# Considering Cultural Difference of Participant on User Research Method for Planning

Mainly with In-depth interview method as communication

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Abstract: Today, we face many opportunity to co-work designing with other people who comes from different countries. To understand User, a mostly User research method tool is used as drawing insight. While taking interview with someone from different culture, it can cause communication barriers between interviewers. We considered communication structure of interview user research method, grafted message transfer structure model, and analyzed errors on it. We propose component to figure out user culture whether user is belong to high or low context so this may help us customize to plan user research method.

Key words: Culture Difference, user research method, In-depth Interview

# 1. Introduction

As globalization advances, understanding users who has different culture is getting become important issue. When we do of user experience design especially, it is more important to consider understanding what user's need is to get more effective output. Thus, many of user research methods are being used widely. But these are being used with only one direction without considering cultural differences of users. Therefore, this paper studies that how can different participant's culture and how it effects when do user research, in-depth interview.

## 2. What is Culture?

The purpose of this paper is that making a plan of user research has to consider culture difference because of that culture difference effects on progress of user research and result as advanced research determined.

#### 2.1 Definition of Culture

The 'Culture' is not easy to define by one word. The cultural theorist and critic, Raymond Williams writes in Keywords "Culture is one of the two or three most complicated words in the English language." After 20 century, by developing human-social-science, theorist gives us consistent argument. The anthropologist, E.B. Tylor(1871), defined culture as 'that complex whole which includes knowledge, belief, arts, morals, law, custom, and any other capabilities and habits acquired by man as a member of society'. And R.Linton writes 'Culture is the total way of life of any society'. Like these, many theorists descript culture is a way of life.

## 2.2 Cultural Variables

Some theorists present many of cultural variables to separate and define by different culture. Kim, Jung-ha (2003) writes 'Cultural Variables is that it can be a standard to measure by other culture'. The understanding of cultural variable needs to figure out that how the culture is different comparing with other culture. Among many of them, Geert Hofstede(1980) and Edward T. Hall(1786)'s culture models suggest how interact on communication with other people, how recognize social hierarchy of I and other people in a Group and attitude for time and circumstance. Both are popular culture model to be used. These cultural variables give help trying to find direction of cultural difference for this study.

Hofstede proposes four dimensions to study cultural values: (1) individualism-collectivism – explores individual's relationship with society and the extent of societal-individual dependence; (2) power distance – explains the extent to which cultures accept social hierarchy and social inequalities; (3) uncertainty avoidance – measures cultures' tolerance for uncertainty and ambiguity in daily life; and (4) masculinity-femininity – explores how gender roles are allocated in society. Together, these four cultural dimensions capture the essence of cultural values most commonly observable across cultures

Edward T. Hall proposes that a high context (HC) communication or message is one in which most of the information is already in the person, while very little is in the coded, explicit, transmitted part of the message. A low context (LC) communication is just the opposite; i.e., the mass of the information is vested in the explicit code.

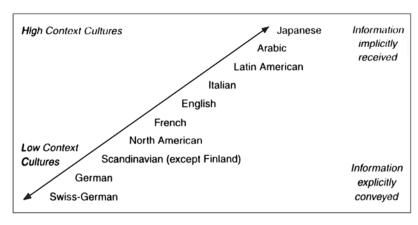


Figure 1. High context - Low context (Edward T. Hall)

Context is the information that surrounds an event; it is inextricably bound up with the meaning of that event. The elements that combine to produce a given meaning – events and context – are in different proportions depending on the culture. The cultures of the world can be compared on a scale from high to low context.

## 3. Culture differences and related user research

For User Centered Design, User research method is developing rapidly and it using by many researchers. There are many methods of user research, but we focus on In-depth Interview method because of that it is very popular method in the world and easy to execute. User Research method is based on communication between moderator and participant, and the context during communication should be considered importantly.

# 3.1 In-depth Interview

In-depth interviews are a useful qualitative data collection technique that can be used for a variety of purposes, including needs assessment, program refinement, issue identification, and strategic planning. In-depth interviews are most appropriate for situations in which you want to ask open-ended questions that elicit depth of information from relatively few people (as opposed to surveys, which tend to be more quantitative and are conducted with larger numbers of people).

In-depth Interview is composed 6 components as Moderator, Participant, Message, Channel, Setting, Feedback and Interrupt, re-composed based on Saundra Hybel(2004)'s communication component like Sender-Receiver, Messages, channel, Feedback, Noise and Setting. As below [table1], there is definition of 6 components.

Table 1.	the component of	f In-depth	Interview

	Component	Definition		
In-depth Interview	Moderator	In charge of Progress		
	Participant	Meet the requirements		
	Message	Sign to make understanding		
	Channel	Tools or Documents for communication		
	Setting	Set the place for interview		
	Feedback	Reaction during communication between Moderator and Participant		
	Interrupt	Barriers (Mis-understanding, Silence)		

# 3.2 In-depth Interview as Communication

Communication is to deliver and receive information or message. So it can create common meaning and effect to act for each other. Communication is classified under 6 heads as ego communication, interpersonal communication, small-group communication, group communication, public communication and mass communication according to participant's number, situation, and a kind of media and direction of communication. In-depth Interview has come under interpersonal communication.

In the other hands, the components of In-depth Interview can be understood in a message-based 'Context'. On communication, recognizing context is one of the effective components.

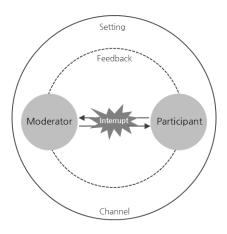


Figure 2 message-based communication model

In their book, Simon and Schuster(2003) studied of the differences between Eastern and Western thought patterns based upon research and cultural archeology. In one study, Japanese had a difficult to give their idea without presenting context, but they could do adroit after explaining context. American gave their thought naturally even though no presenting relative context. Likewise, considering context with different culture during communication is very fundamental. As Hwang, Hae-Jin (2008) studied; she presents some cultural effect factors while Koreans communicate with foreigners. Among them, power-distance has especially high effects on communication. Like context, the power distance which one of the Hofstede's four culture dimension can consider requisitely. When high power distance, it affects giving feedback and attitude according to power distance in Group. Also, participant tends to follow other's idea so it seems that it is not easy to give their own idea during communication. And opposite, participant thinks of like they have a duty to give their idea when low power distance, so they tend to give their active opinion and experience.

Son, Ju-hyun(2012) defines communication concept of Identity Design. Based on it, we studied of communication concept of In-depth interview as below [figure 2]. Sender sends message to receiver though concept, sign or language and it transfers tangible output to them. After receiving output, receiver makes their own thought as intangible. On communication, it is iterative concept.

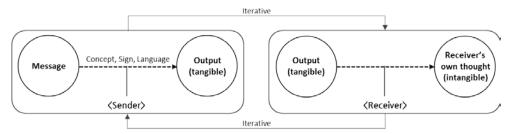


Figure 3 communication concept

# 3.3 The Communication Progress Model of In-depth Interview

The message-based communication progress model of In-depth interview can be classified 3 steps as before conveying message, during conveying message and after conveying message. Before conveying message, Moderator prepares to convey message and participant be ready to attend interview. During conveying message, participant plans and decide their thought according to delivered message and moderator listens to give feedback with right intention. When moderator gives feedback, participant re-plans and decides their thought. It is repetitive task on this progress model.

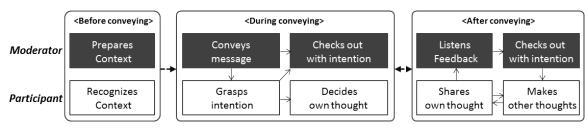


Figure 4. Message-based communication progress model on In-depth Interview

Before conveying message, participant recognizes context of interview when moderator prepares context for it. At this time, the recognizing context of participant, it has high effect to progress and output of interview so that it is very important to know because of that participant recognizes context based on their culture background. So, we should consider participant's culture background before doing in-depth interview for getting expected result with intention.

## 4. Considering of cultural effect element for participant

After consideration of cultural difference on user research, we found that participant is affected by context and power distance on communication. So we propose four options of cultural effect element like (1) High context-High Power distance, (2) High context – Low Power distance, (3) Low context – High power distance and (4) Low context – Low power distance by components of communication. We can say that context is overall context and power distance is personal context on communication. Based on these, we can figure out participant's cultural difference before interview.

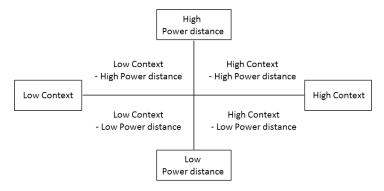


Figure 5. Two dimensional grid

## 4.1 Deduction of cultural effect element on In-depth interview

## 4.1.1 Experiment Plan

To figure out two dimensional culture valuables, we had experiment with some participants who have each different culture background. We processed in-depth interview with 5 people like 2 women and 3 men; Taiwanese, Brazilian, Chinese, Egyptian and Russian. This study focuses on High context- Low context basically so we appointed like high context is Taiwanese and Chinese, Low context is Brazilian, Egyptian and Russian. We recruited university students so their age is all around 20~25 years old and they all speak in English during interview. We gave a topic of interview which was pros and cons of living life in Korea as an exchange student and examined their cultural attitude, interaction frequency and power distance in context of communication.



Figure 6 In-depth interviewing

# 4.1.2 Experiment Result

As mentioned before, we tried to examine to see cultural difference including attitude, interaction frequency and power distance in whole context of interview.

In case of participant who belongs to High context, they looked around the interview place when reached at first. They feel comfortable to use indirect expression instead of direct language and they tend to follow moderator's leading which can notice that they are under high power distance. Also, they had a positive response to the some channels, documents and tools, during interview. In case of participant who belongs to Low context, they had an interesting about interview contents and gave us their thought very well with direct language even if we don't explain about context. Sometimes, they tend to lean to one side so interview has gone into overtime. The interactive way which gets shown on the surface is as below [table 3].

Table 2 Interactive way on In-depth interview

	Interactive way	
Maggaga	Direct Language (Words)	
Message	Indirect Language (Sign, Concept)	
Channel	Use (with document, Tools)	
Channel	No use (only language)	
Catting	Considering	
Setting	Un-considering	
Feedback	Direct feedback	
reedback	Indirect feedback	
Interrupt	Allow	
Interrupt	Not allow	

There is an analysis of experiment of relationship cultural valuables with component of communication. It can be helped understanding user's culture background so that useful to plan user research in advance.

Table 3. the details of two dimensional grid of culture valuables

	High context	Low context
High Power distance	<ul><li>Indirect language</li><li>Indirect Feedback</li><li>Consider interrupt</li></ul>	- Consider Setting - No use Channel
Low Power distance	- Un-consider Setting - Use Channel	<ul><li>Direct language</li><li>Direct Feedback</li><li>Un- consider interrupt</li></ul>

## 5. Conclusion

In this paper, we expect to try finding cultural differences and how it effects on user research, in-depth interview. The relationship between culture and user research has defied though theory consideration of them, so we figured out that context and power distance is very effective element on Communication. By experiment of in-depth interview, we get the details of two dimensional grid of culture valuables how could we consider based on cultural difference- high context, low context and high power distance and low power distance. Thus, we propose that user research planning should be considered for participant based on it before interviewing. But the experiment in this study is limited that we tested few participants as qualitative research, and it should be applied to use case in real.

So based on this limitation, we will verify this study with real examples and we can propose guideline for planning of user research method.

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