Policy Smart Card 1.0

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ABSTRACT

As per the Industrial Revolution 4.0 (IR4.0) requirements, the educational system has transformed the learning process into technology-based learning to meet 21st-century learning needs. Recognizing the relevance of modern technology, such as QR codes, to the community, especially students, the idea for a Policy Smart Card (PSC 1.0) was formed. PSC 1.0 contains a QR code that directs users to a custom-built website containing Malaysian government policies. While the objective of this PSC 1.0 is to ensure that receiving information is practicable, could save time, and spread awareness and knowledge among people, especially students nowadays. The commercialization target of PSC 1.0 is students, particularly policy students, as well as lecturers. It is also expected to be benefits such as resources for the public.

Keywords: New norm, Innovation, Policy studies

1. INTRODUCTION

Industrial Relationship 4.0 was created a few years ago to assist every industry, including education, in discovering new technologies (Savitri et al., 2021). The impact of IR 4.0 has transformed the educational system in innovations of teaching and learning skill technology-based learning (Ismail et al., 2020). Due to the global pandemic Covid-19, recent modifications in learning activities following new standards have had a massive impact on students' and lecturers' ability to cope with the new learning culture. According to Pravat Kumar Jena (2020), every challenge is an opportunity for educational institutes to strengthen the knowledge technology and infrastructure to address education's challenges during Covid-19. Technology has become an essential part of education (Ahmadi, 2018) and has been implemented in various ways to improve the student learning experience and improve the accessibility of knowledge (Bower, 2017; Lai & Bower, 2019).

Furthermore, the growth in technology such as Quick Response (QR) code is becoming more popular in marketing, communication, the industry as well as education field (Chee & Tan, 2021). The development of QR codes is a revolution from the traditional bar code with different total data storage allowed (Sato & Henry, 2021). A previous study found that quick accessibility of the QR code by scans through specific devices has brought the QR code as one of the unique technology-based learning for learning activities (Sharma, 2013; Chee & Tan, 2021). Furthermore, adopting QR codes for course-related activities has resulted in good attitudes regarding technology adoption among students (Abdul Rabu et al., 2019). Also, Bahtiar and Surjono (2020) discovered that QR code features help modernize traditional textbooks, inspire students, and make teaching easier to provide. Thus, in line with the innovation of technology-based learning for the educational system, PSC 1.0 has been introduced.





2. MATERIALS AND METHODS

The main materials needed for this product are the various type of government policies in Malaysia. Besides, all the information needed for this product will be obtained from Malaysian government websites. A total of 28 different types of policies was successfully gathered into a single custom-built Google Sites webpage. Next, the website was developed to enable people to scan the QR code and link to *https://sites.google.com/view/malaysian-government-policy/laman-utama*. Furthermore, QRCodeMonkey.com and Canva.com were used to design the QR code as well as PSC 1.0. Nevertheless, the utilization of a laptop and a smartphone to access and testing the custom-built website for PSC 1.0. Figure 1 shows several websites used in creating and designing the product.

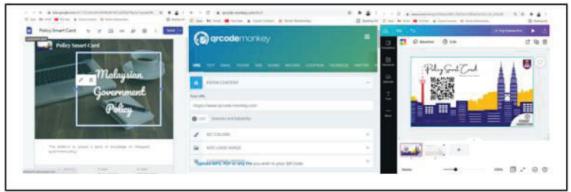


Figure 1. Websites used for Policy Smart Card 1.0

3. DISCUSSION

3.1: Problem statement

There are a few issues that brought us to introducing the PSC 1.0. First, the traditional education systems, such as using textbooks in class, may be rendered outdated for students and educators in this century due to the disability to update the most current information. Second is the difficulty accessing and downloading the new government policy since it is provided on different ministerial websites. For example, the problem might occur when there is a 'pop quiz' related to the new government policies among students. The students must have the practicality of getting that information. Third, the level of awareness among students as well as the public regarding government policy is relatively low nowadays. Thus, the problem statement above illustrates the idea of PSC 1.0 that connecting people to the systematic platform of Malaysian government policies.

3.2: Objectives

The main idea of PSC 1.0 is based on the practicality of getting the source of information, especially all policies in Malaysia, in one single card. We want the user to experience the true meaning of knowledge is just within your fingertips. Users can easily access the policy according to their demand by just scanning the QR code on the card, and it will bring them to a website where all the government policies are gathered in one place. Thus, we believe that this PSC 1.0 will make the searching time for a specific policy faster. Furthermore, we also want to spread awareness and knowledge regarding the importance of policy in our daily life. It is such an advantage when people can understand how the policies are crucial in shaping the daily routines and people's life at full quality. We are committed to achieving these objectives so that more people can understand the policies in the most convenient method.

3.3: Applications



Figure 2. Design for PSC 1.0

The application of the product is quite simple. The user only needs to have their smartphone and the PSC 1.0 to fully utilize the benefits.



Figure 3. Our custom-built website.

Based on figure 2 above, this is the front side of the smart card which includes a QR code for the user to scan with their smartphone. Then the user will be directed to the website where they can find various policies available in Malaysia gathered just in one place.







Figure 4. Example of how to download the document.

The user can just hover their mouse on any thumbnail on a specific policy, then click on the pop-out icon to continue their reading in PDF format. The user can click on the download icon to save the desired document by downloading the PDF softcopy on their devices.

4. COMMERCIALISATION

This PSC 1.0 is an effort that benefits various parties because it can be used by almost everyone. Among the intended parties that we targeted to be our clients are the university students, especially those who partake in the course that involves policy studies. We are aware that policy study is a tough course that has a variety of syllabi, and the students need to read a lot of policies also reference materials to fully grasp the knowledge. Thus, we believe that the PSC 1.0 is a must-have product for the students who take the policy studies because it is an innovation that is very useful for them. Using this smart card will make it easier for the students to search and find the policy they need according to their demands effortlessly. The second intended client is the lecturers. The reason why we targeted the lecturers is we want to make it efficient for them in terms of gathering the information. When they use the PSC 1.0, they just need a simple step to get all of the policies that existed in Malaysia compared to the orthodox method which they need to carry the physical policy books everywhere they go. Furthermore, we are very committed to spreading the awareness of digitalization and the importance of policy studies among the public. The illiteracy about policy could be reduced, and more people will know about their rights as citizens and consumers by understanding the policies that existed in Malaysia. Last but not least, we are intended to promote the design of our card to collaborate with Touch 'n Go on future product innovation. We believe that it will increase the probability for the target consumer to carry our card with them everywhere and benefit from it in several ways. To wrap up this section, we hope that our PSC 1.0 could be a game-changer in achieving a decent quality standard, especially in the educational field of study, by promoting it to all kinds of people.

5. CONCLUSION

The conclusion that can be drawn from this Policy Smart Card 1.0 is that it is essential in spreading awareness and information among the general public, particularly students because the application is simple to use and does not take up a lot of space. As a result, more students will desire to use the Smart card policy. This is calculated in light of the difficulties that students and lecturers face. Furthermore, new technologies have had a far-reaching impact on society, as they are no longer just a means of disseminating knowledge. There must have more invention and innovation of moving toward technology in the digital era. This policy on smart cards is a new invention.



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REFERENCES

- Abdul Rabu, S. N., Hussin, H., & Bervell, B. (2019). QR code utilization in a large classroom: Higher education students' initial perceptions. *Education and Information Technologies*, 24(1), 359–384. https://doi.org/10.1007/s10639-018-9779-2
- Ahmadi, M. R. (2018). The Use of Technology in English Language Learning: A Literature Review. *International Journal of Research in English Education (IJREE)*, 3(2), 115–125. https://ijreeonline.com/browse.php?a id=120&sid=1&slc lang=fa
- Bahtiar, A. Z., & Surjono, H. D. (2020). Teacher and Student Perspective of Using the Quick Response Code Feature in the Biology Module. 440(Icobl 2019), 201–206. https://doi.org/10.2991/assehr.k.200521.045
- Chee, K. M., & Tan, K. H. (2021). QR Codes as a Potential Tool in Teaching and Learning Pronunciation: A Critical Review. *Higher Education and Oriental Studies (HEOS)*, 1(1), 31–44. http://www.heos.asia/ojs/index.php/heos/article/view/4
- Ismail, N. A., Wahid, N. A., Yusoff, A. S. M., Wahab, N. A., Rahim, B. H. A., Majid, N. A., Din, N. M. N., Ariffin, R. M., Adnan, W. I. W., & Zakaria, A. R. (2020). The Challenges of Industrial Revolution (IR) 4.0 towards the Teacher's Self-Efficacy. *Journal of Physics: Conference Series*, 1529(4), 0–6. https://doi.org/10.1088/1742-6596/1529/4/042062
- Jena, P. K. (2020). Challenges and Opportunities Created by COVID-19 for ODL: A Case Study of IGNOU. *International Journal for Innovative Research in Multidisciplinary Field (IJIRMF)*, 6(5), 217–222. https://www.ijirmf.com/wp-content/uploads/IJIRMF202005041.pdf
- Lai, J. W. M., & Bower, M. (2019). How is the use of technology in education evaluated? A systematic review. *Computers and Education*, 133(May 2018), 27–42. https://doi.org/10.1016/j.compedu.2019.01.010
- Sato, T. S., & Henry, T. S. (2021). QR Codes: A Simple Tool for Engaging Radiology Audiences. *Current Problems in Diagnostic Radiology*, 50(1), 16–17. https://doi.org/10.1067/j.cpradiol.2020.10.016
- Savitri, E. N., Dewi, N. R., Amalia, A. V., & Prabowo, S. A. (2021). Learning using real science mask with QR code to increase students' digital literacy. *Journal of Physics: Conference Series*, 1918(5). https://doi.org/10.1088/1742-6596/1918/5/052059

