

Pioneering Usability in Indonesia: Exploring the Challenges

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Abstract

The practice of usability in Indonesia is strongly related to the fact that Indonesia is a multi-ethnic nation with its diverse local customs and traditions. Despite of its notorious reputation for economic and political turbulence, the economic wheels in Indonesia are magically still spinning. Even though the growth of the IT industry has given a significant boost to the awareness of usability, the usability practice has not reached the point of critical mass in Indonesia. Within the framework of Hofstede's cultural dimensions, an analysis of several case studies will provide a showcase of usability practice in Indonesia as a part of Asia regional culture. Furthermore, a discussion of some current challenges and potential threats for the practice of usability in Indonesia will provide some insights for further strategic development of usability in Indonesia in particular and Asia region in general.

1 Introduction

Marco Polo, who reported his visit to Indonesia and some other South East Asian countries, provides an example how a “Westerner” attempts to rationalize many things that include: cultures, people and animals encountered in the “East” with Western perspective. The following excerpt (Hammer & Russo) is an example how Marco Polo described an animal unknown to him as a Unicorn:

"They have wild elephants and plenty of unicorns, which are scarcely smaller than elephants. They have the hair of a buffalo and feet like an elephant's. They have a single large, black horn in the middle of the forehead. They do not attack with their horn, but only with their tongue and their knees; for their tongues are furnished with long, sharp spines, so that when they want to do any harm to anyone they first crush him by kneeling upon him and then lacerate him with their tongues."

The animal, that was later identified as rhinoceros, has no relationship whatsoever with the mythical creature Unicorn.

Even though today's globalization has blurred the boundaries between the West and East, the boundaries are still exist in the forms of gaps, such as: education gap, income gap, digital divide and gap of cultural understanding. These gaps furthermore translate into several challenging multifaceted issues in the practice of international usability. In particular, the followings are several main issues related to the practice of usability in Indonesia:

- The role of usability in professional domain.
- The role of education in nurturing the growth and regeneration of usability practitioners.
- The role of local cultural context in the adoption of usability.

Even though the issues are interrelated with one another, this paper will mainly focus on the last issue, i.e. **the role of local cultural context in the adoption of usability**. Within the scope of usability practice in Indonesia, the local cultural context plays an important part in the adoption of usability for a couple of reasons:

- **The existence of complex subcultures in Indonesia.**
The complex subcultures in Indonesia are the results of decades of cultural assimilation of numerous subcultures. Tolerance, as one of the shared values in Indonesia (Anderson 1996), has dynamically accelerated the cultural assimilation of different subcultures in Indonesia for many years.

- **The concept of Usability bears Western values.**

Referring to Worm's opinion (Worm 1997), Hofstede pointed out that common sense takes a precedence over rationality for the Asian: *Rationality is abstract, analytical, and idealistic with a tendency to logical extremes, whereas the spirit of common sense is more human and in closer contact with reality.*¹ (Hofstede 2005, p. 230). Several years ago when the first author wrote an article related to common sense and usability (Tedjasaputra 2002), he did not realize that usability with its strong influence of Western culture strongly retains the value of rationality. Instead of emphasizing the value of “virtue” that is reflected in the life of most Asians, the article emphasizes on the value of “truth”.

The use of cultural dimensions (Hofstede 2005) in analyzing the practice of usability in Indonesia is based on a premise that they are sufficient to provide an explanation for the usability practice in Indonesia. In this paper, the authors will discuss some descriptions of the Indonesian cultural dimensions in relation to usability and its implication to the usability practice in Indonesia.

2 Cultural Dimensions

When Hofstede published a classification of national cultures with its cultural dimensions (Hofstede 1980), he introduced a “new paradigm of classifying national cultures”. Through the cultural dimensions of **power distance**, **individualism-collectivism**, **masculinity-femininity** and **avoidance of uncertainty**, Hofstede framed the data he collected from his research at IBM. The fifth dimension that he labelled **long-and short-term orientation** was derived from a later research work of Chinese Value Survey (CVS) (Hofstede 2005).

The weakness in framing the issue of local cultural context within the cultural dimensions is the cultural bias. An example of Western bias in framing a theory is the Maslow's “Hierarchy of Needs” (Maslow 1970). The theory emerged from psychological study of people. The study itself was considered uncommon in the field of psychology in 1943. Based on a positivist view that human nature is good, the theory explains the destructive human acts as a result of thwarted needs. Interestingly, Hofstede pointed out that this view is a product of an individualist society that positions “self-actualization” as the supreme motivation in the hierarchy (Hofstede 2005).

The use of the Hierarchy of Needs theory to analyze the practice of usability in Indonesia can be misleading because of the Western bias. On the other hand, the cultural dimensions can be considered a “nearly-neutral platform”, in which the description of usability practice and its implications can be analyzed more independently with regard to the cultural bias. The neutrality can be assumed because the initial IBM research results has been validated against other measures (Hofstede 2001), in addition to the inclusion of the fifth cultural dimension derived from CVS.

The results of CVS did not include Indonesia. Nevertheless, the long-and short-term orientation dimension is significant in discussing and analyzing the local cultural context of Indonesia as illustrated in the following linguistic analysis:

From the linguistic point of view, the question posed by Hofstede when he introduced the concept of Long-term Orientation, i.e. “Yesterday, Now, or Later?” (Hofstede 2005, p. 207) has a significant use in the Indonesian language - Bahasa Indonesia. The fact that Bahasa Indonesia does not use tenses in a written sentence or conversation makes the adverbs of time, such as “kemarin”, “sekarang” and “nanti” (“yesterday”, “now” and “later”) are indispensable to express some distinctions of time in a written sentence or conversation. When these adverbs do not appear in a sentence, they are assumed to be understood by the means of context.

Analogous to the understanding of meaning by context in Bahasa Indonesia, the understanding of the practice of usability in Indonesia shall also be analyzed within the cultural context of Indonesia.

The culture level of the cultural dimensions is a macro level. The level of abstraction in profiling tends to create stereotypes. This situation implies that an analysis framed within the cultural dimensions will only provide a macro

¹ Worm, 1997, p.52, citing a 1936 book, *My Country and My People*, by the Chinese author Lin Yutang. (Hofstede 2005)

perspective in contrast to rich-detailed micro perspective. The macro perspective is analogous to a “helicopter view” that can only give a “top-down“ overview of some phenomena. The “top-down” approach is relevant for the Indonesian cultural context as a high power distance culture country, because changes naturally start from the “top”. In the paper, the authors chose the macro approach with a purpose of providing some insights in establishing a direction for development in strategic level instead of development in the micro level.

3 Case Studies

“It is not an unusual experience to be trapped in a chaotic traffic if one lives in a big city such as Jakarta. Some private car drivers impatiently honk if another car moves slowly. Most of the public transportation drivers stop whenever and wherever they want. Some motorcycle riders move swiftly and carelessly between lines of cars in order to pass through traffic jam. The traffic signs are insufficient and ambiguous. Many of the roads are full of holes. Some policemen hide in some places to stop cars and motorcycles for bribes. In short, to be in the roads of Jakarta can be a nightmare (or a daymare)TM.

R.M. Budi Djaja Paidjo Prihatin (Budi) is a financial consultant at a multinational company in Jakarta, a labour force that represents more than 40% of Jakarta population. He commutes daily for work. In the morning, he leaves home at 6 o'clock to avoid traffic jam and waits for a morning bus that comes irregularly. He has learnt from his past experience that if he leaves home at this hour, somehow he will not be late for work. If a bus is not crowded (or if some passengers can still hang in the bus door), the bus driver will stop at the side of the road where Budi usually waits. He can then get into the bus and pay fee to a “kenek” (a bus driver’s assistant). After changing buses twice, he eventually arrives at his office and starts to work at 8 o'clock. After about eight hours of work, he leaves for home. With a different route from the morning bus, he eventually gets home in about two and a half hours.” (Sari 2002, p. 1)

The excerpt illustrates the situation in the roads of Jakarta in which the “man-behind-the-wheel” naturally poses a largely dominant power compared to pedestrians or passengers. Additionally, ambiguity and unpredictability in the forms of insufficient and ambiguous traffic signs and unpredictable bus schedules are part of the daily life in Jakarta.

The nuance of uncertainty, tolerance for chaos, power absolutism and inequalities in the excerpt may be unusual for some people. Nevertheless, the situation in the excerpt may illustrate Indonesia as a nation with large power distance and weak uncertainty avoidance (Hofstede 2005).

The large power distance between service providers and clients or customers can also be observed through the people's interaction with technology as illustrated in this e-banking usability case:

Bank X is one of the biggest banks in Indonesia. Several years ago, after the bank initially released its internet banking or e-banking services, some internet security issues arose. In response to the security issues, the e-banking services have taken some technical security measures. As a result, some usability issues that were introduced include the followings: long delay in response to clicks and page loading, page time-out detector, the use of an additional physical random key generator, numerous security layers, etc. These issues were introduced as a result of the security measures taken by the bank at the expense of usability problems for the bank's customers.

Compared to the other countries in the Hofstede's study, Indonesia scores 48 in the avoidance of uncertainty dimension that can classify Indonesia as a country with a weak uncertainty avoiding culture (Hofstede, 2005). This dimension is one of the reasons why the bank's customers in the previous usability case are willing to put up with the e-banking system despite of the usability issues. In a discussion with a customer that uses the e-banking system, the customer said that she was feeling more secure with all the security layers she had to encounter when she used the e-banking system. Security seems to be more important than usability.

4 Analysis and Discussion

The nature of Indonesia as a multi-ethnic nation can mean that national culture scores may be misleading (Hofstede 2005). Nevertheless the setting and context of the cases and observations presented in the paper are very much related to the pre-dominant Javanese culture that conforms to the cultural dimensions in the Hofstede's study (Anderson 1996, Hofstede 2005).

Nielsen suggests that the minimum effort for international user testing is the use of test data from the United States, Japan and Germany, based on an assumption that the three countries are “very different” (Nielsen 2005). According to the data from the study conducted by Hofstede (Hofstede 2005), some significant differences between the three countries are as the followings:

- Both the United States and Germany are categorised as countries with small power distance in comparison to Japan as a country with large power distance.
- Both the United States and Germany are categorised as individualist countries in comparison to Japan as a collectivist country.
- Both Japan and Germany are categorised as countries with strong uncertainty avoidance in comparison to the United States as a country with weak uncertainty avoidance.
- Both the United States and Germany are categorised as countries with short-term orientation in comparison to Japan as a country with long-term orientation.

A dimension that is missing from Nielsen’s assumption is the masculinity dimension, in which the three countries are categorised as masculine countries, where *the emotional gender roles are clearly distinct*. (Hofstede 2005, p.120)

In a feminine culture country such Indonesia, the application of the methods and results of the international user testing conducted in the United States, Germany and Japan may not apply nor give a meaningful sense. This is especially significant in the user testing that involves social interaction between genders, competitive product, child socialization (van Rossum 1998, Hofstede 2005), shopping behavior (Hofstede 2001, p. 310-11, de Mooij & Hofstede 2002, de Mooij 2004, Hofstede 2005) and organizational management and work ethos (Hofstede 2005).

In addition to the missing dimension, another issue in the practice of usability in Indonesia is related to the cognitive consistency value of usability. One of the core values of usability practice is creating and conserving cognitive consistency. This value may contradict the cultural values of most people in the East and Southeast Asian countries, because people do not consider cognitive consistency as one of the ultimate values in daily life: “*Western psychology assumes people seek cognitive consistency, meaning that they avoid mutually conflicting bits of information. This seems to be less the case in East and Southeast Asian countries.*” (Hofstede 2005, p. 230-231, Carr, Munro & Bishop 1996)

The usability guidelines and approaches mainly crave for cognitive consistency. These usability guidelines and approaches often become some issues of minor importance in the practice of usability: “*What is true or who is right is less important than what works and how the efforts of individuals with different thinking patterns can be coordinated toward a common goal.*” (Hofstede 2005, p. 232)

5 Conclusion

During an English breakfast in an international gathering, a Dutchman provoked an issue related to the order and arrangement of dining table done by a Lebanese.

Dutchman: *What's so special about this (table) arrangement?*

Lebanese man: *If you can eat easily, then it is special. Look.....* (The Lebanese started demonstrating how the plate arrangement can help the transition from one course to another in the breakfast.)

The practice of usability in the West is not always applicable in the East. The case studies in the paper have shown how usability is perceived differently or even de-emphasized in the East. The main consideration lies in the cultural differences that influence how people use any technological artifacts, the motivation behind the use and the local cultural context.

Indonesia with its customs and traditions represents a dynamic Asian country in the South East Asia region. The use of the cultural dimensions in the paper suggests that cultural approaches, that include cultural models and theory, can be utilized to analyze the current challenges for the practice of usability in a third-world Asian country, such as Indonesia.

The need to translate the Western rational usability values to the Eastern usability with its virtue values is obvious for further strategic development of usability practice in Indonesia in particular and Asia region in general. During the translation, a multicultural understanding is an asset that can provide insights to the work of usability practitioners in the region.

References

- Anderson, Benedict R. O' G. (1996). *Mythology and the Tolerance of the Javanese* (2nd Edition). USA: Cornell Modern Indonesia Project Publications.
- Carr, S. C., D. Munro, and G. D. Bishop (1996). Attitude assessment in non-Western countries: Critical modifications to Likert scaling. *Psychologia*, 39, 55-59.
- de Mooij, M. (2004). *Consumer behavior and culture: Consequences for global marketing and advertising*. Thousand Oaks, CA: Sage.
- de Mooij, M., and G. Hofstede (2004). Convergence and divergence in consumer behavior: Implications for international retailing. *Journal of Retailing* 78: 61-69.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Thousand Oaks, CA: Sage.
- Hofstede, G., & Bond, M. H. (1988). The Confucius connection: From cultural roots to economic growth. *Organizational Dynamics*, 16 (4), 5-21.
- Hofstede, G. & Hofstede, G. J. (2005). *Cultures and Organizations: Software of the Mind* (2nd ed.). New York: McGraw-Hill.
- Maslow, A. H. (1970). *Motivation and personality* (2nd ed.). New York: Harper & Row.
- Nielsen, J. (2005). Foreword. In *Usability and Internationalization of Information Technology*, ed. Aykin N. (pp xvi). New Jersey: Lawrence Erlbaum Associates, Inc.
- Hammer, E. and Russo, T. M. In the Footsteps of Marco Polo. Retrieved March 2, 2005, from <http://www.metmuseum.org/explore/Marco/adv.html>.
- Sari, E. R. (2002). V-office – an essay. Retrieved January 14, 2005, from <http://the2the.com/eunice/V-office.pdf>
- Tedjasaputra, A. (2002). Common Sense and Usability. Retrieved January 15, 2005, from http://translate-easy.com/common_sense_usability.htm
- van Rossum, J. H. A. (1998). Why children play: American versus Dutch boys and girls. In G. Hofstede et al., *Masculinity and femininity: The taboo dimension of national cultures*, 130-138. Thousand Oaks, CA: Sage.