



اَوْنُوْرُوسِيْتِي تِيكْنُوْلُوْجِي مَارَا
UNIVERSITI
TEKNOLOGI
MARA

NEW PRODUCT DEVELOPMENT REPORT

QR CODE OF COUPON COLLEGE SYSTEM BY USING MOBILE
APPLICATION FOR KOLEJ ZAMURD & BAIDURI, UiTM PUNCAK ALAM

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Table of Contents

1.0	EXECUTIVE SUMMARY	1
2.0	INTRODUCTION	2
2.2	Problem Statement	2
2.3	Methodology	2
2.4	Limitations	3
3.0	NEW PRODUCT DEVELOPMENT	4
3.1	Definition	4
3.2	Classification of New Product	5
3.3	New Product Development Process	6
3.3.1	Research & Development	6
3.3.2	Product Design/Features	8
3.3.3	Concept Testing	9
3.3.4	Built Prototype (2D or 3D)	10
3.3.5	Test Marketing	10
4.0	CONCLUSION	11
6.0	REFERENCES	12
7.0	APPENDICES	13

1.0 EXECUTIVE SUMMARY

Zamrud & Baiduri College is one of colleges in UiTM Puncak Alam. It can fits around 1 500 residents which most of these students are from Faculty of Architecture, Planning and Surveyor. As same as other colleges, there are many activities and programs that held by this college. There are compulsory activities that will be held every semester and also there are new activities introduced in order to attract the students.

Zamrud & Baiduri College offers opportunity to the residents by introducing the coupon scanning system. This system is widely used and is now taking over the old manual paper coupon system. Yet, due to several limitations and constraints, this current system – coupon scanning system is not the best solution in order for tracking the students' attendance to the college programs or activities.

Thus, in New Product Development (NPD) report, we came out with a solution to this problem which is by developing blue print by using mobile application. The product is considered as new to the firm – new product line to this organization. This mobile application will be used as the platform for the students to 'sign' that they already joined any activities by scanning the QR Code. By proposing and developing the product, we hope we can easier the college management's schedules. The blue print prepared by us will pass to the Zamrud & Baiduri College management and we hope we can help them to improve their services and give the best service to the residents.

2.0 INTRODUCTION

2.1 Problem Statement

The current bar code scanning system has several problems arise even though they are an improvement over the event coupon system. The first problem arise is the inefficient way of collecting and processing the data received. Due to the limited number of scanner, this is only one per college, it causing the need to key in the student's matric number manually when there are too many students attending the events. The recurring way of registering and storing data contributed to the inefficient process. The inefficiency also may cause corrupted or damaged data during both collecting and processing.

The second problem arise is the system is time consuming. Using the bar code scanning system, the students would still need to line up in order to register themselves before and after the event. Referring to the problem of limited scanner, the line up would be long as there is only one scanner to scan the matric card which causes the process to be done slowly. The students also have no mean of referring the events that they have attended. That have been problems occur due the students claimed they have scanned their matric card but is not successfully registered into the system. In order to refer back the event they have been attended, they will need to physically go to the college information counter and ask the staff to check for them.

2.2 Methodology

In order to analyze the problems and come out with the business solution, the first step that has being done was setting up the appointment to meet the Zamrud & Baiduri College management authority.

From there, we met Mr, Ahmad Shakani bin Abdullah the Manager of Zamrud & Baiduri College on 27th April 2018 and asked her a few questions. The aim of this interview session was to find out the problems facing by the Zamrud & Baiduri College management in the scope of the current coupon system and indirectly identify the solutions to the problems occurred. This interview session can be classified as open-ended interview. The information from the session is obtained through inquiry and recorded by the interviewers. The interview session held at Zamrud & Baiduri College Office. We prepared the interview questions based on the three themes which are;

1. What are the business operations and processes?
2. How should those operations be performed?
3. What Information is needed to perform those operations?

Apart from that, we also did survey to analyse and validate our previous data collection method; the interview session. The survey questionnaires were distributed to the 5 respondents who are residents of Zamrud & Baiduri College. The respondents were required to answer the questionnaires. These questionnaires were distributed on 30th April 2018 and also collected on 30th April 2018. The data was then collected and analysed using basic frequency analysis that was derived from Microsoft Excel software.

2.3 Limitations

As for the data collection process, due to the several constraints such as limited time, the difficulty of finding the respondents for the survey sessions and the people who were willing to be interviewed; although this data collection process was carefully prepared, there were still limitations and shortcomings. The process of survey was done on a small scale involving only 5 respondents and the people that willing to be interviewed was only a person. Since the population was small, the findings presented may not be applicable as general representations. To do so, a larger sample would be required.

On the other hand, we assume that there still lacking of updated information and some of the information had not been found in order to develop this product. The limited the QR knowledge about codes and mobile application should also be one of the limitations occur in order to build up the project as we only refer to the reading materials and our knowledge in this area. There is also needed the experts who are knowledgeable in this area to develop this system. Next, time constraints also one of the limitations in order to build up this system as the developing process is taking a longer period. Besides, lack of budget can be considered as the limitations too since the development process requires much money to do so; the budget for hiring the developers that experts in designing QR codes and mobile applications and the budget on buying the tools needed during this development process. However, we found a free website that can generate the QR codes freely such as <http://en.qrcode-pro.com/> but still need people who has knowledge in this technology to discover the ways of using these Qr codes generators.