



Netnography Approach for UX Research

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ABSTRACT

This paper discusses on how netnography can be applied to gain an understanding on sensitive research topic in a high power distance culture. The study investigated the frustrations among practitioners in incorporating the User Experience Design (UXD) in software development process. Netnography has been applied to uncover the unspoken behaviors of stakeholders and attitudes of clients who disrespect designers that reflects the UX practitioners frustration on the stakeholders' politics. This findings will be useful in seeking a solution to improve the UXD process. From this work it can be concluded that netnography can be a suitable approach to gain deeper insights into understanding practitioner's frustrations in UX research study.

Author Keywords

User Experience (UX), frustration, design, community of practice, Malaysia

ACM Classification Keywords

Participatory Design, Empirical Qualitative, User Experience Design, Office and Workplace

INTRODUCTION

Most research work on users' frustration were centered on the user studies based on the principles in the user-centered design (UCD) and later extended to the context of user experience design (UXD). When research work on UXD studies extends into the realm of the software development studies, it was discovered that the gap between developers and users in practice persists [12].

This may be due to the developer's mindset which is in a conundrum that users always do not know what they want [3]. Perhaps more studies on UXD practices are needed based on practitioners. In particular, where HCI awareness is still low and UXD practices is still at its infancy state like in Malaysia.

Questions about what happened, issues that matter most in the practice, and their relationship to software production development and design were not address. The literature

on UXD practices revealed the lack of understanding on the context of the stakeholder's role within the UXD process in practice. Therefore, it is reasonable to ask about how practitioners include stakeholders in the project development process.

RELATED LITERATURE

The term 'stakeholder' was first coined by students of business administration and corporate management in the 1980s to refer to individuals, groups or other organisations who have interest and ability to influence an organization [10]. On the other hand, in software development studies, stakeholder refers to the "user" who had little interest in the system but need to attain some goals; directly or indirectly [4].

The literature of user-centered and participatory design has identified the phenomenon of power between the stakeholders [16] which later became known as stakeholder politics. This phenomenon inflicted a power structure that may affect the final decision making on the design [6].

[6] further concluded that fitting the UXD process into development phases was difficult, for reasons such as the lack of time, communication problems, organisational problems, bad attitudes, lacking in competence or merely focusing the attention on the project to keep within time and budget. According to [6], bad attitudes refer to the software developers who lacked respect to the users.

Previous research findings on UXD practices were limited to the discovery of the usability methods, tools and techniques that were most used by usability practitioners in industry [13] and lacks on the reason for not implementing UUXD within development teams. Another concern on the research of UCD/UXD practices was the focus on what should be done, rather than what actually happens in practice.

In addition, despite the numerous emphasis on the importance of UXD constraints, there is little variety methodological approach used for studying the UXD practice. Previous methodological approach to the study of practice is dominated by quantitative survey method. Lately qualitative approaches were adopted as seen in [2] who employed the interview method on designers.

It is found that qualitative methods enabled the researchers to uncover constraints which allow them to focus on effective UCD practice. In terms of the research method for understanding the practice; [17] reported that the most effective method is observation. However, the medium or context for observation may differ.

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Among the new methods of observation in the community of practice is netnography. It is a form of ethnography conducted on the Internet that adapts the traditional and in-person ethnographic research techniques of anthropology to the study of online cultures and communities formed through computer-mediated communications [14].

Netnography provides a spectrum of participation by observing, reading, posting and commenting the social network platform to gain insight into the attitudes, behaviours and actions of members in the social network [14].

On top of that, most studies were conducted in the developed countries and may not represent the situation of the UXD practices in the developing countries. In addition, an opportunity to understand UXD properties using netnography is wide open. The next section will describe detail information about our research methods.

METHODS

In our work we opted for the application of netnography as our qualitative approach towards understanding the UXD practices in the Malaysian context. Malaysia is said to be a country with a high power distance [1][20].

Power distance is defined as the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally [11]. Unjustly, it is expected that Malaysians in general are willing to accept the fact of inequality in power as being normal [20]. The following sub-sections described the details of the procedure involved.

Planning and entrée

At this stage, the researcher participated in the online community through a social media channel set up by a local UX leader. The chosen social media in this study was Facebook, with its mounting number of members and activities posted in the closed group.

Participants

Seven (7) practitioners participated in the discussions on UXD practitioners frustrations. The participants were between the ages of 25 to 35. There were six (6) male and one (1) female engaged in the conversations. Labels were given to the participants who commented to the open ended question on the group's wall.

The open question was posted on the social group UX Malaysia: "What are the three main frustrations in being a User Experience practitioner?" The orthogonal situation of frustration was chosen over satisfaction to identify the sources of problem on conducting UXD process.

Analysis and interpretation.

This process was conducted using open coding, as described in the grounded theory approach by [19]. Each response was individually analysed and sentences were coded according to affective codes, which include emotion coding and values coding. Then, the codes for each sentence were interpreted and assigned to categories. This process resulted in a list of categories and codes, which were used to get an overview of similar problems faced by members of the group.

RESULTS

The data was analysed through manual coding using paper and pencil on hardcopies. Manual coding was possible due to the small scale of the observation from social media, with not more than 10 responses to the question.

Six (6) themes were created based on the categories labelled for each excerpt: unclear goals and purposes, difficult clients, client network influence, lack of knowledge, confusion between UX and GUI, and financial resources.

Table 1. Causes practitioners' frustration

Codes	Categories	Theme
"Lack of direction" "Lack of ownership" "Forgot business needs and requirements"	Goal Purpose Business goal (Codes=3)	Unclear goals and purpose
"Being a scape goat" "Nonsense" "Clients? Bad ones" "My 12-year-old daughter can do so much better" "Difficult client" "I blame you" "You end up becoming a photocopy machine"	Blame Anger Judgmental (Codes=7)	Client attitude
"They know what they don't want" "If they go about colour tone of the logo, size of the button, and keep changing for the next two to three meetings, it's a sign that they have no idea what they want" "Some clients have an unlimited amount of cash to blow but don't care about all these (<i>referring to UX</i>)."	Not knowing (Codes=3)	Lack of UX awareness
"Clearly misunderstood web design and user experience"	Understanding (Codes=1)	Confusion between UX and GUI
"Some clients are really excited about having great UI/UX design for their products but can't afford my rates"	Resources (Codes=1)	Financial constraint

Table 1 summarises the cause of frustration on becoming UXD practitioners. Each comment and sentence was read through line by line and analysed individually [15]. 15 codes were identified in the open coding analysis and 9 categories could be labelled for each sentence.

Affective code, which included emotional labels, was chosen as guidance [7]. The expressions of emotion led to the values, attitudes and beliefs of participants; these were structured, coded and summarised, then explained and interpreted [15].

Unclear Goals and Purposes

The largest number of comments by participants reflected that most of them believed that most frustrations came from a lack of direction and clarity of the requirements on

the part of the business served by both clients and UX practitioners.

Lack of direction, lack of ownership and being a scapegoat are issues that I face as a professional. Clients became upset and behaved unprofessionally towards UX practitioners if they were not satisfied with the end products or results (FBP5, 11).

Difficult Clients

From the practitioners' point of view, the most difficult challenge was in dealing with "bad" client. A participant gave an example of how clients behaved during the requirement elicitation stage:

Clients? I had real bad ones a long time ago. Example 1: Change the "Next" to "Proceed" button then change to "Agree", then during the next meeting, change "Agree" to "OK". Example 2: "I like it blue"; next meeting: "No, better purple"; next meeting: "Change to this navy blue". Example 3: "Too wide, too narrow, too wide".

All referring to the same screen. Example 4: "If other people can do it so nicely, why can't you?", "I don't have resources", "Don't give me that nonsense, I provided you enough! Google them!". Example 5: "My 12-year-old daughter can do so much better." (FBP1, 1).

This excerpt shows how "bad" clients communicated during the development process, frustrating the practitioners because they kept changing the design requirements. It implied a lack of clear goals on the client's side. No matter how good the product UX is, some "bad" clients will still blame the practitioners:

There are clients who can be really difficult and no matter what you do, they'll still blame you (FBP4, 10).

In this example, the clients seemed to be influential people that made decisions on the systems or products. It was observed that the client's decision was more important than the end users'. (Clients might be the stakeholders of a company, an organisation or a project.)

Client Network Influence

Some clients wanted a website that looked exactly like their competitor's or their families'. In this case, these clients had a strong influence on the final product under development. However, they seemed to be unclear of the exact goals of the website, which is why they wanted to follow the existing products of related people, in particular, close acquaintances or cronies. In the Webster's Dictionary, the term crony is often perceived as derogatory and refers to a close friend or companion with whom they have a long history.

They [clients] just want something that looks exactly like the ones [of] their competitor, parent company or sister company. Otherwise, they shove some super boring and restrictive brand guidelines so you pretty much end up becoming a photocopy machine (FBP6, 16).

In this example, the UX practitioner or "copier machine" had little opportunity for inputs on the design decision.

It helps when you can convince a client that the purpose of the product is not to satisfy the boss, the boss's wife, mistress or daughter. The purpose of the product is to serve their customers/demographic and that's the aim. So if their customers test the product and they like it, it's a success even if the Datuk, Director or COO thinks the button looks too small on their phone (FBP6, 16).

The results showed that users are often represented by clients. In line with previous studies in the information systems field, system stakeholders might be selected on the basis of political affiliation and compliance rather than for their understanding of the exact system requirements [6].

Lack of Knowledge

Sometimes, clients did not understand the terminology or the results they wanted out of a system or product. Most comments referred to the behaviour of clients as a result of their limited knowledge or awareness of the importance of UX. Some clients did not know what they wanted, although they knew what they didn't want.

This is reflected in the goal theory of approach motivation and avoidance motivation [18], in which humans divide their goals into the things they want to achieve and the things they want to avoid. The following excerpt illustrates this:

You do sometimes bump into clients who know what they're saying and clearly know what they want. I usually only pull this stunt when I suspect that clients have no idea what they want. When a client asks questions about the flow and how information is being displayed, they know what they are talking about, where the design has to be tweaked to demonstrate their idea. If they go about colour tone of the logo, size of the button, and keep changing for the next two to three meetings, it's a sign that they have no idea what they want (FBP3, 12).

This scenario created frustration among practitioners:

Don't you just hate people who know what they don't want but don't know what they do want? (FBP4, 13).

Some practitioners knew how to assess clients based on their knowledge of what they wanted, and the findings indicate one approach to the identification of clients who know what they want out of a project: observation of the client's response to the initial prototyping. They either express concern about the information flow, which indicates their level of knowledge of their proposal, or they point to visually-displayed media.

Confusion Between UX and GUI

Usually, I don't let clients interfere with our work to the point where they decide what colour the button should be or how the specific flow of an app should be. All that will be discussed and agreed upon during the planning stages. If they hire us to do the work, then I'll make sure we do the work (FBP6, 16).

Some practitioners refrain from letting the clients' become involved in the subjective design features as it is difficult to measure and comply with them. Too often, clients request changes in terms of colour, appearance and other aesthetic elements, and practitioners would rather "sign off" on the design first to avoid such changes that may put their projects' schedule at risk.

Financial Resources

Finance was found to be among the reasons for practitioners' frustration, not because there were insufficient resources but because clients lacked consideration of UX. In the analysis, both limited and unlimited financial resources were the reasons practitioners felt disappointed. Limited financial resources were expected to be a problem, but unlimited financial resources were even more irritating because the clients were concerned with trivia rather than the overall UX;

Some clients have an unlimited amount of cash to blow but don't care about all these (referring to UX). Some clients are really excited about having great UI/UX design for their products but can't afford my rates (FBP6, 16).

Based on the descriptions, comments, use of language and expression by the members of the group, it was found that there was general interest by people in the same domain, that is usability and user experience. The problems posed by the netnography participants were in line with the problems faced by practitioners who tried to introduce UCD in development processes [2][8][21].

CONCLUSIONS

The findings of this study revealed the situation in the design work and the suffering that have arisen from the shortcomings due to stakeholders' politics. Prior studies have noted the importance of corporate politics, culture and procedures in influencing the incorporation of usability in a project [5].

However, in this study, netnography linked clients' attitude to a lacking of respect or trust towards designers. This result has lack been described in any previous studies. [9] mentioned the word lacked respect for usability issues but did not explained in details.

Some of the issues emerging from these findings are related to a design decision-making power in a project or team. UXD practitioners would be more likely to influence management and clients regarding UXD if they had the authority to make design decisions. Further work is required to confirm this.

However, despite success in discovering an in depth insights of practitioner's frustrations, this study is subject to a number of limitations, mainly associated with the number of responses in this particular problems. Unexpectedly, the informers expressed their opinions freely without covering their real identities to contribute to the in-depth insights of their experiences.

It was found that these practitioners were working in private sectors, where opinions were appreciated as individual preferences. However as for the participants from the government sector, no one commented on the

issues as seen from the profile used to comment on this issue.

This may be due to the culture of a high power distance country whereby employees are 'afraid' of their employers as employers wield powers such as the authority to fire employees [20]. The practitioners may refrained from having issues with their employers if they exposed the issues which might give a bad impressions to the company they are working with.

In conclusion, this work showed that netnography was able to uncover the causes of frustrations in the attitude of clients and to reveal the knowledge, skills, motivation, awareness, resources, culture and procedures of a company.

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