Against Interest and Learning Achievements in Islamic Education. Journal of Education, 1(1), 150–168. <https://doi.org/10.24090/jk.v1i1.536>
- Ningrum, E. (2016). Human Resource Development in Education. Gea Geography Journal, 9(1). <https://doi.org/10.17509/gea.v9i1.1681>
- Nurdyansyah, N. (2017). Resources in Educational Technology. Surabaya State University, 1–22. Retrieved from [http://eprints.umsida.ac.id/1625/1/Sumber Daya dalam Teknologi Pendidikan.pdf](http://eprints.umsida.ac.id/1625/1/Sumber%20Daya%20dalam%20Teknologi%20Pendidikan.pdf)
- Rusuli, I., & Daud, F. M. (2015). Science From John Locke To Al-Attas. 9(1), 12–22. <https://doi.org/10.13170/jp.9.1.2482>
- Satar, M. (2012). The Development of Superior Human Resources in Indonesia Facing the Competitive Communities of the Globalization Era. Mimbar: Journal of Social and Development, 18(4), 429–442.
- Sejathi. (2011). Effectiveness Of Social Network Utilization (Facebook) As An Online Business Media In Increasing Sales Volume. Journal of Chemical Information and Modeling, 53(9), 1689–1699. <https://doi.org/10.1017/CBO9781107415324.004>
- Setiawati, N. S. R. dan 2Mia. (2019). Application Online Education “Teacher Room” As An Improving Interest In Learning Milenial Generation In Respecting The Development Of Industrial Revolution 4.0. Seloka: Jurnal Pendidikan Bahasa Dan Sastra Indonesia, 3(2), 241–246. <https://doi.org/10.1007/s11010-011-1216-4>
- Syamsuar & Reflianto. (2019). Education and learning challenges based on information technology in the era of the industri revolution 4.0. Scientific Journal of Educational Technology, 6(2), 1–13. [https://doi.org/https://doi.org/10.24036/et.v2i2.101343](https://doi.org/10.24036/et.v2i2.101343)