

Analysis of Emotional Influence on Different Generation of Indonesian Women on Magazine Digitalization

Ariani Kusumo Wardhani, Setiawan Sabana, and Ira Adriati

Abstract—As the technology advancing rapidly, people also want to make their life easier and more practical. One of the examples of the recent innovations is the transition of magazine format: from printed form to digital. This transition could pose problem to the audience, especially those who has a limited experience with computer tablet technology. Femina is one of the first women’s magazines in Indonesia thus have audiences from several different generations. Recently, Femina launched the digital format of their magazine. Different generations have their unique expectation, generational history, and demographics that influence their experience with computer tablet technology. In this work, we performed a study of the factors that could affect the readiness of the Indonesian women with respect to the transition from printed to digital format of the magazine from the point of view of different generations. The result in this work is analyzed with focus group method (qualitative analysis) and further analysis of the result is discussed with emotional design theory. From the result of this work, we know that not all of Indonesian women in the correspondences is ready to move from printed magazines to digital due to factors of education, culture, and customs. Additionally we found that the perception of pleasure in reading digital magazines on a tablet computer has differences in each generation. Furthermore, emotion is one of the important factor to understand expectations from each different generations of readers to move to digital magazine.

Index Terms—Digital magazine, Indonesia women, technology transition, generation, women magazine, perception of pleasure.

I. INTRODUCTION

Magazine in the form of printed media is one form of mass media that have existed since long ago, thus became a medium of information for all women especially in Indonesia. Magazine serves as a medium of information and educational tool for the community. For women in the Indonesian society, such information could be obtained from the women’s magazine, ranging from the children’s education, cooking, career, beauty, fashion, home life, etc. Technology makes the human being wants to make their life more practical and easier. Digital magazine is one of the results of technological change in the field of media.

Shahnava [1] describes that a technology is useful when it meets three requirements; firstly, the technology should fit in with the people and the environment where it will be used.

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Secondly, such a technology must be appropriate with the needs and the way of workings of the local communities in long-term perspective. Thirdly, such a technology must also pay attention and consider the suitability of educational, social, cultural, infrastructural, economic, and political aspects of the local community.

Femina magazine is one of the first and popular women’s magazines in Indonesia. Femina was first published on 1972 in printed. At the end of 2011, Femina decided to launch the digital format of the magazine, where such a magazine can be downloaded from on-line via an computer tablet.

Since the first issue, Femina has been read by three generations of readers. A generation is defined as a group of people who has experiencing life (i.e. social, political, historical, economic and general) together within a certain time range. For example, Femina magazine has been read by three generations such as: Baby Boomers, Generation X, and Generation Y [2]. Table I shows the division of generations based on their date of birth and also their age in year 2013. The characteristics of each generation are essentially a function of the place where they are raised, lifestyle and attitude.

TABLE I: CLASSIFICATIONS OF GENERATIONS BY COHORT [3]

Generation	Date of Birth	Age (in 2013)
Traditionalist	1925-1945	68-88
Baby Boomers	1946-1964	49-69
Generation X	1965-1980	33-48
Generation Y	1981-1999	14-32
Generation Z	After 2000	Less than 13

The differences in generations also lead to the transformation of lifestyles, customs, and culture. From our point of view, most of the reader of the Femina magazine falls into three generations; Baby Boomers, Generation X and Generation Y. This is because we think that the number of the Femina reader within the Traditionalist generation is too small and the people in Generation Z at the moment are out of the target age of Femina magazine reader. Thus, we will focus on the three generations that we mentioned above and below is the description of each generation:

A. Baby Boomers Generation

This generation was born between the years 1946-1964. They grew up in a rich and healthy condition in the post-World War II. They are known as a self-centered generation and they see in a view that the world revolves around them. Family became important norms that exist in the world and work is the second priority, with at least on weekdays from 8 am to 3 pm. Their lifestyle revolves around the fact that they live to work. Part of this generation is still following the rules of the previous generation.

B. Generation X

Born between the years 1965-1980, this generation watched their parents sacrifice a lot of time to work because of the rapid competition. They were also brought up in the shadow of the influential boomer generation. This generation has the characteristics: more open, appreciate competition, education and career-oriented, materialistic, obsessed to education as high as possible due to tighter competition. As a consequence, they developed behaviors (not values) of independence, resilience and adaptability, more strongly than the previous generations. In opposition to the hard driving Boomers who live to work, they work to live and view the world with a little cynicism and distrust.

C. Generation Y

This generation born in 1981-1994 and has been portrayed as the next big generation, an enormously powerful group that has the sheer numbers to transform every life stage it proposes. They were brought up during the 'empowerment' years where everyone won and everyone got a medal. This generation has the characteristics of a more open, more democratic and freer to criticize because their parents are more established dual income. This generation is the technology generation because they are starts to depend on gadgets.

Every generation certainly has a different background both in terms of economy, politics, and ideology. With the development of technology that is not limited result in differences of comfort in the use of technology. Generation X and Y have started to recognize digital technology, while baby boomers may be said still comfortable using analog or printed version of documents.

We think, the factors mentioned above influence the readiness and the comfort of Indonesian women to move from printed magazines to digital magazines. Each generation has a different experience and perception of pleasure when it comes to computer tablet usage to read digital magazine.

II. DATA ACQUISITION PROCEDURE

In this study, our target audiences for the correspondences are women who live in Indonesia. To probe the level of desire of the correspondences to move from printed version of the magazine to the digital version from each generation, we provided a questionnaire for the correspondences. The variables used to distinguish between the use of technology tablet computer habits according to age and education.

This questionnaire was meant to assess the level of comfort of each generation in terms of reading digital magazine. To understand the definition of pleasure of reading Femina digital magazine from different generations, demographic variables were used to distinguish the convenience level of using a computer tablet. Inquiries conducted using interviews (to fill in the questionnaires) to obtain data from 41 Indonesian women with age range between 27-60 years at the Femina readers.

Shedroff [4] finds that making a digital work from the perspective of user experience is very important in helping to transform the information available on personal knowledge.

If readers have a positive impact in experience on the digital magazine, so the reader will go back again to read the magazine. The process is called transformation that changes the data information into knowledge in mind [4].

From such a basis, in this study we conducted the usage of tablet computers in the digital magazine Femina for different generations. Before the correspondences were asked to fill the questionnaire, they were given a chance to read and browse through an issue of Femina digital magazine on the computer tablet.

The method that used to analyze the data in this research is focus group (qualitative analysis) and further analysis of the data will be discussed using emotional design theory [5]. According to this theory, emotion plays a significant role in the real-world experience and perceived knowledge of the products. Explanatory research used in this research to explain and the occurrence of the events. The goal in this research is to understand the validity level of the explanation and see if it needs to be modified or whether it only valid only for limited conditions [6].

III. RESULT AND DISCUSSION

A. Transition Agreement

The interviews (sample selection) were performed on 41 randomly selected Indonesian women that read Femina magazine – either in digital or printed form with the age range that spreads over three generations (from Baby Boomers to Generation). The majority of the correspondences were Generation Y as many as 18 people. While the correspondences that are classified as Generation X is 13 people. The smallest population in the data pool is the people that's belongs to the Baby Boomers generation which in total is 10 people. The result of the interview stated that they agree to move from printed magazines to digital magazines. We asked the correspondent to give score for each question between 1 and 5, where 1 is strongly shows disagreement, 3 shows doubtfulness and 5 is strong agreement.

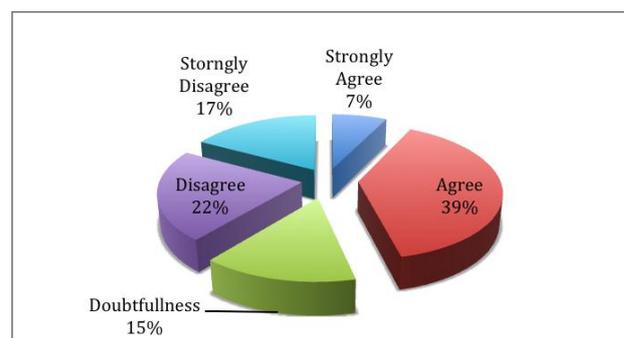


Fig. 1. Result on whether Indonesian women agree to move from printed magazine to digital magazine.

Fig. 1 shows the result that the biggest percentage of the population is the people that are agreed to move to digital version of the magazine (46%), the population that is disagree (not ready yet to change to digital version magazine) scored up to 39%. While the people that still doubt to move from printed magazine scored up to 15%.

B. Perception of Pleasure

According to Keinonen [7], emotions that created within a product will have strong link with its usability. And it certainly leads to generalizations made about the product with respect to its perceived usefulness. Keinonen also found that users have expectations toward the perceived usability of a product also differ greatly to actual measured usability. Jordan [8] mentioned that the user’s evaluation has a strong importance on whether people decided to use the product or to recommend to a friend, or generate an ownership emotion, which in the end will turn into loyalty and commitment to such a product. All of those mentioned are the outcomes of perception of pleasure. The more closely a product can invite and deliver on user expectations, the more pleasurable the readers will perceive the product.



Fig. 2. Example of navigational features in digital magazine (courtesy of femina digital magazine).

Fig. 2 shows an example of the existing navigation page on a Femina digital magazine. We can see that to choose the page to read, one can simply select and shifting the page. To go to the next page, one should shift the scroll-bar to the right while to return to the pervious page, one should shift the scroll-bar to the left. For some people who are used to read the printed version of the magazine, this feature is a new experience and could be daunting, thus inhibits their willingness to move to the digital version of the magazine.

The field of usability has traditionally focused on ease of use and functionality based on measurable, observable cognitive activity. Norman [9] describes that a design usability and design community begun to pay closer attention to the aesthetic, or affective aspects of interaction design in the usability evaluation process [8]. New paths in emotion-based design research have been opened up by Desmet, who in their work have advocated for a broader focus on pleasure and emotion in the usability and design of a

product’s user experience [10].

Emotions govern the quality of interaction with a product in the user’s environment and relate directly to appraisal of the user experience. Jaasko and Mattelmaki [11] presented a framework for user experience where pleasure must satisfy two levels. The first level involves appearance (aesthetics) and user interface (usability). The second level extends to user personality (socio-cultural context), product meaning (time/historic context), environment (physical context), interaction (use context), and product novelty (market context) [9].

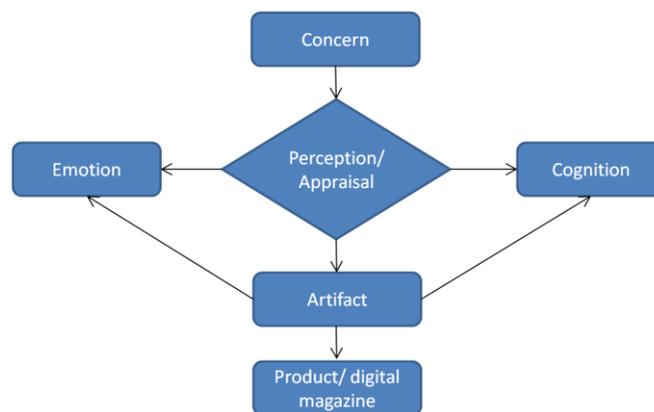


Fig. 3. Artifact created during product interaction [11].

In Fig. 3 Spillers [12] found that, artifacts that are created or accessed during product interaction take on affective properties as they interchange with emotions in order to aid cognition and task performance. (Note: Cognition is separated in Fig. 3 merely for illustrative purposes and is not intended to imply that emotion is a “separate” activity of cognitive processing) [12].

TABLE II: RESULT OF PERCEPTION OF PLEASURE FROM DIFFERENT GENERATIONS

User	Baby Boomers	Generation X	Generation Y
Femina Readers	24,3%	31,7%	43,9%
Aesthetic	Interesting layout but the font is hard to read	Interesting layout but the font is hard to read	Interesting layout but the font is easy to read
Interface Design (easy to use)	Difficult to use the tablet computer	Enjoyed reading using tablet computers, though sometimes still like to read the printed magazine.	Enjoyed so much reading using a tablet computer.
Clear	Unclear	Clear	Clear
Enjoyable	Enjoy but still confuse to operate computer tablet	Enjoy to read with computer tablet	Enjoy to read with computer tablet

Jaasko and Mattelmaki [11] also said that measurable emotional responses with products are apparent where attitudes, values, goals and expectations are coupled with usability and pleasure ability. In this view, emotion is seen as an integral component of the design and an important driver of cognitive processing and task performance [12]. User

expectations are coupled with the emotional state that accompanies or codifies interaction expectations and the emotional signature in how users perceive pleasure with the product.

Result from the focus group discussions are shown in Table II. In general, we found that the majority of the generations X are familiar and comfortable using an electronic tablet but most are still choosing the printed magazine to read. For Baby Boomers, almost all of them experienced problems in the use of computer tablets, even though there are desire to move to digital if they can use it. Almost all of the Generation Y have moved to the digital magazine and those that has not use it yet are because of they do not have a tablet computer due to socioeconomic factors.

IV. CONCLUSION

Measurable emotional responses are apparent with products where attitudes, values, goals and expectations are coupled with usability and pleasure abilities [9]. In this view, emotion is seen as an integral component of the design and perception of pleasure is an important driver of cognitive processing and task performance. Each generation have differences of perception of pleasure and the use of computer tablets for digital read magazine. The development and change in technology pushes the correspondents to learn in using the new technology, especially for baby boomers generation. From the age factor, it is shown that the correspondents that are Generation X and Generation Y are more familiar to read the digital format of Femina on a computer tablet compared to those from baby boomers generation. For the latter group, although they still want to follow the technological development by reading the digital magazine, their experience is reduced by the unfamiliarity of the technology.

Therefore, not only visual and content aspects of the magazine that can be accepted but technological usage is also one of the aspect that is need to be thought. It is also determined by how the development of political, economic, social and technology play a role in the decision-making role on each generation. The obtained result shows that age category [3] provides different characteristics on respondents and it also produces interpretations of pleasure ability based on what they experience and understand in receiving visualization. However, the knowledge to bridge such a

transition (for example: understanding the most comfortable layout for the reader) is required to ascertain a smooth transition, thus more researches in this direction are needed.

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