Kid's Education Through Interactive Magazine

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Abstract: Magazine industry has been outdated because younger generation today is to depending to new media such as mobile application and website. The sale of magazine, especially, kid's magazine has been decrease because this new trend. Parents nowadays is more expose their kids to gadget and internet. Therefore, the aim for this research is to analysis the effectiveness kid's education through interactive magazine and develop educational interactive magazine for kids at age 6-9 years old. Learning through play will be concept for this interactive magazine. It's will fun platform for kids to learn something while play. It's also can lift magazine industry to a new level. This interactive magazine will use mobile application as platform.

INTRODUCTION

The presence of new media such as mobile application and website has made the magazine industry falling down. Since, 2008, the magazine industry has suffered tremendously and many consumer magazines have had to shut down or change their publishing models[1].

This problem happens for a few factor. One of the factor is the presence of new media that I mention above. Have proven that it is because of the advent of computers and internet[2]. Besides that, the another major factor of falling magazine industry it's because today's generation is too depending on gadget. Younger generation, the so-called digital natives, reads less from print than the older one.

Therefore, publisher in the magazine industry need make a change according with the world's progress today. Most of them have focused more on digital and interactive publication because for them that the future for magazine industry. According to Kaitlin[3] a major trend to incorporate growing technologies in magazine industry is the transition into digital magazine. Thus, the magazine industry in Malaysia also have to take bold steps to ensure the continuity in this industry and made it's more relevant with the world's trend today.

Background of the study: Interactive magazine is a part of digital and online publication that become more popular today compare than print publication. This have been proved by many publishers change their publication method.

According to Lawernce[4] in general, publishers, despite some change in a few years have been relativity slow to join the online revolution in a formal and organized way. This happen because digital and online publication is more user-friendly and efficient at any angles.

Along with the world changers today, interactive magazines have been published in many theme including about kid's education. This platform has big potential in kid's education. Unfortunately, in Malaysia, it can be said that not have or less interactive magazine has been published especially that related to kid's education.
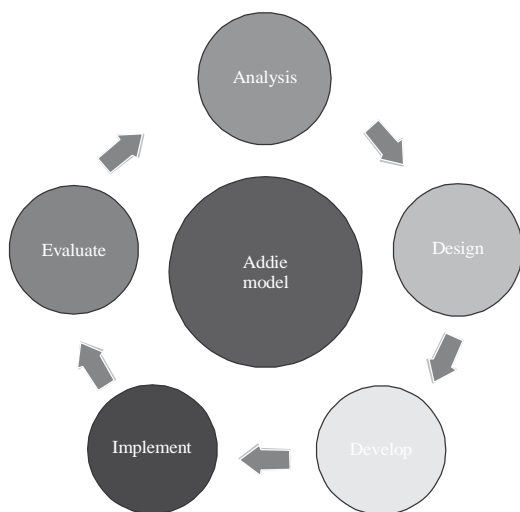
Fig. 1: ADDIE model diagram

Kid's education is very important because they are future for us. Nowadays, parent expose their kids to gadgets and internet because for them this is what world need today. According to survey conducted by MCMC[5] the percentage of internet user in Malaysia is 76.9% and non-user internet is 32.7%. This survey shows that most Malaysians use the internet in their daily life.

It's a biggest lost if the Malaysia's magazine industry does not want to take advantage from this situation especially when kids today use gadget and internet often but they use it in the wrong way. So, we have to take this advantage and need provide our kids an interactive magazine in educational form but at the same time they can have fun using it.

Methodology is the one of the most important elements in research. According to Rajeshkar *et al*.[6] methodology in research in important because it's a systematic way to solve a problem. So, the methodology that I will use for this research is the ADDIE model. ADDIE model is strategic planning for the instructional design (Fig. 1). ADDIE model is combination of a few step between analysis, design, develop, implement and evaluate. According to Molenda[7] ADDIE model is one of the most common models used in the instructional design field a guide to producing an effective design. This model is an approach that helps instructional designers, any content's developer, or even teachers to create an efficient, effective teaching design by applying the processes of the ADDIE model on any instructional product.

So, for get data for this research methodology I will use quantitative methods. This may include the survey that I will run on the kid's guardians and also for the kid itself. The survey will be asked about how effective this interactive magazine for kid's education.

Quantitative: The one method is use to collect data for the research. According to SIS International Research (2018) quantitative is a structured way of collecting and analyzing data obtained from different sources. Quantitative involves the use of computational, statistical, and mathematical tools to derive results. So, for this research I as the researcher will provide a questioner to the respondents. As I mention above the respondents will be kids and they guardians. Then, the data will be analysis through that questioner

Analysis: Analysis is the first phase of this model. During this phase you have to determine problem of the issue, audience, goals and objective of the project, limitations and also tools and strategies should use in the project. By doing all of the above steps it can ensure the project will run smoothly According to Lauren etc., this phase can be very time intensive, as the rest of the ADDIE model requires the initial thought and assessment-based research during the Analysis phase. In this case I have to analysis how interactive magazine can be effective for kid's education. The target user for this interactive magazine is for kids at age 6-9 years old.

Design: Design phase is the next step in ADDIE model. Design phase it's also call as where blueprint is created. According to Steven design is phase involves using the outputs from the Analyze phase to plan a strategy for developing the instruction and also during this phase, you must outline how to reach the instructional goals determined during the Analyze phase and expand the instructional foundation.

So, in this phase my focus is more create a design that can attract the target user which is the kids at age 6-9 years old. According to Gelman[8] there is a popular misconception among designers that kids like lots of colors. It's true that younger children love things that are bright and bold but actually they prefer a limited color palette and can get overwhelmed if there are too many colors competing for their attention.

My focus in this phase is also to create a design as minimal as I can and also have clear visual to make sure that have no problem for kids to use this interactive magazine. According to Gelman[8] kids tend to click on just about everything to see what happens; it's all part of the game for them. So, you'll want to create a strong visual separation between the elements that users can interact with and those they can't.

MATERIALS AND METHODS

Interactive magazine methodology
Development: Development is the phase when we should more focus build the output. According to Molenda[7] this design is depends on the first two phases which are

Fig. 2: Software to develop this application

the analysis and the design phase. That mean, if we did these phases correctly the development will be easier. In this phase also the backup plan is very important. So, in this phase I will use a few software to build the output. As you can see in Fig. 2 that software I will use.

Implementation: The implementation phase is all about present our project to the target user. This phase only can be through if all phase before have done. It's because at:

In this phase the product must be function properly. As a result, in this phase, my plan is to test this project to target user. As I mention earliere, this interactive magazine's target user is kids at age 6-9 years old. The communication with user is very important in this phase because to make sure user understand how your product will function, especially when your user is kids.

Evaluation: Evaluation is the phase when you evaluate your product that you already test to the target user. This is last phase for ADDIE model. According to Molenda[7] it is very important to evaluate each step in order to make sure that, we achieve our goals using the instructional design and materials to meet the learner needs. At this phase, evaluation will be get from all user respond and feedback how effective this interactive magazine for kid's education.

Prototype development: This interactive magazine used mobile application as a platform. It's also has been divided into five section. Each of the sections is designed to create user friendly experience to the user. The section has been divided into explore the world, play and learn, quiz, watch video and stories time. There are also several pages that serve as informants to children who want to use this interactive magazine. To develop this interactive magazine, I use a few software such as Adobe Animate, Adobe Illustrator and Adobe Premiere.

Design development: Design development is the crucial stage in the process to develop this interactive magazine because target user for this application is kids at age 6-9 years old. So, it's important to make sure this interactive magazine's design is user friendly to kids at
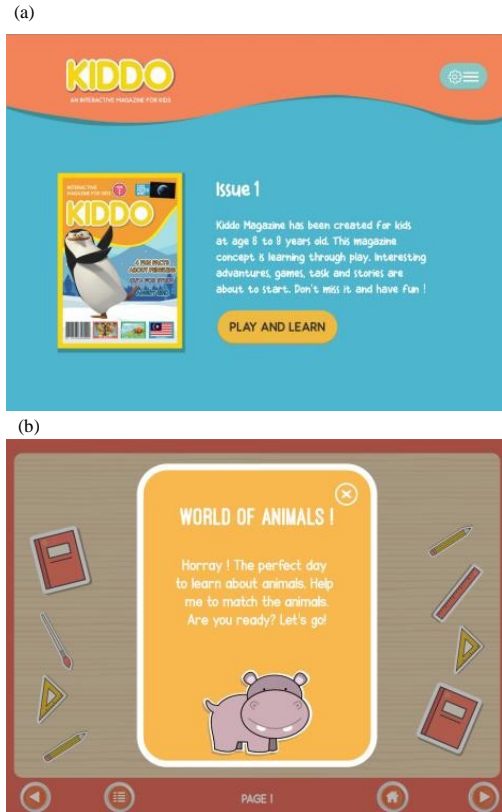

Fig. 3(a, b): The interface design

Fig. 4: The button design

that age. The main concept for this interactive magazine is learn thorough play. So, the design must be the same as the concept.

Interface design: The interface design that I create is greatly facilitating the user to use it. This is because the instructions given are direct in both the form or the pictures (Fig. 3). It's also easy to navigate. This interface design has been created in Adobe Illustrator before it's been transform to Adobe Animate.

Button design: The button design (Fig. 4) in this interactive magazine has been create to make sure the user can understand to use it easily. To make sure user can understand easily, so, the button has been creating based on form or picture. The concept of minimal also has been apply in this button design. It's will make the button in this interactive magazine is more user friendly.

Color: The color that, we use in this interactive magazine is bright color. In one design interface, we do not use much color because according to the study to draw kid's attention it does not need to be so much of color. According to Gelman[8] kids actually prefer a limited color palette and can get overwhelmed if there are too many colors competing for their attention.

Font: In this interactive magazine, we use a few types of font that suitable for our user. We put a few criteria to make sure the font that we choose is user friendly. The first criteria it must be easy to read. The another criteria is the font must be simple and draw our user attention.

RESULTS AND DISCUSSION

Testing and result: This chapter will discuss testing and results based on my research and application. Testing and results have been made after the completion of the development stage of the prototype. To get data, I have distributed a questionnaire to parents and guardians to children at age 6-9 because they are the target user for this interactive magazine. The method used for testing on this interactive magazine is Alpha testing and Beta testing.

Data: Data are facts and statistics collected together for reference or analysis. In this research, the main way to get the data is to distribute a questionnaire to parents and guardians of children at this target age user interactive magazine. A total of 18 questions were given to 10 respondents to complete this research.

Alpha testing: Alpha testing is a test run by the developer itself. This test is on track to detect previously undesirable errors. This test is run between developers. It is also carried out before an application is released to the public.

Beta testing: Usually, run before an application is commercially available. This test is run by distributing a questionnaire to the target user. Target users usually also have the opportunity to test an application.

CONCLUSION

Interactive magazine is the future for magazine industry. According to world trends today it's the best way to attract user to use magazine in their daily life. The people in this industry should take action to change this industry according the world's trend today. If not magazine industry will have outdated.

Interactive magazine also has big potential in kid's education industry. Looking at the situation today, kids need to be provide with something useful when they use gadgets and internet. Interactive magazine can be a great platform for them to learn something new with fun and their parent don't have to worry because it is something special designed for kids. Hence, I hope people in kid's magazine industry can take this golden opportunity.

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