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# A Cross-Cultural Comparative Study of User Interface in Social Media

- Why Social Media Can Cross Seas But Not Nationalisms -

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## SUMMARY OF MASTER ' S DISSERTATION

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# Contents

<b>Summery of Master ' s Dissertation</b>	<b>i</b>
<b>Acknowledgements</b>	<b>ii</b>
<b>Contents</b>	<b>iv</b>
<b>List of Figures</b>	<b>vi</b>
<b>List of Tables</b>	<b>vii</b>
<b>1 Introduction</b>	<b>1</b>
1.1 Overview . . . . .	1
1.2 Contributions of This Work . . . . .	3
1.3 Organization of This Thesis . . . . .	3
<b>2 Art and Science of Social Media</b>	<b>5</b>
2.1 The Collapse of Capitalism . . . . .	5
2.2 Importance of Art and Science . . . . .	6
2.2.1 Definition of Art and Science . . . . .	6
2.2.2 Importance of Art . . . . .	6
2.2.3 Importance of Science . . . . .	7
2.3 User Interface as Art and Science in Social Media . . . . .	7
2.3.1 Functions of Social Media . . . . .	7
2.3.2 Art and Science in Social Media . . . . .	9
2.4 Summary . . . . .	10
<b>3 Validity of Five Factor Cultural Model</b>	<b>11</b>
3.1 Five Factor Cultural Model . . . . .	11
3.2 Validity of Five Factor Cultural Model in Social Media . . . . .	12

<b>4</b>	<b>World Wide User Interface Commonalities Investigation</b>	<b>15</b>
4.1	World Wide User Interface List . . . . .	15
4.2	Investigation Using Five Factor Cultural Model . . . . .	17
4.3	Discussion . . . . .	17
4.4	Summary . . . . .	17
<b>5</b>	<b>Questionnaire Investigation</b>	<b>19</b>
5.1	Objectives of Questionnaire . . . . .	19
5.2	Questionnaire Items . . . . .	19
5.2.1	Process . . . . .	20
5.2.2	Aim of Questionnaire Items . . . . .	21
5.3	Questionnaire Target . . . . .	21
5.4	Questionnaire Results . . . . .	23
5.4.1	General Information . . . . .	23
5.4.2	Preference Overview Among Both Countries . . . . .	24
5.4.3	A Questionnaire Result of Function . . . . .	27
5.4.4	A Questionnaire Result of Service . . . . .	30
5.5	Discussion . . . . .	32
5.5.1	A Comparison Between Usage of Social Media . . . . .	34
5.5.2	Results Adaptation in Current Situations in Social Media . . . . .	34
5.5.3	Relationship Between Five Factor Cultural Model . . . . .	34
5.5.4	Effects on the Intercultural Experience . . . . .	35
5.5.5	Contradictions of Results and Five Factor Cultural Model . . . . .	36
5.6	Summary . . . . .	36
<b>6</b>	<b>Conclusion</b>	<b>37</b>
<b>7</b>	<b>Future Prospects</b>	<b>39</b>
7.1	Questionnaire targets . . . . .	39
7.2	Environment Effects to Cultures . . . . .	39
7.3	Cultural Matching Issue . . . . .	41
7.4	Intercultural Investigation in several countries . . . . .	41
7.5	An Issue of Social Media Limitation for Investigation . . . . .	41
7.6	Uncleared Contradictions of Results Related to Five Factor Cultural Model . . . . .	42
<b>A</b>	<b>Questionnaire Items</b>	<b>43</b>
<b>B</b>	<b>Questionnaire Results</b>	<b>54</b>
	<b>Bibliography</b>	<b>62</b>

# List of Figures

- 1.1 Usage of social media in Europe . . . . . 2
- 1.2 "As-is, To-be" of this work . . . . . 4
- 1.3 Applying V-model to this work . . . . . 4
  
- 2.1 4 composite functions of social media . . . . . 8
  
- 3.1 Indication of Five Factor Cultural Model . . . . . 13
- 3.2 World Wide Usage of Social Media . . . . . 14
  
- 5.1 Questionnaire Result: An Overview of Preference Between Japan, United States and IEP . . . . . 25
- 5.2 Questionnaire Result: An Overview of Results Among All Countries . . . . . 26
- 5.3 Questionnaire Result: An Overview of Functions in Japan . . . . . 27
- 5.4 Questionnaire Result: An Overview of Functions in United States . . . . . 27
  
- 7.1 Average age distribution across social media in United States . . . . . 40
- 7.2 Average age distribution across social media in Japan . . . . . 40
- 7.3 Average age distribution across social media in China . . . . . 41



# List of Tables

- 1.1 Inclination of social media users toward native countries (US and JP) . . . 2
- 2.1 A comparison of social media functions . . . . . 10
- 4.1 Design and Layout of Social Network Services . . . . . 16
- 4.2 Values of Five Factor Cultural Model . . . . . 18
- 5.1 Pre-observation for questionnaire . . . . . 22
- 5.2 Questionnaire Respondents . . . . . 23
- 5.3 Intercultural Experienced People . . . . . 24
- 5.4 Social Media Usage . . . . . 24
- 5.5 An Overview of Questionnaire Results . . . . . 33
- 5.6 Results and Current Situations in Social Media . . . . . 34
- 5.7 Relationship Between Preference Value and Individualism . . . . . 35
- B.1 Listed data of questionnaire results . . . . . 54

# Chapter 1

## Introduction

### 1.1 Overview

Since the late 2000s there has been a dramatic restructuring of relationship between user and information by massive spread of Smart Device (e.g. Smartphone, Tablet Computer). At the same time its advance to freedom of portability and operation-ability has promoted a spread of Social Media to become a global communication tool on Internet.

Although social media has spread over the world, the number of user in each social media sways toward those native countries. A gulf between United States and Japan is one of the biggest. Table 1.1 presents the sways of social media users toward native countries with 8 services - 5 are from United States and 3 are from Japan. The data of visitors that each service has is collected at DoubleClick Ad Planner[1].The sways are presented as the ratio of users of the social media in Japan to users in United States. The number of users in Japan has been revised by multiplying by a ratio of Internet users in US to Internet users in JP. The sways have been presented increase in proportion to difference between the ratio and 1.

It is not only about the situation between continents, but also in the continents. Figure 1.1 presents the usage of eight social medias in Europe, revised based on the usage of Internet in each country. As a result concerned sway, there are differences of usage in a social media more than two times.

In this situation, it cannot to say that social media realized the true communication tool to across the boarder of countries. Various factors affect to this situation, but in particular one of the biggest reasons is the difference of cultures among advanced countries. Anping Xie,P.-L. Patrick Rau a, Yuchien Tseng, Hui Su, Chen Zhao say that the ways of communication between high context people (HCP) and low context people (LCP) differ in eachother[2]. As concerns a table 1.1, it is not eccentric situation that a sway has been

## 1.1. OVERVIEW

Table 1.1: Inclination of social media users toward native countries (US and JP)

Country	Service	#Total visitors	#US visitors	#JP visitors	#Revised JP visitors <sup>1</sup>	Ratio <sup>2</sup>
US	Facebook	1.7 B	590 M	6.7 M	16.16 M	0.03
	LinkedIn	97 M	45 M	0.35 M	0.84 M	0.02
	YouTube	1.4 B	410 M	45 M	108.54 M	0.26
	Ustream	12 M	4.2 M	2.8 M	6.75 M	1.61
	Digg	14 M	5.6 M	0.08 M	0.19 M	0.03
JP	mixi	14 M	0.47 M	13 M	31.36 M	66.72
	NicoNicoDOUGA	18 M	0.27 M	17 M	41 M	151.85
	Hatena	2.9 M	0.03 M	2.8 M	6.75 M	225

Revised JP Users = #JP users \* 239,232,863(#Internet users in US) / 99,143,700(#Internet users in JP)

Ratio = #Revised JP users / #US users

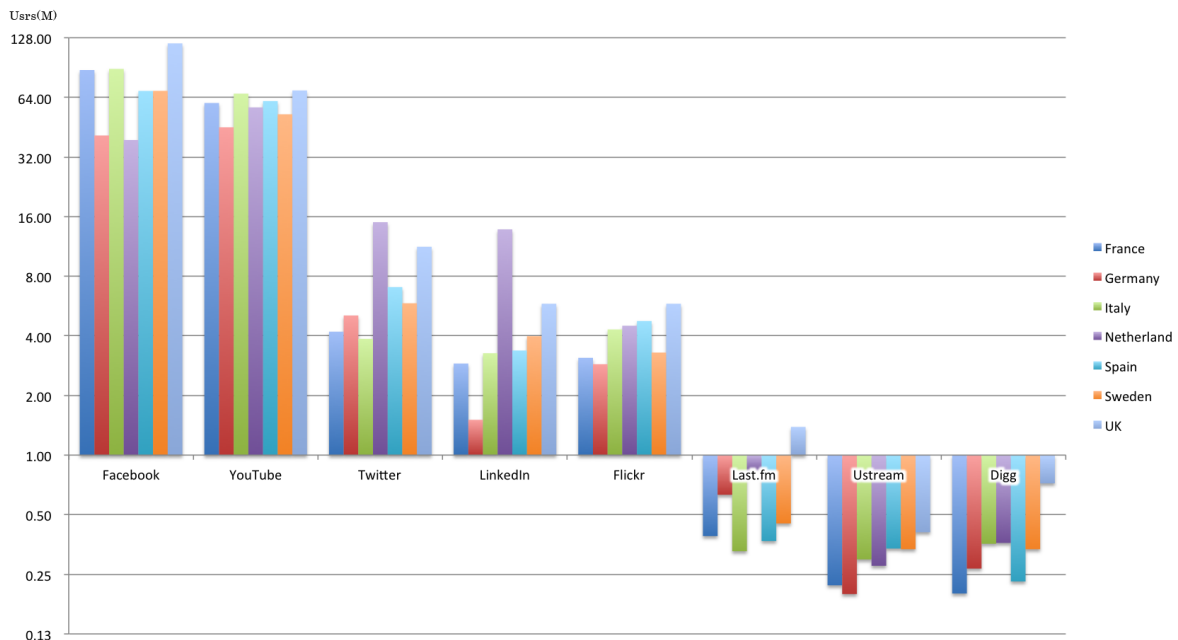


Figure 1.1: Usage of social media in Europe

Data source: DoubleClick Ad Planner, Internet World Stats (Usage and Population Statistics)

existed between United States as LCP and Japan as HCP.

To fill the gap between nationalisms, it is necessary to understand and apply the culture to each social media. However, there are some preceding studies related to how social media influences culture differences[3], but no preceding studies related to how culture differences influence social media before.

This paper will focus on user interface in social media, and discuss from the viewpoints

## 1.2. CONTRIBUTIONS OF THIS WORK

---

of art and science after collapse of capitalism, historical background of each culture, five factor cultural model in sociology and quantitative investigation through questionnaire related to user interface in social media.

## 1.2 Contributions of This Work

The objective of this research project is to system design the world that the true global communication tool connect the society across nationalisms. The true global communication tool, mentioned in this paper is defined as the tool that users can use without operability-less or any negative feelings based on cultural-differences, and to communicate with any nation in the world seamlessly.

As a part of this research project, this paper discusses as follows:

1. Defining issues related to user interface in social media, which is not enough succeeded in localization.
2. Providing the way to activate the global communication by improving the internationality of social media, using cultural comparative study of user interface in social media.
3. Providing opportunities of global business to Japanese IT companies. This paper focuses mainly about a relationship between United States and Japan.
4. Applying discourses of art and science to theme related to social media.

Figure 1.2 shows "As-is, To-be" tool from System Design Management, which presents before and after this work. "As-is" box presents the situation before, and "To-be" box presents the situation after. As figure 1.2 presents the objective of this work, figure 1.3 presents the roadmap of this work from "As-is" part to "To-be" part, using "V-model" tool also from SDM. V-model is a progressed tool of "Water fall model", aimed to show relationships design part, which presented in left side of V, and integration part, which presented in right side of V.

## 1.3 Organization of This Thesis

The rest of this thesis is organized as follows. Chapter 2 defines art and science in this paper to analyze what functions of social media have to be investigated. Chapter 3

1.3. ORGANIZATION OF THIS THESIS

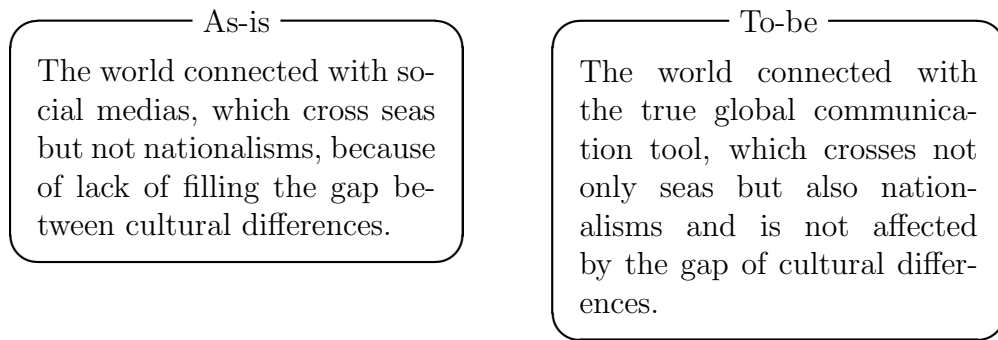


Figure 1.2: "As-is, To-be" of this work

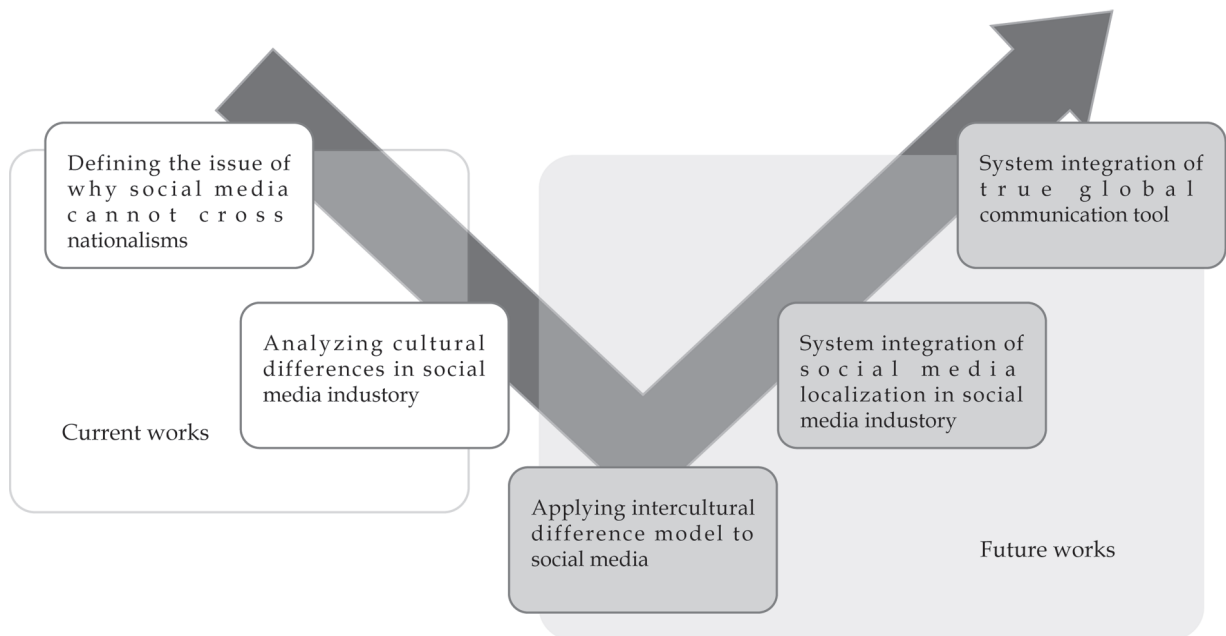


Figure 1.3: Applying V-model to this work

provides and proves the preceding study in sociology, five factors cultural model, that can be used for evaluation tool for the investigation in this paper. Chapter 4 discusses the relationships between intercultural countries in social media by the social network service design investigation. Chapter 5 discusses the effects of different culture in social media in term of user interfaces by questionnaire investigation. Chapter 6 gives a conclusion of this thesis and discusses future works at chapter 7.

# Chapter 2

## Art and Science of Social Media

This chapter describes the importance of art and science in social media to define suitable functions among cultural differences. As an introduction to discuss why art and science are mentioned in this paper, the collapse of capitalism eventually happened in 2008 will be discussed. Following the discourse, a description of an importance of art and definition will be discussed with the definition of art and science in this paper will be explained. As a conclusion of this chapter, how art and science of social media will defined will be discussed.

### 2.1 The Collapse of Capitalism

Richard A. Posner [4] says the failures of the free market, failures of economic science, failures of government — and some bad luck into the bargain — led the collapse of capitalism in 2008. To describe the situation before and after the collapse, Eran Fisher [5] describes the capitalism before a collapse, Fordism capitalism, has changed to post-Fordism, involving changes not only in the regime of accumulation - that is, in how production is carried out, where, and by whom — but also in the mode of social regulation, entailing a whole set of political arrangements and cultural practices. This has changed with keywords — globalization, outsourcing, "just-in-time" production - from lexicon of the new capitalism. The Fordism, named after Henry Ford [6], is a system of mass production to realize highly productivity by standardizing product line. On the other hand, post-Fordism is a wide applied philosophy that describes various thinkers have different views of its form and implications.

Also, Fisher says that the transformation of the emergence of network technology, which enabled a new society in the age of digital, has to be discourse as the intersection between new, post-Fordism capitalism with narratives of the digital discourse and under-

scores how these constitute a new "spirit of networks" — New Capitalism requires an social emancipation to bring individual emancipation through individual empowerment, authenticity, creativity, and cooperation. —

For these discourses, Social Media, the most effective network technology in new social community, can be adopted to globalization.

## 2.2 Importance of Art and Science

In this section, the description related to the importance of art and science will be given. Before a discussion of main topic, a definition of art and science will be presented.

### 2.2.1 Definition of Art and Science

In this paper, definitions of art and science will be described as follows:

**Art** is a study of subjective absolute values that enlarge people's happiness

**Science** is a study of objective absolute values that enlarge people's happiness

### 2.2.2 Importance of Art

Phil Libin [7], Evernote CEO [8], describes the society after the collapse of capitalism as a society of scarcity. The scarcity, described before, presents aw a scarcity of energy, resource, and so on. However, the scarcity is now made artificially.

Scarcity is lately not physically constrained anymore. People creates artificial scarcity, e.g., Digital Rights Management, which is a term for access control protocol among digital contents that be able to copy unlimitedly, has controlled a movement of flood of contents. This aims to make artificially scarcity to remain values of contents. Although artificially scarcity seems being succeeded to remain values of contents, the fundamental issue has not be solved, which is a scarcity of product value.

To solve an issue of scarcity of product value, Phil Libin has mentioned as follow:

*“ Value of product is not how scarce they are, but how people love it. ”*

4 factors among a scenario of realizing product development including love are important to be described. One of 4 factors present an importance of deep personalization. Deep personalization provides users of product suggestions or recommendations based on their favorite choices, which has been analyzed a communication. The idea of this deep personalization is related to the idea of individual emancipation that Fisher mentions.

Deep personalization and individual emancipation provide love to users to enhance happinesses. Which is deeply related to the art that this paper defines. As individual emancipation is the necessary part of social media in new capitalism, adjusting a thought of art is important.

### 2.2.3 Importance of Science

Kevin J. Hemker [9] advocates for the importance of science to discuss about "deliberative democracy" which Barack Obama despised an importance of science with using metaphor that the strength of democracy is not that people always has the right answer but rather that no one person (king, queen, or dictator) can dictate what the right answer shall be. Hemker mentioned as follow:

*“ There is a growing and very real appreciation for the critical role that science and technology have to play in the future of our world. The need to develop new economies, protect our environment, and address the world’s ever-rising energy needs is now widely appreciated by the public at large and by those within our governments. ”*

As Fisher mentioned that a social emancipation has been needed in new capitalism, which has been taught as post-Fordism, the idea of those Hemker is advocating is necessary to realize an enhancement of happiness.

## 2.3 User Interface as Art and Science in Social Media

In this section, a discussion related to art and science in social media based on a discussion about background of art and science in new capitalism. A pre given information of social media will be given as an introduction in this section. After the discussion, user interface as an art and science of social media will be discussed.

### 2.3.1 Functions of Social Media

Jay Deragon [10] analyzed social media as defined it as *system of communication* for especially business. In this analysis, Deragon describes that social media has 4 composite functions among a process of communication on the Internet. Figure 2.1 present the relationship between 4 functions. X-axis presents time flow of process among 4 composite functions, and Y-axis presents the value of output. Each interface between functions has



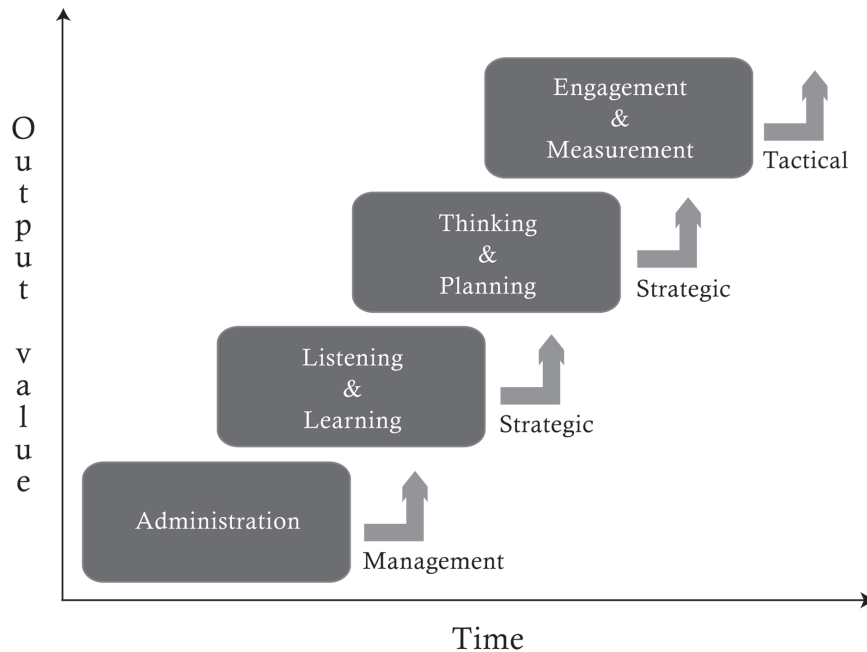


Figure 2.1: 4 composite functions of social media

different type of action. Management is necessary between *administration* and *listening and learning*.

4 composite functions of social media are as follows:

#### 1. Administration

Organizational profiles within relevant and relative social networks are described as now. Establishment of a social media policy, training and education for organizational members on use of social media. Establishment of an organizational blog and integration of content within relevant communities. Market research to find new market, and also confirming current market where the service exists, is participating.

#### 2. Listening and Learning]

Creation of a monitoring system, which aims to listen to society trend keywords, what is relevant to them and learning what topics pull interest. Understanding who are the creators, observers, participants and their relative influences. Learning what, where, when, why and how users can make them incentives and what influences the behavior in a society. Understanding the strategies and tactics of another users.

#### 3. Thinking and Planning]

Based on what has been learned from step 1 and 2, thinking the strategy to com-

municate with another users through social media on the Internet will be useful and valuable.

#### 4. Engagement and Measurement]

Through step 1 to 3, the relevant knowledges has been attained for the engagement of what users are planning. Establishing effective measures is critical to quantify whether the methods used, the content created and the tools users are using are improving the position in social media.

4 composite functions, described above, are adjusted by social media for each. The social media for administration can be presented by social network service, for instance. Listening & Learning by blog, micro-blog, Thinking & Planning by cloud-computing, Engagement & Measurement by any social media.

Common functions of social media through 4 composite functions are relatively existing. Which are as follows:

#### **Contents design**

Social media services provide their service with mainly their original contents. Contents design provide the way of contents presenting, categorizing, and providing. Those each service has original contents in several ways, such as text, picture, music, video, etc., it is important to make interfaces between other types of contents but same concept.

#### **User interface design**

To connect contents and realize services, user interface design is necessary. User interface has to be adapted to the concept and objective of each service without users' notice. Among user interface, *Layout design* and *Visual design* are included. Each social media service has several functions to realize its service. Layout design is necessary to apply functions effectively. e.g., the service related to providing visual contents, 2 columns among main stage provide a service, which can be defined easily, and 3 columns for text contents, instead. The brand of each social media service is important to specialize to another services. Visual design provides including image design, color design and also shape design. Logo, for instance, is a convenient part to illustrate the concept of service.

### **2.3.2 Art and Science in Social Media**

Table 2.1 presents a comparison of contents design and user interface design, aimed to define which function is much practical for art and science. In the comparison, the view

## 2.4. SUMMARY

point of art defines as social media services. The cell crossed contents design and art is describing how social media services choose contents for publish is based on the art mind. The mind of art for choosing contents is able to replace with collecting, which is not enough for presenting their art mind. On the other hand, the mind of art in user interface design is in total has been provided to users.

For these reasons, this paper focuses on the user interface design for an investigation, which will be discussed in later chapters.

Table 2.1: A comparison of social media functions

	Contents Design	User Interface Design
Art	Choosing which content to publish is chosen based on art mind of each social media service.	Visual design and image design provides the art mind of social media services, which effect users favorite.
Science	Designing the relationships of each content into groups, which provides several ways of explanation to users.	Designing user interfaces universally provides users an environment, which adapts any situations across the cultural differences.

## 2.4 Summary

This chapter discussed the importance of art and science based on the historical background of new capitalism, the function of social media that relates to art and science, and a comparison of contents design and user interface design. As a conclusion, user interface design has been chosen for the focal point of the investigation in this paper.

# Chapter 3

## Validity of Five Factor Cultural Model

This chapter discusses the validity of five factor cultural model whether it can use for an evaluation tool in investigations, which will be discussed in later of this paper. As an introduction, the explanation of five factor cultural model will be given. After that, validity of five factor cultural model will be discussed.

### 3.1 Five Factor Cultural Model

Will Fitzgerald discussed related to models for cross-cultural communications for cross-cultural website design structured with cultural dimension (N-factor) models, cultural marker model, cultural differences in on-line behaviors, activity theory and against cultural models [11]. Five factor cultural model, a famous theory for cross-cultural web design papers, was created by Geert Hofstede [12]. Five factors are:

1. Power distance

Power distance presents extents among people especially at organization, which distribute power unequally. i.e., employees accept not to against to their superiors at high power distance organization, and the other does not. For example, United States is low power distance country. On the other hand, Japan is high power distance.

2. Uncertainty avoidance

For instance, at organization, uncertainly avoidance allows people to communicate directly weather general topics or business negotiations. In another word, uncertainly avoidance leads society based on contracts (i.e., United States), and the other

is based on verbal promise (i.e. Japan).

3. Masculinity vs. Femininity (perhaps Assertiveness vs. Tenderness)

Each country has a factor of masculinity and femininity both in the same time. Perhaps, the distribution of them is different in each country. Those country where high masculinity has been indicated men's value is much assertive compared to women's value.

4. Individualism vs. Collectivism

This factor presents individualism, which is easily presented as *American dream*, for example. It presents not only a responsibility of men but also a relationship of family. Those country where indicates low individualism – collectivism – has strong responsibility of family protection, rather than relationship.

5. Time Orientation (orientation to past, present and future)

A factor of time orientation has been made lately to indicate the difference between west and east. Mostly, east side has long time orientation, which is presented as persistence, thrift, ordering relationships by status, or having a sense of shame. On the other side, short time orientation is presented as personal steadiness and stability, protecting your *face*, respect or tradition, reciprocation of greetings, favors, and gifts.

Many studies have done based on Hofstede's five factor cultural model, such as Ford Gabrielle and Gelderblom Helene's study related to the difficulty of measuring the factors and no interrelations between human performance (speed, accuracy, satisfaction) and five factors [13].

## 3.2 Validity of Five Factor Cultural Model in Social Media

This section proves the validity of five factor cultural model in social media by giving explanations of relationships between the figure 3.1 and the figure 3.2.

The figure 3.1 presents the distribution based on the data source of *Clearly Cultural* [14], which quantizes five factors. Countries for the item in the figure have been selected by Clearly Cultural. Also, countries are listed by a number of long time orientation. Y-axis of this figure is structured as sum of points of five factors given for each country in percentage. It presents the relative distribution of five factor cultural model.

The figure 3.2 presents what social media each country uses. The social medias used

## 3.2. VALIDITY OF FIVE FACTOR CULTURAL MODEL IN SOCIAL MEDIA

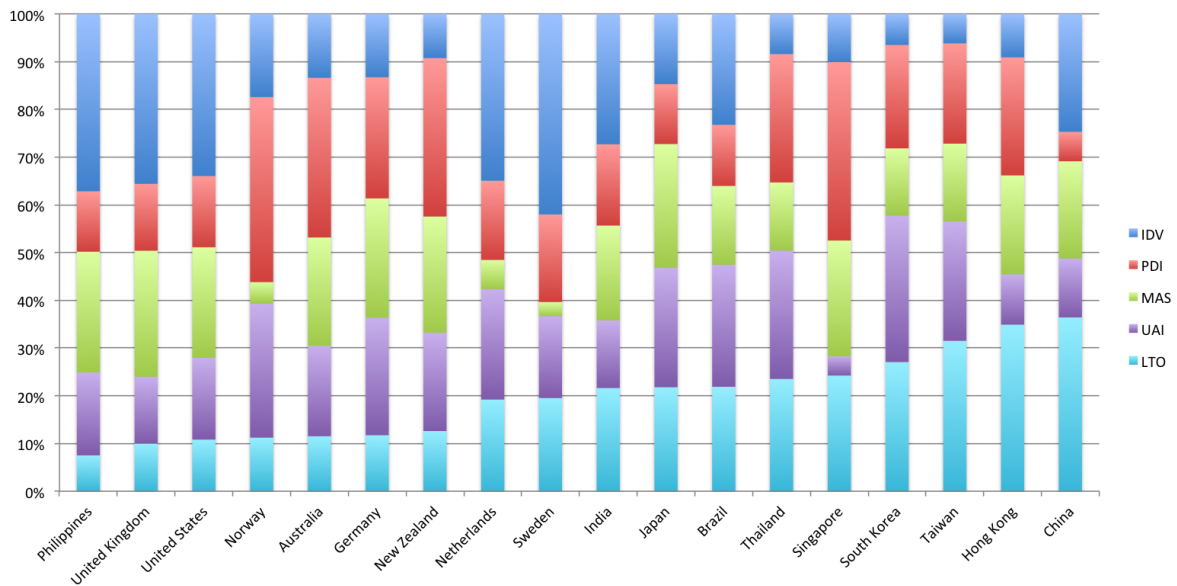


Figure 3.1: Indication of Five Factor Cultural Model

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Data source: Clearly Cultural

in this section are same as those used in section 1.1. The Y-axis presents a total number of social media usage in relative distribution, percentage. It provides the way of each country how they relate to social media.

There are relatively indications between figure 3.1 and figure 3.2. e.g., as follows:

- The country with high long term orientation indicated have used SNS (Facebook, LinkedIn) rather than sharing services (Last.fm, Flickr), compared to low long term orientation indicated country.
- Those country where are distinct from another counties in term of the five factors distribution has unique distribution in usage of social media services. In another word, they have native social media services, which is localized only their countries. (e.g., China, Japan)
- As long term orientation increases, the countries where use micro blog service increase. (e.g., Japan, Brazil, South Korea)

From these discourses, it can to say that five factors cultural model has a validity to apply in the investigation of social media in later chapters.

CHAPTER 3. VALIDITY OF FIVE FACTOR CULTURAL MODEL  
 3.2. VALIDITY OF FIVE FACTOR CULTURAL MODEL IN SOCIAL MEDIA

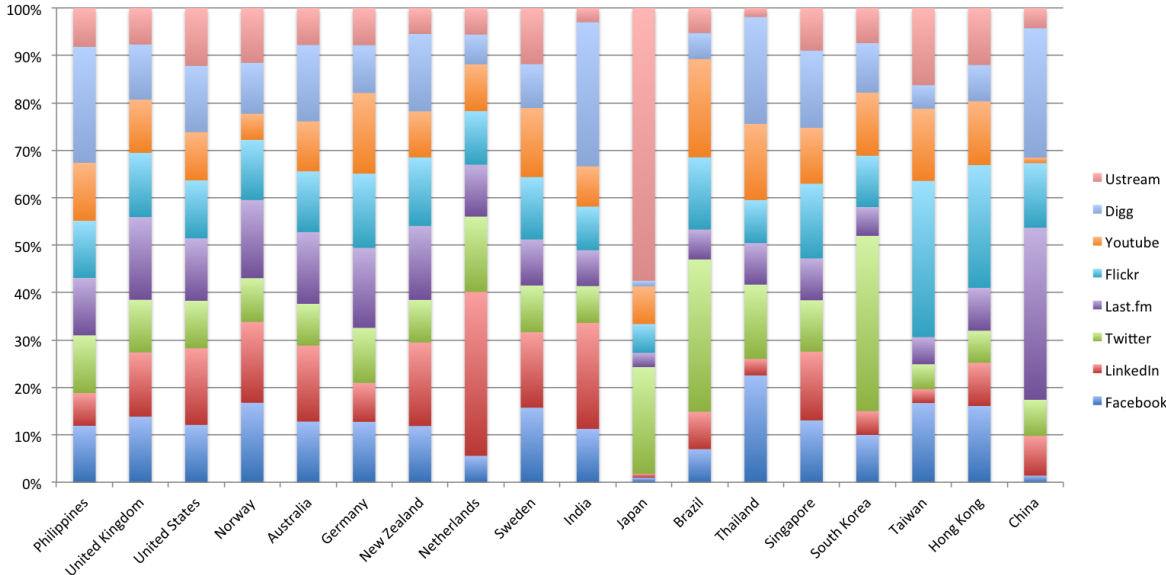


Figure 3.2: World Wide Usage of Social Media

Data source: DoubleClick Ad Planner, Internet World Stats (Usage and Population Statistics)

# Chapter 4

## World Wide User Interface Commonalities Investigation

This chapter discusses how cultures effect user interfaces through the investigation of social network service design and layout in several countries. Provides a table of design and layout of SNS as an introduction of this chapter, afterwards, the investigations of cultural differences among SNS using five factor cultural model, which has been discussed in chapter 3.

### 4.1 World Wide User Interface List

Table 4.1 presents a list of design and layout that gives the information of each SNS structured. Each service presents its concept color, background color, number of stage, corner of table, presentation and country. The country listed below are chosen by referring a map made by Vincenzo Cosenza [15].

Concept color shows what color the service uses for presentation of its logo, title section, or main elements. Background color shows the color being filled out side of main stage. Corner of table shows how the frame, which rounds contents, cornered (e.g., sharp as rectangle or rounded). Presentation shows how the service presents its logo or any user interfaces in term of visual. (e.g., a logo that uses smily face will be presented as not realistic).



Table 4.1: Design and Layout of Social Network Services

Service	Concept color	Bg color	#stage	Corner of table	Presentation	Country
Friendster	Green, Orange	White	2	Sharp	Realistic	Australia
Flickr	Blue, Pink	White	1	Sharp	Realistic	Canada, United States
LiDe	Blue, Red, Yellow, Green	White	1	Sharp	Not Realistic	Czech Republic
Littleredbook	Red, Yellow	White	3	Sharp	Not Realistic	China
Qzone	Blue, Yellow	White	3	Rounded	Not Realistic	China
Iwiw	Blue, Orange	White	2	Sharp	Realistic	Hungary
Cloob	Blue, Orange, Purple, Green	Blue	3	Rounded	Not Realistic	Iran
Maktoob	Orange, Blue	White	3	Sharp	Not Realistic	Israel
Mixi	Orange	White	3	Rounded	Not Realistic	Japan
Draugiem	Orange	White	2	Sharp	Realistic	Latvia
One	Orange, Blue, Yellow	White	3	Sharp	Realistic	Lithuania
Hyves	Orange, Blue, Red	White	1	Sharp	Not Realistic	Netherlands
Nasza-Klasa	Orange, Blue	Green	1	Sharp	Realistic	Poland
V Kontakte	Green, Blue	White	2	Sharp	Realistic	Russia
Odnoklassniki	Blue	White	2	Sharp	Realistic	Russia
Cyworld	Orange, Moss green	White	2	Sharp	Realistic	Russia
Wretch	Orange	White	3	Rounded	Not Realistic	South Korea
Last.fm	Blue, Yellow	White	2	Sharp	Realistic	Taiwan
Facebook	Red	Gray	2	Sharp	Realistic	United Kingdom
Linkedin	Blue	White	3	Sharp	Realistic	United States
Okcupid	Blue	White	2	Rounded	Realistic	United States
Orkut	Blue, Pink	Blue	2	Sharp	Realistic	United States
Tribe	Purple, Blue	Blue	2	Sharp	Realistic	United States
Multiply	Orange	Gray	2	Rounded	Realistic	United States
Hi5	Blue	White	2	Rounded	Realistic	United States / Canada
Zing	Orange, Black	White	2	Rounded	Realistic	United States / Indonesia / India
	Blue	Blue	2	Sharp	Not Realistic	United States / Latin America
				Rounded	Not Realistic	Vietnam

## 4.2 Investigation Using Five Factor Cultural Model

Table 4.2 presents the index of five factor cultural model. Through comparison between table 4.1 and table 4.2, some relationships have found. Which are as follows:

- As individualism increases, the presentation shows realistic in stead of not realistic.
- As individualism increases, the corner of table shows sharp in stead of rounded.
- Power of distance, masculinity, uncertainty avoidance and long term orientation are not related to the presentation, corner of table.
- As uncertainty avoidance increases, the number of colors that services use increases.
- As long term orientation increases, the presentation shows not realistic in stead of realistic.
- As long term orientation increases, the number of stages increases.
- As long term orientation increases, the background color shows white rather than gray or blue.
- As long term orientation increases, the concept colors show including yellow or orange.

## 4.3 Discussion

The elements, individualism and long term orientation had much effects than others. This paper hypothesizes that is because since SNS are system of communication as mentioned at section 2.3.1, those countries where have high individualism and long term orientation care about behaviors on SNS. Which is presented as the presentation (e.g., not realistic).

## 4.4 Summary

This section discussed the world wide user interface commonalities investigation, using five factor cultural model. The investigation listed elements related to design and layout for each SNS up. Also, focused each element of five factors to order SNS. As a result, found relationships between cultural differences, especially the difference of individualism and long term orientation. The causes hidden behind results are hypothesized as because SNS are system of communication, individualism effects the behavior on SNS. The cause has to be defined as a future work.

Table 4.2: Values of Five Factor Cultural Model

Country	PDI	IND	MAS	UAI	LTO
Australia	36	90	61	51	31
Brazil	69	38	49	76	65
China	80	20	66	40	118
China	80	20	66	40	118
Czech Republic	57	58	57	74	
Hungary	46	55	88	82	
India	77	48	56	40	61
Indonesia	78	14	46	48	
Iran	58	41	43	59	
Israel	13	54	47	81	
Japan	54	46	95	92	80
Netherlands	38	80	14	53	44
Poland	68	60	64	93	
Russia	93	39	36	95	
South Korea	60	18	39	85	75
Taiwan	58	17	45	69	87
United Kingdom	35	89	66	35	25
United States	40	91	62	46	29
Vetunum	70	20	40	30	

Data Source: Clearly Culture

# Chapter 5

## Questionnaire Investigation

This chapter gives the description of questionnaire investigation. The description includes the objectives, original items of questionnaire, results with evaluation through quantitative analysis.

### 5.1 Objectives of Questionnaire

Objectives of questionnaire are as follow:

1. To investigate a cultural difference between United States and Japan concerned user interfaces in social media, which differs to another categories of user interface on Internet services.
2. To investigate how the environment of culture affect the choices through questionnaires to people, who have spent time in intercultural countries.
3. To investigate how social media services adapt themselves to what users want through the questions using exist examples.

### 5.2 Questionnaire Items

Questionnaire items have been made based on the objective of questionnaire in section (5.1). The Items related to peculiarities in social media are made based on observations. Peculiarities of user interface in social media are recommendation function, feeds, mini blog function, for instance. Since rest of functions are basically same as another type of Internet services, it is also important to know the differences of effects between peculiarities and the others. The Items related to user interfaces, which are originally focused

## 5.2. QUESTIONNAIRE ITEMS

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on social media, are referred to the contents that *Designing Interfaces*[16] give as MECE categories in user interfaces.

### 5.2.1 Process

A pre-observation of making questionnaire items has been done among eight social medias with referring the MECE categories written on *Designing interfaces*. In this work, the categories, which are not available for using in social media, have rejected for pre-observation.

The MECE categories are as follows:

#### Animated transition

Smooth transition with an animation that makes it feel natural in the visual space.  
(e.g. Closable panels)

#### Center stage

Putting the most important stage by showing contents in the center of layouts to make users easily focus on them.

#### Titled sections

Layout separate sections as easy definition with visually strong title and laying them all out on the page together.

#### Data tips

The function, which gives data values to users when they put mouse rolled over a point of interests on graphics.

#### Row striping

Use two similar shades to alternately color the backgrounds of the table rows to make contents easier to read by separating visually.

#### Input prompt

Prefill a input box with a prompt that tells users what to type.

#### Autocompletion

Predict what users are looking for while users are texting.

#### Visual style

Define the layouts, colors or functions to characterize a web-site.

### 5.3. QUESTIONNAIRE TARGET

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Observed eight social medias, which have been chosen with the same reason as one written at introduction in section 1.1, concerned MECE categories.

Table 5.1 gives a result of pre-observation.

#### 5.2.2 Aim of Questionnaire Items

Appendix A presents the questionnaire items.

Made questionnaire items based on pre-observation among categories of user interfaces. This questionnaire is structured of three parts. Part 1 is related to respondent's background of using social media. Part 2 asks respondent about each user interface of categories, mentioned in subsection 5.2.1, among eight social medias to investigate their sways of favorites. Part 3 is related to respondent's personal history in term of countries, where they have lived before.

**Section 1** aims to investigate how respondents use social media. The question 1.2 asks people, who do not use social media in daily life, about the reason why they don't use them. The aim is to know which of bad contents or bad user interfaces affect people not to use the service.

**Section 2** aims to investigate how cultural-differences affect the choice of design and layout, which are parts of user interfaces. Question 1 and 2 show two pictures used same designed functions in different layouts to know which layout do respondent like. Question 3, 4 and 5 show two pictures used same layout, but different designed functions to know which design do respondent like. Question 6, 7 and 8 ask about favorite design and layout among two pictures used different designed functions in different layouts. Question 9 to 15 are related to peculiar functions in social media to know respondent's choice. These questions contrast with the others in section 2 in term of the way of answering. This aims to discuss results from sociology aspects.

**Section 3** is structured with questions related to background, such as sex, age, profession, level of English skill and countries, where respondents lived. These aim to investigate the affects of environment for the choices.

### 5.3 Questionnaire Target

In this work, the questionnaire mainly targeted young generation between 18 to 24. This section discusses the reason why targeted young generation, but not another generation, instead.

## 5.3. QUESTIONNAIRE TARGET

Table 5.1: Pre-observation for questionnaire

Categories	LinkedIn	mixi	YouTube	Nico Douga	Ustream	Nico Namahousou	Digg	Hatena
Animated Transition	-	-	Search option, Statistics, Details, Size enhancement Content, Comments	Nico News, Section title, Comments	Comments	Comments	Appearance of feeds	
Center Stage	Feeds	Feeds	Content, Comments	Comments, Ads	Contents, Profile	Comments, Ads	Feeds	Feeds
Titled Sections	Gray bgc, panel, closable panels	Gray bgc, panel	white bgc, closable panel	Black bgc, top thin boarder, closable panels	Black bgc, top thick boarder, closable panels	Black bgc, top thin boarder, closable panels	Blue bgc, top thick panel, card stack, closable panels	Blue bgc, top thin panel
Data tips	Group Menu: View Profile, Add	User Setting, Title Section(closable panels)	Function Explanation	Function Explanation, Section (closable panels), Ad comments	Function Explanation	Function Explanation, Section (closable panels), Ad comments	Function Explanation	none
Row Stripping	none	All updates	message	none	none	none	none	none
Sortable table	Type of Contents	none	animated panel	closable panel	closable panel	closable panel	Type of Contents	none
Input Prompt	Collaborate, share an idea, or recommend an article	What's on your mind?	none	none	none	none	Submit a link	none
Autocompletion	user name, pic, at least info	none	content	none	content	none	none	none
Visual Style	Few hues, some values, white bgc, hairlines, corner treatment of boarder	Two Colors, Few hues, white bgc, hairlines, corner treatment of boarder	Some Colors, High hues, white bgc, hairlines, corner treatment of boarder	Some Colors, white bgc, hairlines, corner treatment of boarder, echo fonts	Some colors, dark bgc, corner treatment of boarder	Some Colors, white bgc, hairlines, corner treatment of boarder, echo fonts	Few hues, some values, white bgc, hairlines, corner treatment of boarder	Few hues, some values, white bgc, hairlines, corner treatment of boarder
Recommendation	Friend	Ad	Channel, Content (Based on user's info)	Content (Based on total info)	Content (Based on total info)	Content (Based on total info)	Hot Topics	Hot Topics

## 5.4. QUESTIONNAIRE RESULTS

Yasuyuki Takatori [17] investigated the resistances to inter-cultural communication among the baby-boom generation (52 - 53 years old) and the generation of their children (19 - 24 years old), by questionnaire study to 200 people. As a result, 50% of young generation has a resistance to inter-cultural communication, and 40% of baby-boom generation does so. The reason why there is 10% difference between young generation and mature generation is based on experience of touching inter-cultures. Young generation has less time to have intercultural communication than mature people in daily life. Thus, young generation is less affected their native culture than mature generation.

However, as there are different aspects among young generation and mature generation, the mature generation has to be investigated in the same way as this work as the future work. The additional discourse about the generation has to be investigated is discussed in section 7.1.

## 5.4 Questionnaire Results

This section presents the results of questionnaire, executed for this thesis, aimed to investigate how cultural differences effect the choice of users in user interfaces. As follows, general information will present the information of respondents. Afterwards, results of services, functions and intercultural experienced people will be given.

### 5.4.1 General Information

This investigation adopted 201 samples on the internet in United States and Japan. Table 5.2 shows the detail information of respondents in this investigation. Table 5.3 presents the information of intercultural experienced people among respondents. These people are one of keys in this investigation for the cultural difference comparison.

Table 5.2: Questionnaire Respondents

Country	#Sample	#Male	#Female	Average of Age
Japan	101	50	51	21.7
United States	100	50	50	21.1

Since it is given information that United States is much multi cultured than Japan to adopt the sample of intercultural experienced people, questionnaire included the question related to the skill of English to adopt similar data to IEP only for Japan. As a result, adopted 5 sample in Japan, who have attained English skill more than business level. In later sections, the result viewed from IEP aspects will be given.



## 5.4. QUESTIONNAIRE RESULTS

Table 5.3: Intercultural Experienced People

Country	#Entry	Native Country	#Year	Lived Country	#Y	LC	#Y	LC	#Y
Japan	1	Japan	16	Australia	8				
United States	1	Costa Rica	9	US	9				
	2	Finland	9	Sweden	2	Rwanda	2	US	6
	3	Germany	18	US	5				
	4	Germany	2	US	21				
	5	Romania	23	US	1				
	6	South Korea	2	US	21				
	7	US	18	Russia	2	Dominica Republic	3		
	8	US	5	Qatar	2	Saudi Arabia	12		
	9	US	1	China	8	US	12		
	10	US	20	Peru	4				

Table 5.4 presents the responses of question 1, which asked which of following social media services do users use and most. As a result, respondents in Japan uses YouTube the best, and Mixi and NicoNico Douga follow. On the other hand, respondents in United States use Facebook the most, and YouTube follows. Also, 5 respondents answered they do not use social media, but no respondent answered in the same.

Table 5.4: Social Media Usage

Services	JP Uses	JP Best 3	US Uses	US Best 3
Facebook	12	5	90	88
MySpace	7	1	46	11
LinkedIn	0	0	13	2
Mixi	63	44	1	0
Gree	23	8	1	0
Orkut	0	0	1	0
YouTube	79	59	74	52
Last.fm	5	3	18	4
NicoNico Douga	70	43	2	1
SlideShare	0	0	2	0
Twitter	40	18	46	15
Tumblr	2	2	10	4
Flickr	1	0	15	1
Del.icio.us	0	0	3	0
Digg	1	0	7	0
Hatena	4	1	0	0
Ustream	6	0	6	2
Others	2	1	8	5
I don't use social media	5	5	0	0

### 5.4.2 Preference Overview Among Both Countries

This sub section describe the overview of preferences among Japan and United States from a big picture to details.

Figure 5.1 presents an overview of preference between Japan, United States and IEP.

## 5.4. QUESTIONNAIRE RESULTS

Japan R, listed on the figure, shows IEP in Japan, and so US R does. As a result of which country based user interface do respondents prefer, US based service is much preferred than Japan based. In particular, Japan shows a lower contrast of preference between Japan based and US based than US.

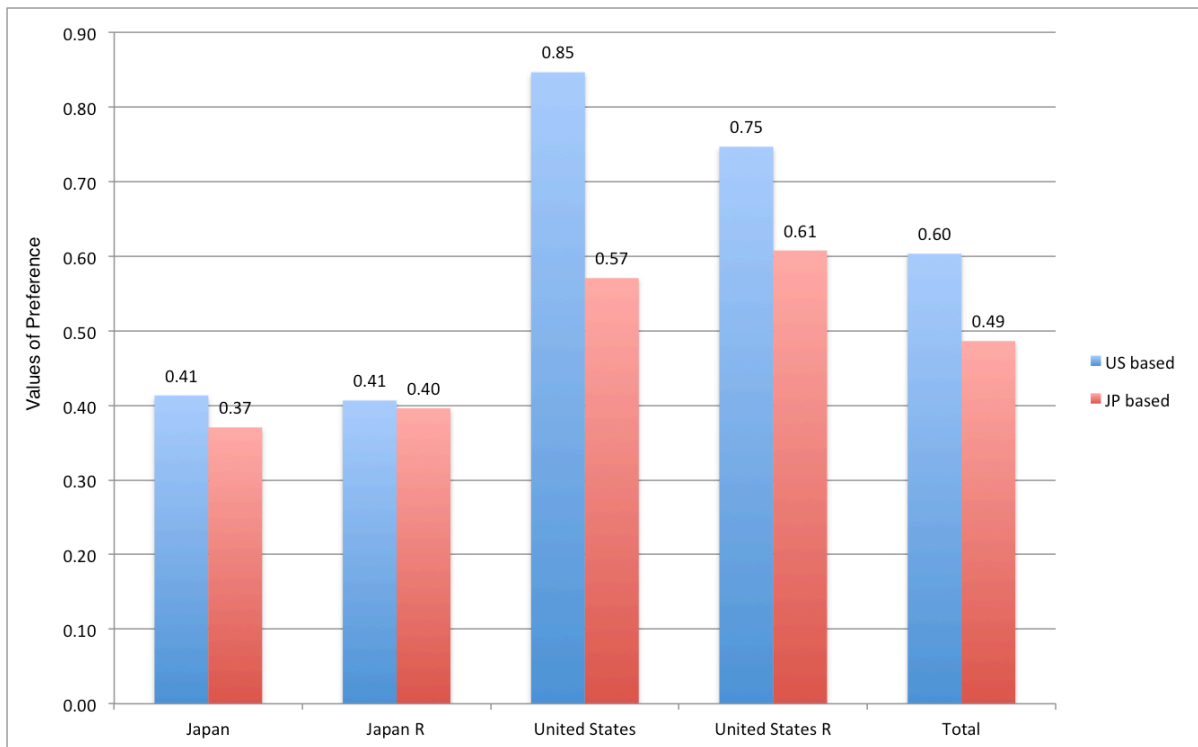


Figure 5.1: Questionnaire Result: An Overview of Preference Between Japan, United States and IEP

To focus for each country, Figure 5.2 presents the preference in terms of design and layout for each country. Basically, design and layout based on US style are preferred by both countries, however, the Japan based layout is preferred by Japan IEP. In particular, Japan and also Japan IEP are not so much having contrasts between Japan based and US based. On the other hand, US has large contrasts between Japan and US based design and also layout. Although US IEP has also contrasts, they are lower than US's.

Figure 5.3 and figure 5.4 present an overview of functions in Japan and US, included both IEP. Through analyzing each figure, its is important to check figures of both countries in the same time. Which is because to avoid the situations that the values of preference can be effected by the quality of each service. Also because the aim of this investigation is to carve the cultural differences among US and Japan out.

According to figures, both countries show values of preferences swayd to US style in term of design and also layout. In the same time, Japan prefers half of listed functions

## 5.4. QUESTIONNAIRE RESULTS

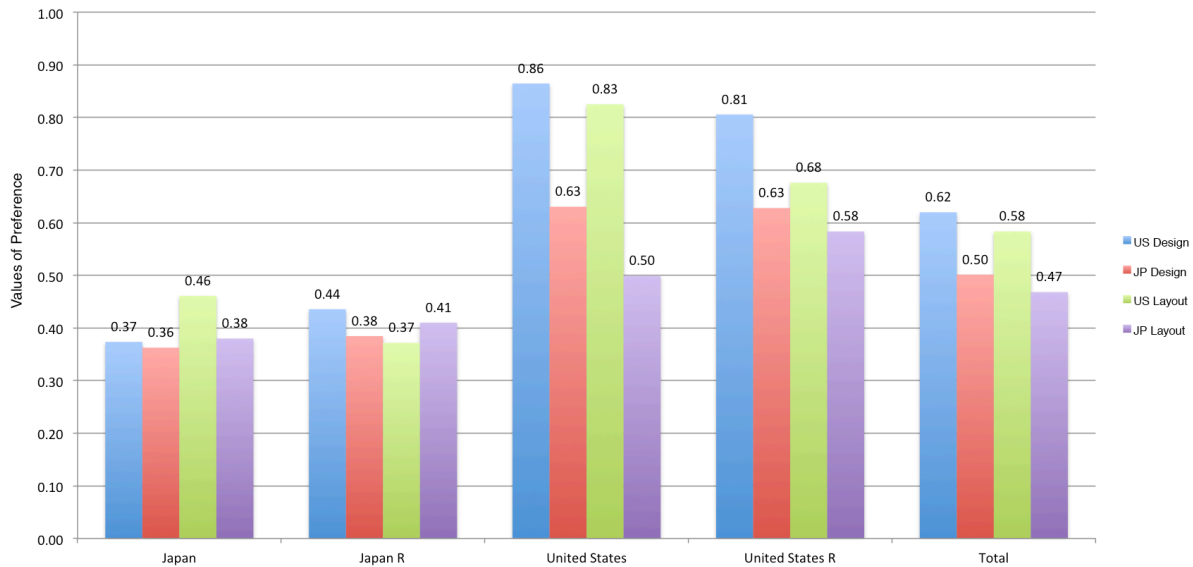


Figure 5.2: Questionnaire Result: An Overview of Results Among All Countries

such as Categories, Feeds, Hot Topics, Miniblog, News, Profile, Search.

As the values of preference related to Contents Info, Vide Player, Comments, Hot Topic and News are high, it shows Japan has been interested in those functions. In the same time, those functions marked low values (e.g., Ad, Feeds, Miniblog, Profile, Recommendation) are not interested in. Also, those situations when values of preference has became contrasted among US based and Japan based can be described as that country has strong values on it. For instance, Contents Info, News, Video Player are contrasted strongly.

However, since US is also having the values on Contents Info and Video Player, those functions might be effected by the quality of services, this thesis avoids those functions.

There are some functions to be preferred independently among design and layout. For instance, Feeds, Menubar, Miniblog, News, Recommendation and Search by Japan, and Contents Info, Feeds, Menubar, News and Profile by US. In addition, the results of Categories, Feeds, Hot Topic, Miniblog, News and Search are clearly different between US and Japan.

As a summary of this sub section, Japan peculiarly has values on News and Profile, and US has Categories, COMments, Hot Topic and Search.

5.4. QUESTIONNAIRE RESULTS

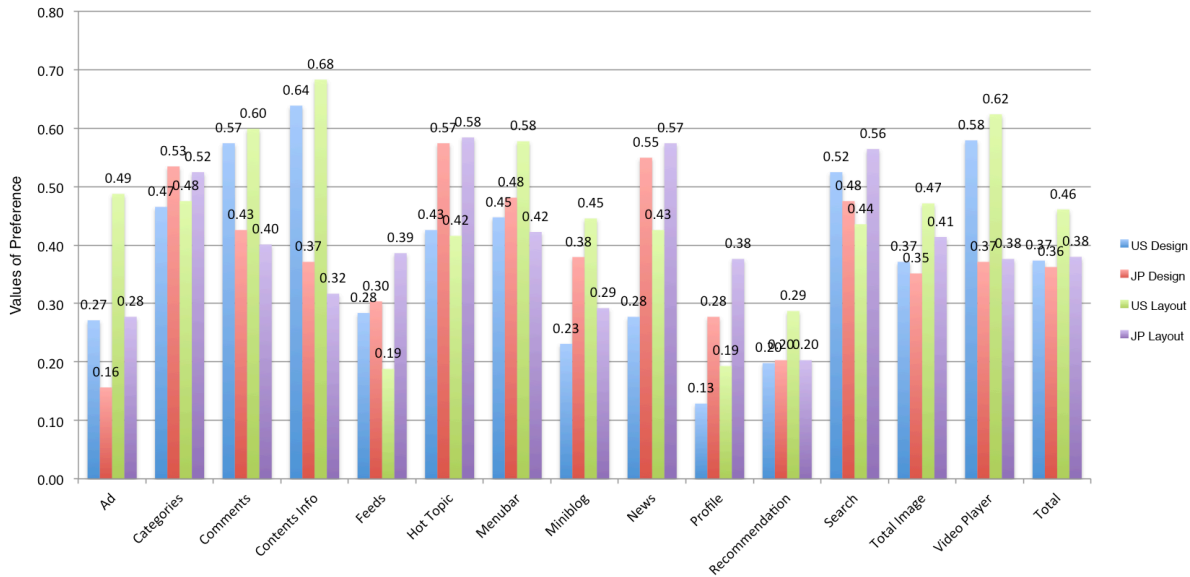


Figure 5.3: Questionnaire Result: An Overview of Functions in Japan

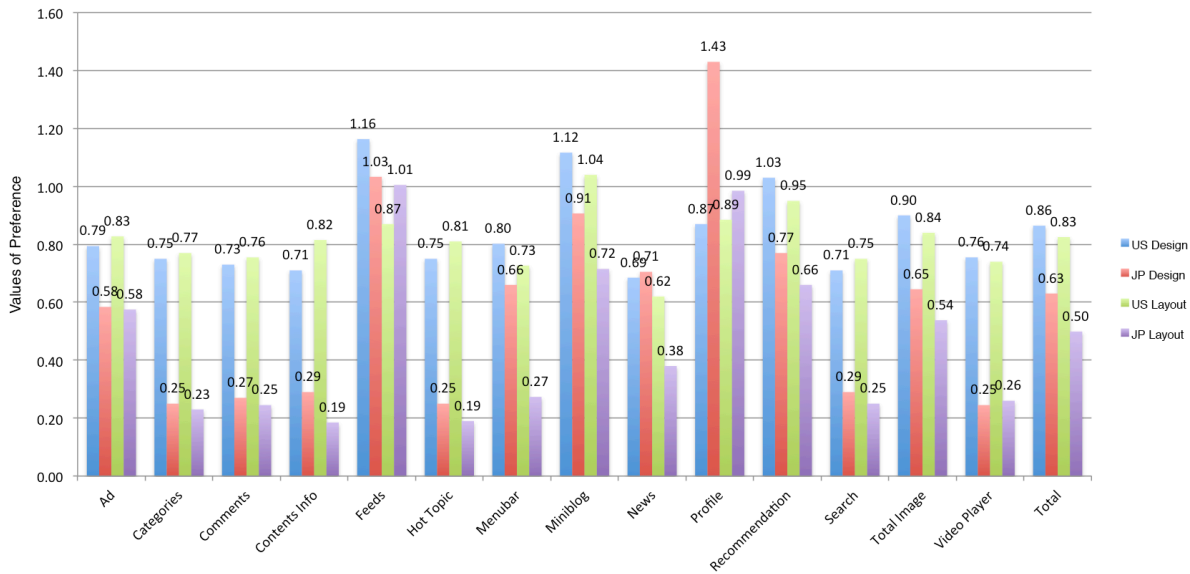


Figure 5.4: Questionnaire Result: An Overview of Functions in United States

5.4.3 A Questionnaire Result of Function

This sub section describes results of each function, investigated by the questionnaire, mainly the difference and contrasts among results. Figures of each result of functions are given in section B. The peculiarly points through the questionnaire results of functions

5.4. QUESTIONNAIRE RESULTS

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are as follows:

**Ad**

- Japan prefers Mixi based layout to Facebook based layout. US prefers Facebook.
- Japan prefers Facebook based design to Mixi based design. US does so.
- Japan prefers Ad swayed to Video Sharing and Streaming services.
- US prefers Ad swayed to social network services.

**Comments**

- US based design and layout are preferred by both countries consistently.
- Values of preference in design and layout are linked.

**Contents Info**

- US based design and layout are preferred by both countries consistently.
- Values of preference in design and layout are linked.

**Feeds**

- No such a big difference between US based and Japan based has shown in total, but Japan based design have been preferred to US's.
- Both countries prefer the design based on each native country.
- A comparison between Facebook and LinkedIn, Japan prefers Facebook better in terms of layout, which has 3 column.
- A big contrast of values of preferences in term of design exists between Facebook and Mixi.
- US prefers Japan based in comparison of LinkedIn and Mixi.

**Menubar**

- Design and layout are preferred equally.
- Menubar in SNS has been preferred Japan based, but social bookmark, streaming, video sharing are preferred US based.
- Japan prefers Japan based Menubar in SNS.
- Japan prefers LinkedIn much compared to Facebook.
- US prefers Facebook much compared to LinkedIn.
- US prefers Japan based layout to US based.
- Japan has been interested in streaming and video sharing
- US has been interested in SNS.

**Miniblog**

5.4. QUESTIONNAIRE RESULTS

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- US based layout are preferred to Japan, but in the same time, Japan based design are preferred.
- Both countries prefer Miniblog based on each native country.
- Japan prefers US based layout, but also Japan based design.

**News**

- Both countries prefer News based on each native country.
- The values of design based are equally among two countries, except social bookmark. Both countries prefer each one.

**Profile**

- Both countries prefer Japan based Profile.

**Recommendation**

- Japan has a gap between design and layout.
- Japan prefers US based layout, but designs are preferred equally by both countries.
- US prefers US based layout better, and prefers design based on Facebook the most, Mixi the second and LinkedIn the third.

**Total Image**

- Values of layout and design are linked.
- Although both countries prefer US based in total, the design and layout based on Mixi are preferred much by both countries.
- Japan prefers Japan based SNS, but video sharing and streaming based on US.
- Japan is interested in videos sharing and streaming, but US is interested in SNS.

**Video Player**

- Both countries prefer US based video player consistently.
- Values of design and layout are linked.

**Function Explanation**

- Values of design and layout are independent.
- Basically US based Function Explanation is preferred, but US prefers Japan based design.
- The values that Japan R shows are similar to US rather than Japan.

**Popup Menubar**

- Popup Menubar A, US based, is the most preferred in total.
- Japan R prefers Popup Menubar F, also US based.

5.4. QUESTIONNAIRE RESULTS

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- Values among US and US R are equally except Popup Menubar B, Japan based, which US R does not prefer.

**Popup Role**

- Popup Role, which shows a list as soon as users click, is the most preferred.
- Japan, Japan R and US prefers in order of 1, 2, 3, 4. US R prefers in order of 1, 2, 4, 3.
- Japan has value of Popup Role.
- US R is not interested in the difference of click and rollover, also fadein and appears instantly.

**Recommendation**

- Japan prefers recommendation to each user more than US.
- US R prefers recommendation to each user more than US.

**Scroll vs Click**

- The value of Japan sways to scroll more than US.
- The values of Japan R and US R are equal.

**Search Prediction**

- There is a contrast between Japan and Japan R, which Japan does not need this search prediction much, and JapanR want to use it.
- There is no contrast between US and US R.

**5.4.4 A Questionnaire Result of Service**

This sub section describes results of each service, investigated by the questionnaire, mainly the difference and contrasts among results. Figures of each result of functions are given in section B. The peculiarly points through the questionnaire results of services are as follows:

**Design LinkedIn based**

- US based services are preferred, except Profile.
- The values among US and Japan equally.
- Both countries prefer Profile based on each style.
- Japan is interested in Miniblog.
- US is interested in Feeds.

**Layout LinkedIn based**

- The functions, Ad and Feeds, are preferred US based, but rests of functions are preferred Japan based style.

5.4. QUESTIONNAIRE RESULTS

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- There are differences of values between US and Japan in Ad, Miniblog, Profile. (US Ad better, Japan prefers Japan based Miniblog, US not, Japan is not interested in Profile)
- Japan is interested in Ad and Profile.
- US is interested in Menubar and Profile.

**Layout Design LinkedIn based**

- Except Menubar and Profile, US based services are much preferred to Japan based.
- Almost same results, except Profile. (Japan doesn't care, US cares)

**Design mixi based**

- Except Miniblog and Recommendation, Japan based are preferred to US based..
- Japan is interested in Feeds and Total Image.
- There is a contrast of values of Ad among US and Japan. (US likes Japan Ad, Japan likes US)

**Layout mixi based**

- There are contrasts of values among Ad, Miniblog and Recommendation.
- US is interested in Ad, but Japan is not.
- Japan prefers Miniblog equally among US based and Japan based, but US prefers US based.
- US is interested in Recommendation, but not Japan.
- Japan has values of Feeds.

**Layout Design mixi based**

- Except Recommendation, Japan based services are preferred to US based.
- There are contrasts of values in Feeds, News and Total Image.
- Japan prefers US based style except Menubar and Profile.
- Japan has values of Ad, Menuabr and Profile.
- US prefers Japan based style except Recommendation.
- US has values of Feeds, News and Total Image.

**Layout FB based**

- Except Menubar, US based style are preferred to Japan based.
- Japan prefers US based style, especially Ad.
- Japan has values of Menubar and Miniblog.
- US prefers US based style for all.

**Social Bookmark**



5.5. DISCUSSION

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- The values of Menubar and News are independent among Design and Layout.
- Basically, all functions are swayed to US based style, except News shows the value equally.
- Japan prefers Japan based style, except Search.
- Japan has value of News.
- The values of Japan based Menubar, News and Search are showed different among design and layout. (The layout of Menubar and News are showed equal).
- The values of Menubar and News are showed differently among design and layout. (Layout Menubar equally, News became Contrast)
- US has value of Hot Topic.

**Streaming**

- Basically, US based services are preferred to Japan based.
- The value of Ad is showed equally.
- The value of Contents Info is independent among design and layout.
- Japan based Ad is showed equally.
- The values based on Japan style are showed equally.
- US prefers Ad, Comments, Contents Info and Video Player differently among design and layout. (The values of layout among Comments and Video Player are preferred badly, and the value of Contents Info layout is preferred.)
- US has value of Comments, Contents Info and Total Image.
- There is no contrast in terms of values among US and Japan.

**Video Sharing**

- US prefers US based styles to Japan based, except the value of Japan based Ad design.
- Also Japan prefers US based styles to Japan based, except Japan based Ad design.

**Change Period**

- Japan shows the average of change period 22.84 months. US shows 12.05 months.
- Japan R shows the average of change period 17.50 months. US shows 11.6months.

**5.5 Discussion**

This section discusses what elements among the user interfaces in social media have been effected by the cultural differences, through the questionnaire results.

As a reference for discussion, Table gives an overview of questionnaire results through

## 5.5. DISCUSSION

the summaries of questionnaire results organized with mainly 4 categories: interests, senses of value, different senses of value, and items both countries prefer. These categories discussions relate to cultural peculiars, which will be discussed in this section.

The relationships between these categories present the cultural differences. Interests can be presented duplicated among US and Japan. However, senses of values present the culture in each country. Moreover, the senses of values that both countries have in different directions, those can be presented different senses of values. In the same time, the items both countries prefer are advantages which have made based on their background cultures.

Table 5.5: An Overview of Questionnaire Results

Category	Item
Interests of Japan	Video Sharing* Streaming* Miniblog Ad Profile Feeds Total Image
Interests of US	Social Network Service* Feeds Menubar Profile Ad Recommendation
Senses of Value of JP	Feeds Ad Menubar Miniblog News
Senses of Value of US	Hot Topic Comments Contents Info Total Image
Different Senses of Value	Ad Feeds Miniblog News Social Bookmark
JP Based Items Both Countries Prefer	Profile* Total Image (Mixi based) Popup Role
US Based Items Both Countries Prefer	Comments Contents Info Recommendation Total Image Video Player Function Explanation Popup Menubar

\* Emphasized Items

### 5.5.1 A Comparison Between Usage of Social Media

The interests of each country are linked to figure 3.2, which presents world wide usage of social media, mentioned in section 3.2. e.g., as Japan has been interested in video sharing and also streaming as services, Japan uses Ustream a lot. In the same time, US has been interested in SNS, US uses SNS more than another types of social media.

### 5.5.2 Results Adaptation in Current Situations in Social Media

There were some results which show contrasts of results what respondents want to use and the current situations what social media serve. Table 5.6 presents the results and current situations in social media. For instance, Japan prefers scroll rather than click in contents viewing, nevertheless social media services in Japan are providing the contents viewing role based on click rather than scroll. The cause of this issues might be a lack of investigation in social media services. It connects directly to the difficulties of advances globally without recognizing cultural differences. Reminding the needs based on cultures are existing is necessary in social media.

Table 5.6: Results and Current Situations in Social Media

Results	Current Situations
Japan prefers scroll rather than click in contents viewing.	Social media services in Japan provide click rather than scroll in contents viewing.
Japan prefers the recommendation specialized to individuals.	Social media services in Japan provide the recommendation based on commons through all users.
United States prefers popup role that shows a list as soon as users click.	Social media services in US provide roles that show elegant and slowly.

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### 5.5.3 Relationship Between Five Factor Cultural Model

Through analyzing the overview of questionnaire results, the peculiarities of each category are related and explained five factor cultural model, which has been mentioned in section 3.

One of the items, which both countries prefer, is Profile. Profile is related to the information among users' him/her self, friends, communities, and etc. These are showed in

## 5.5. DISCUSSION

US social network services as an additional information rather than main contents. Japan shows as one of the main contents on the other hand. The gap of mind existed between US and Japan gets ahead of US's clearly. The reason why Japan plots Profile as one of the main contents is because Japan is a country where marks high collectivism, which is opposite index of individualism. The countries where marks high Collectivism live in the community with supports among them. Thus, considering a community balance is one of the most important tasks to them. For the other example, in general, United States shows clear contrasts among the responses compared to Japan. This can be explained by the one factor from five factor cultural model, mentioned in the section 3, which is individualism. Table 5.7 presents a relationship between preference value and individualism. Through this table, the ratio of average values among US and Japan vs individual indexes among US and Japan are nearly equal. As the United States is a country, where people have responsibility for living him or her self, people presents strong ideas compared to Japan.

Table 5.7: Relationship Between Preference Value and Individualism

Country	AVG US based	AVG JP based	AVG Total	IDV
Japan	0.41	0.20	0.31	46
United States	0.76	0.46	0.61	91

Also, according to the result of period to renewal the services, Japan presents 22.84 months to change, and US presents 12.05 months. This is because Japan is a highly long term oriented country, where is considered to be conservative for changing, compared to US, short term oriented country.

These discourses are important to discuss the different cultures among social media across nationalisms, each country has to adapt these to their services while the localizations.

#### 5.5.4 Effects on the Intercultural Experience

Through the questionnaire results, the values of preferences among each country, including Intercultural Experienced People, are distinct. A contrast between Japan and United States has discussed a section before. There are also contrasts between Japan and Japan R, which refers IEP in Japan, and also between US and US R.

According to the data, which has been attained through the questionnaire, the value of preference of Japan among US based style and JP based style were 0.41 and 0.37. On the other hand, Japan R got 0.41 and 0.40. US got 0.85 and 0.57. US R got 0.75 and

## 5.6. SUMMARY

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0.61. These numbers present that the contrasts among each value are declined while the focus on IEP.

There are some hypotheses for this discourse. They are as follows:

1. IEP is less susceptible to cultures compared to Non IEP because of the intercultural experiences.
2. IEP is influenced by another cultures thus there is less interests to the native culture compared to Non IEP.
3. IEP is familiar with the cultural differences compared to Non IEP.

The investigation of proof considered to these discourses have been not done in this thesis. But, it is necessary to do as a future work, which is discussed in the section 7.2.

### 5.5.5 Contradictions of Results and Five Factor Cultural Model

Some contradictions to the predictions have been found through the questionnaire results.

For instance, the values of preferences related to the recommendation function among individual and all users have predicted as Japan prefers a recommendation based on all users, and US prefers a recommendation based on individuals. However, the values of Japan swayd bigger to the recommendation based on individuals than US's as a result, although Japan is a country where marks high collectivisms and US marks high individualisms.

Moreover, the results related to the recommendation functions among Japan R and US R have presented according to the prediction using five factor cultural model. The cause between the contrast of Japan and US, and Japan R and US R has not been analyzed.

The facts of contradictions have to be analyzed as future works.

## 5.6 Summary

This chapter discussed the effects of culture differences through the questionnaire investigation in United States and Japan. The chapter has started to discuss from an explanation of objectives of the questionnaire, then discussed how items for the questionnaire have been made, how questionnaire targets have been targeted using a pre-observation reference, results of the questionnaire, and discussion through the results.

# Chapter 6

## Conclusion

In the age of post-Fordism, presented as a current issue following the collapse of old capitalism in 2008, this dissertation has sought to determine the effect of one of the underlying social issues on the expansion of social media on a global scale – the intercultural barrier. Results have shown that users of social media remain largely confined to their native countries with the issue being that the inclinations of the said users slant towards use of native social networks rather than networks from other countries. This dissertation has sought to define the key factors that cause the intercultural barrier to exist as a barrier against cross-cultural migration.

To begin solving this social issue, this dissertation defines the importance of art and science in their roles within social media in the age of new capitalism. Their roles were incorporated with the purpose to clarify the issue more clearly and to determine a definable framework on which to analyze the issue in a more qualitative and quantitative manner. From these analyses, user interface design was defined as being the target of the investigation in this dissertation rather than contents design.

Prior studies, such as comparative studies on the worldwide usage of social media, have given valid proof of the Five Factor Cultural Model, proposed by Geert Hofstede, as a qualitative and qualitative foundation to base further research on. Based on this prior research, two investigations were proposed.

The first investigation involved comparative analysis on the commonality of user interfaces worldwide. The investigation compared 26 social media services worldwide and gave each service a coefficient based on an indexed five factor cultural model. From the five factors, the study found that the elements on the user interface that most influenced the individualism and time orientation of users were: concept color, background color, corner of table and presentation.

The second investigation was a comparative study of user interfaces in social media

between the United States and Japan. The study was performed through use of a questionnaire to investigate the cultural differences relating to user interfaces between the US and Japan. The questionnaire targeted the 18 to 24 year generation, both male and female, as it this age group is seen to be less susceptible to cultural biases than other generations. 101 samples in Japan and 100 samples in US were attained. Results show that users were mainly influenced in the following areas: functions of user interfaces, senses of values, mind gaps of what users have and services predict, the effects of intercultural experience, and contradictions of predictions.

These two investigations have shown that the issue of cultural barriers within social media to be a larger influence than otherwise thought. The major factors influencing creation of the issue were found and more investigation is thought necessary. The final investigation threw up the major cultural differences in user interfaces for social media worldwide, especially in the US and Japan.

# Chapter 7

## Future Prospects

This chapter discusses the other issues on investigation of cultural differences, the missing parts, and future necessary works for realization of the global communication tool.

### 7.1 Questionnaire targets

In this work, questionnaire investigation has targeted only the generation of 18 to 24. However, as figure 7.1 and figure 7.2 of age distributions present, the main users of social media is the generation of 35 to 44. Moreover, the generation of 18 to 24 is the lowest number of users, which is because, the mobile communication tools, such as SMS, are their main tools. As age increases, their communication tools also change from mobile to desktop, Giles [18] says.

Although there is similarity of age distribution between United States and Japan, figure 7.3 presents a different characteristic of age distribution in China. Author hypothesize that a massive development of economy in China gave the Internet literacy to young generation, but the mature generation instead.

It is necessary work to investigate the cultural-differences between mature generation in several countries.

### 7.2 Environment Effects to Cultures

The questionnaire investigation as a quantitative study of cultural differences has not included a aspect of environment effects. The hypothesis that those people who is living in environments with different cultures gets effected by environment to their culture has not been included in this paper.

One of ways for the investigation is to target half of respondents, who have lived in



## 7.2. ENVIRONMENT EFFECTS TO CULTURES

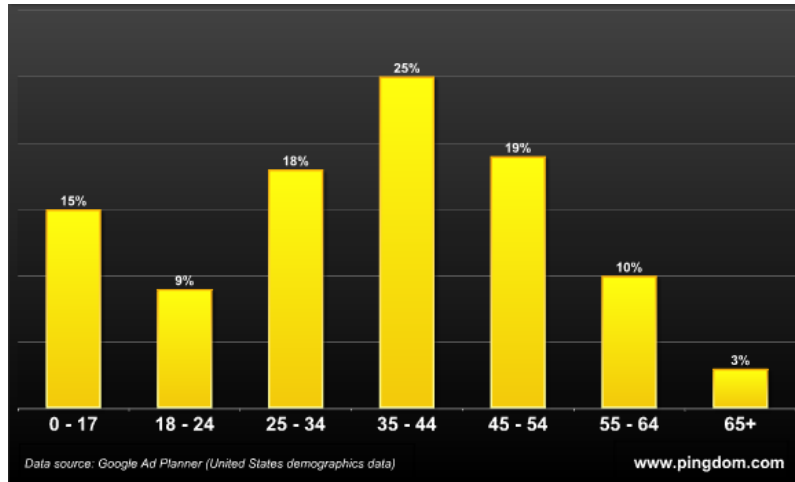


Figure 7.1: Average age distribution across social media in United States

(Figure source: <http://royal.pingdom.com/2010/02/16/study-ages-of-social-network-users/>)

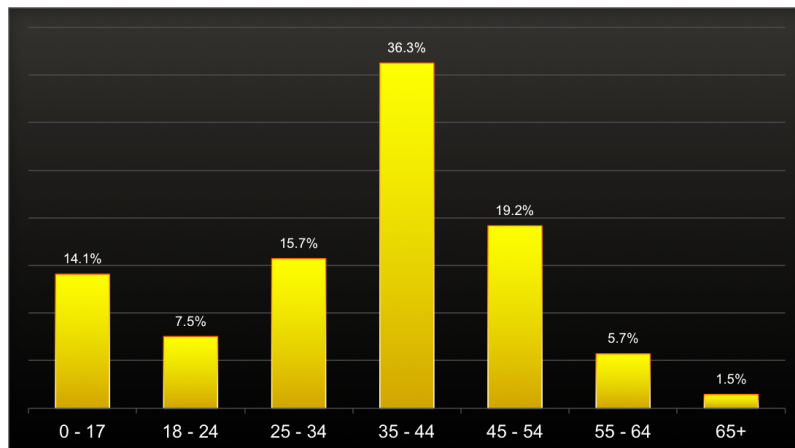


Figure 7.2: Average age distribution across social media in Japan

Data source: DoubleClick Ad Planner (Japan demographics data)

another environment in term of culture, and half from natives. Do same investigation in at least two countries. The point is to reduce countries for investigation to limit opportunities. Then, it can investigate how environment can effect people's cultural mind. This is necessary to do as a future work.

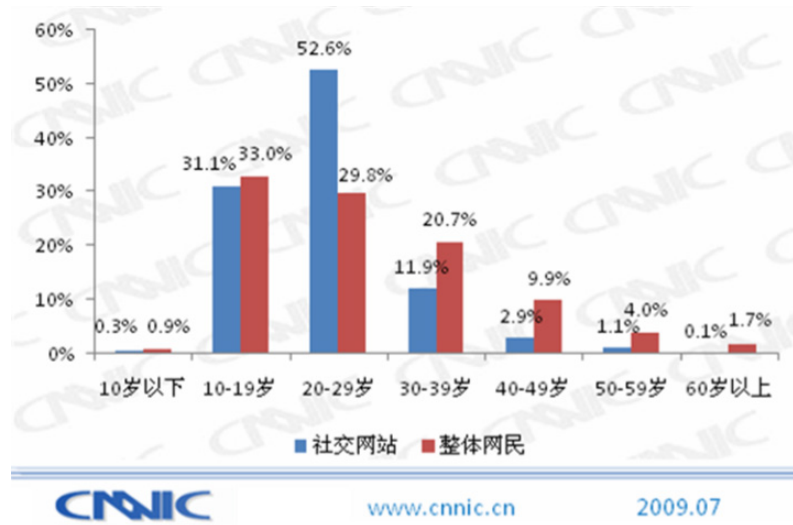


Figure 7.3: Average age distribution across social media in China

(Figure source: [http://internet.watch.impress.co.jp/docs/news/20091116\\_329374.html](http://internet.watch.impress.co.jp/docs/news/20091116_329374.html))

### 7.3 Cultural Matching Issue

Through the questionnaire investigation in this paper, currently social media services are not applying the best user interfaces design and layout to their products. Chapter 4 described the differences of user interfaces among intercultural countries. However, the current user interfaces that social media services are presenting are not proved that is mostly adapted to the culture. Therefore, its is necessary as future works to investigate how current services are applying the cultural sense to the services.

### 7.4 Intercultural Investigation in several countries

In this thesis, the investigation through questionnaire has been done only in 2 countries, United States and Japan. To investigate accurately, the investigations in several countries are necessary as future works.

### 7.5 An Issue of Social Media Limitation for Investigation

Each category of social media, presented in the questionnaire investigation, has been limited to 1 or 2 services, because of the resources for this work. Since each service might

have own culture, it is not enough clear to investigate the cultural differences among few services. It is necessary to be as future works.

## **7.6 Uncleared Contradictions of Results Related to Five Factor Cultural Model**

As a discussion related to the contradictions of results related to five factor cultural model has been not defined, it is necessary to investigate how users on social media act contrastingly to five factor cultural model as a future work.

# Appendix A

## Questionnaire Items

### 1. Background of using Social Media

1.1. "Choose Social Media services that you use (multiple-choice). Also fill out 3 services that you use most."

- a. Facebook
- b. MySpace
- c. LinkedIn
- d. mixi
- e. GREE
- f. orkut
- g. YouTube
- h. Last.fm
- i. Nico Nio Douga
- j. SlideShare
- k. twitter
- l. tumblr
- m. flickr
- n. del.icio.us
- o. digg
- p. Hatena Bookmark
- q. USTREAM
- r. Other
- s. I don't use Social Media

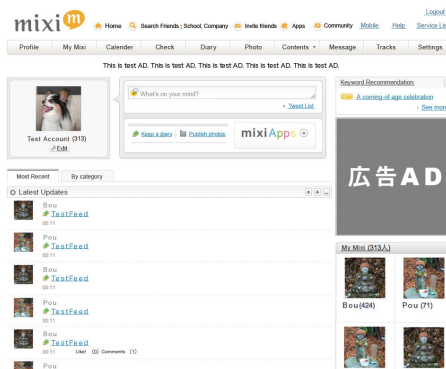
3 services that you use most

1.2. To who chose s. in 1.1. Which of the following categories best describes your problem at using Social Media?

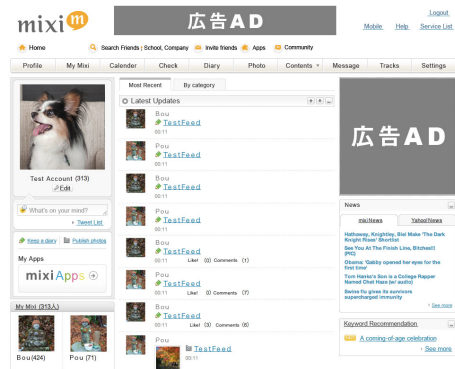
- a. I don't know how to use it
- b. I don't know how to enjoy it
- c. There is no friend around using it
- d. I'm not interested in
- e. Other

2. User interface in social media

2.1. Which of the following categories best describes layouts of each function of services listed below? Please evaluate them by 5 stages.



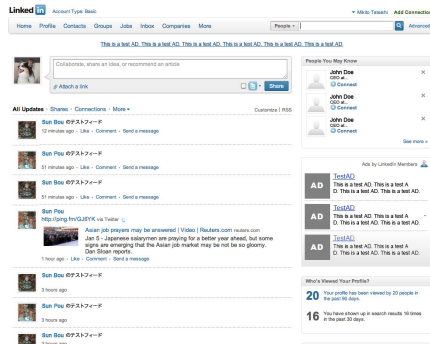
a.



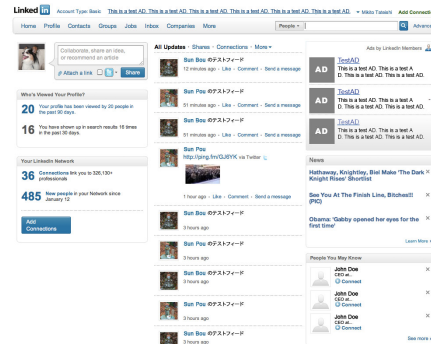
b.

Functn	Pctr	Vry plsnt	Smwht plsnt	Nthr plsnt / unplsnt	Smwht unplsnt	Vry unplsnt
Advertisement	a					
	b					
Miniblog	a					
	b					
Information of my mixi	a					
	b					
Latest updates	a					
	b					
Keyword recommendation	a					
	b					
Total image	a					
	b					

2.2. Which of the following categories best describes layouts of each function of services listed below? Please evaluate them by 5 stages.



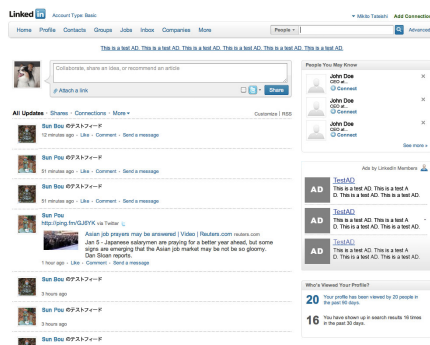
a.



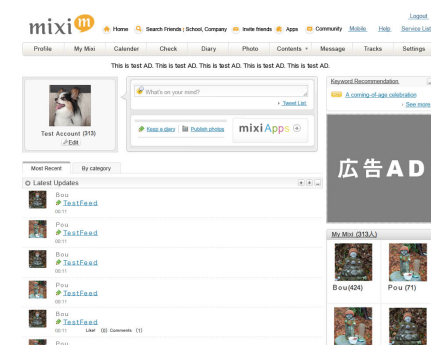
b.

Functn	Pctr	Vry plstnt	Smwht plstnt	Nthr plstnt / unplstnt	Smwht unplstnt	Vry unplstnt
Advertisement	a					
	b					
Miniblog	a					
	b					
Information of profile	a					
	b					
All updates	a					
	b					
People you may know	a					
	b					
Total image	a					
	b					

2.3. Which of the following categories best describes design of each function of services listed below? Please evaluate them by 5 stages.



a.

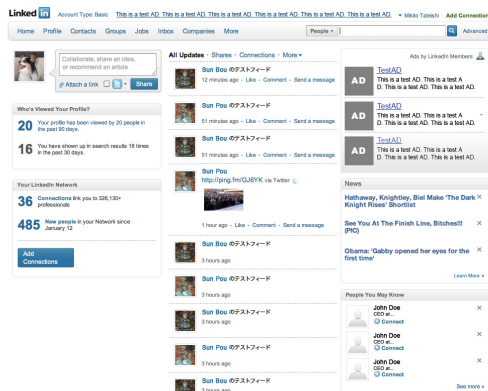


b.

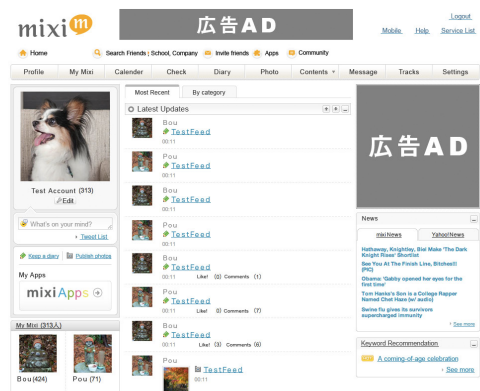
APPENDIX A. QUESTIONNAIRE ITEMS

Functn	Pctr	Vry plnsnt	Smwht plnsnt	Nthr plnsnt / unplsnt	Smwht unplsnt	Vry unplsnt
Advertisement	a					
	b					
Miniblog	a					
	b					
User profile	a					
	b					
Updates	a					
	b					
Recommendations	a					
	b					
Total image	a					
	b					

2.4. Which of the following categories best describes design of each function of services listed below? Please evaluate them by 5 stages.



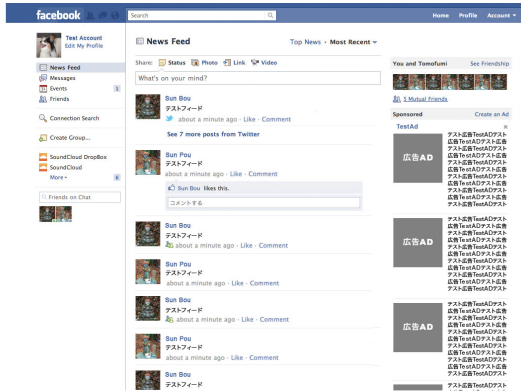
a.



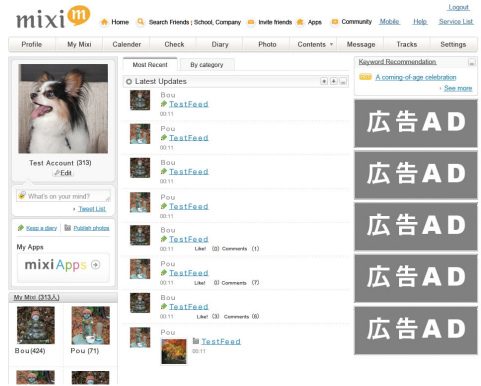
b.

Functn	Pctr	Vry plnsnt	Smwht plnsnt	Nthr plnsnt / unplsnt	Smwht unplsnt	Vry unplsnt
Advertisement	a					
	b					
Miniblog	a					
	b					
User profile	a					
	b					
Updates	a					
	b					
News	a					
	b					
Total image	a					
	b					

2.5. Which of the following categories best describes design of each function of services listed below? Please evaluate them by 5 stages.



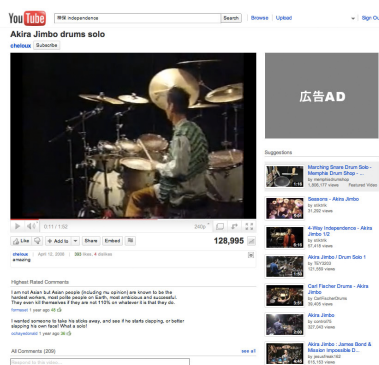
a.



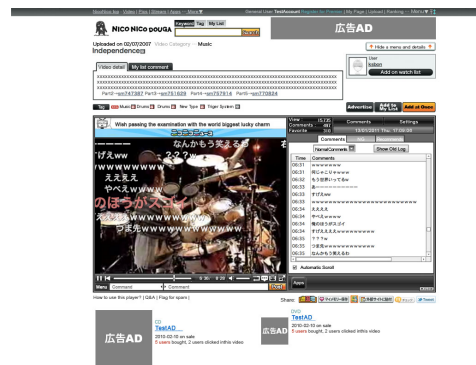
b.

Functn	Pctr	Vry plstnt	Smwht plstnt	Nthr plstnt / unplstnt	Smwht unplstnt	Vry unplstnt
Advertisement	a					
	b					
Miniblog	a					
	b					
User profile	a					
	b					
Updates	a					
	b					
News	a					
	b					
Total image	a					
	b					

2.6. Which of the following pictures are the best in term of layout or design among each function of services listed below?



a.



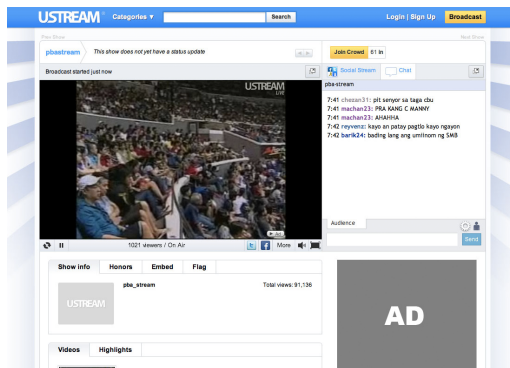
b.



## APPENDIX A. QUESTIONNAIRE ITEMS

Functn	Ctgrs	a	b
Advertisement	Layout Design		
Menubar	Layout Design		
Contents information	Layout Design		
Player controller	Layout Design		
Comments feeds	Layout Design		
Total image	Layout Design		

2.7. Which of the following pictures are the best in term of layout or design among each function of services listed below?



a.

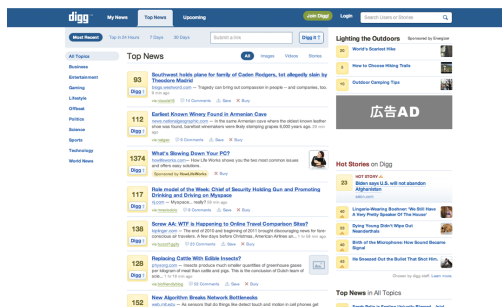


b.

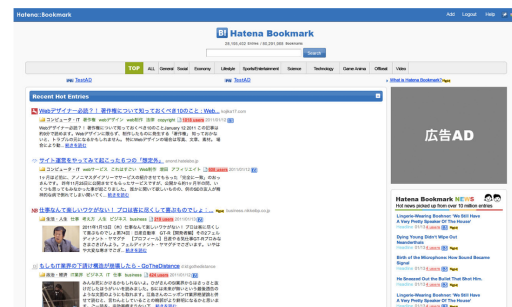
APPENDIX A. QUESTIONNAIRE ITEMS

Functn	Ctgrs	a	b
Advertisement	Layout Design		
Menubar	Layout Design		
Contents information	Layout Design		
Player controller	Layout Design		
Comments feeds	Layout Design		
Total image	Layout Design		

2.8. Which of the following pictures are the best in term of layout or design among each function of services listed below?



a.

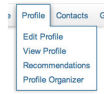


b.

Functn	Ctgrs	a	b
Advertisement	Layout Design		
Information categories	Layout Design		
News feeds	Layout Design		
News searchbar	Layout Design		
Hot entries	Layout Design		
Total image	Layout Design		

2.9. Which of the following categories best describes each popup menubar listed below? Please evaluate them by 5 stages.

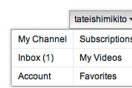
APPENDIX A. QUESTIONNAIRE ITEMS



a.



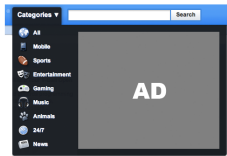
b.



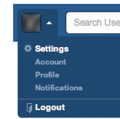
c.



d.



e.



f.

	Vry plsnt	Smwht plsnt	Nthr plsnt / unplsnt	Smwht unplsnt	Vry unplsnt
a					
b					
c					
d					
e					
f					

2.10. How do you make the following ways of appearance of popup menubar in order?

Way of appearance	1	2	3	4
Appear at once after clicked				
Appear at once after rolled over				
Appear in 1 second after rolled over				
Fades after rolled over				

2.11. Which of the following pictures is the best in term of layout or design?



a.



b.

	a	b
Layout		
Design		

2.12. Which of the following categories best describes the search prediction function?



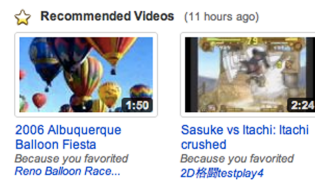
ex.) Search prediction function

- a. I need it
- b. I will use if it exists
- c. I don't care even it doesn't exist
- d. I don't need it

2.13. Which of the following recommendations do you need?



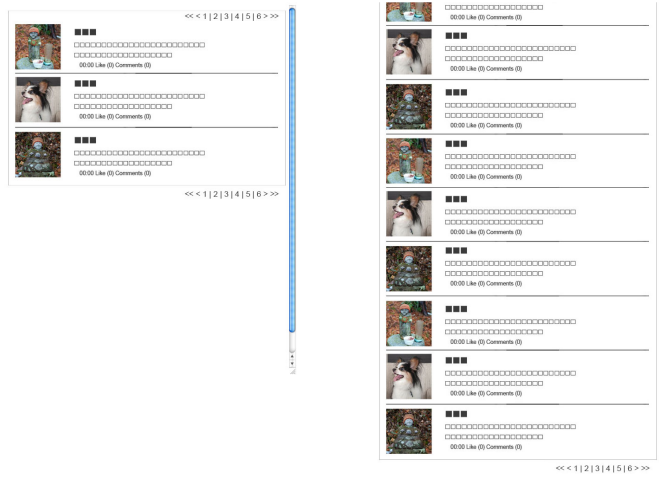
a.



b.

- a. Hot contents among all users
- b. The contents according to each user

2.14. Which of the following styles of contents reading is best for you?



a.

b.

- a. few contents per page (few scrolls, many clicks)
- b. many contents per page (many scrolls, few clicks)

2.15. How often do you think layouts or design of Social Media have to renew?

- a. Once a month
- b. Once at half a year
- c. Once a year
- d. Once every 2 or 3 years
- e. It should not change

3. Your background

3.1. Sex

- a. Male
- b. Female

3.2. Age

years old

3.3. Profession

- a. Officer, Manager at company
  - b. Office worker
  - c. Engineer
  - d. Salesman
  - e. Public employee
  - f. Self-employee
  - g. Part time job
  - h. Freelance
  - i. Junior high school student
  - j. High school student
  - k. Colledge student
  - l. Other student
  - m. House wife/housband
  - n. Other
- 3.4. Please fill out the country you were born and countries you have lived. Also the number of year you have stayed.
- a. Where were you born?
  - b. How log have you lived there?
  - c. Where do you live now?
  - d. How log have you lived there?
  - e. Where have you lived before?
  - f. How log have you lived there?
- 3.5. Have you had opportunities to experience inter culture before? (e.g. went to international school, study abroad, international business)
- a. Usually
  - b. Often
  - c. Sometimes
  - d. Occasionally
  - e. Rarely

# Appendix B

## Questionnaire Results

This chapter presents the listed data of questionnaire results.

Table B.1: Listed data of questionnaire results

Question	Category	Items	Country	US based	JP based
Design mixi based	Layout	Ad	Japan	0.32	0.14
Design mixi based	Layout	Miniblog	Japan	0.44	0.29
Design mixi based	Layout	Profile	Japan	0.25	0.43
Design mixi based	Layout	Feeds	Japan	0.01	0.44
Design mixi based	Layout	Recommendation	Japan	0.27	0.17
Design mixi based	Layout	Total	Japan	0.21	0.57
Design mixi based	Layout	Ad	United States	0.78	1.16
Design mixi based	Layout	Miniblog	United States	1.02	0.87
Design mixi based	Layout	Profile	United States	0.87	1.10
Design mixi based	Layout	Feeds	United States	0.58	1.11
Design mixi based	Layout	Recommendation	United States	0.88	0.71
Design mixi based	Layout	Total	United States	0.76	1.33
Design mixi based	Layout	Ad	Japan R	0.50	-0.17
Design mixi based	Layout	Miniblog	Japan R	0.00	-0.17
Design mixi based	Layout	Profile	Japan R	-0.17	0.50
Design mixi based	Layout	Feeds	Japan R	0.17	0.50
Design mixi based	Layout	Recommendation	Japan R	0.33	0.67
Design mixi based	Layout	Total	Japan R	0.17	1.50
Design mixi based	Layout	Ad	United States R	1.50	0.80
Design mixi based	Layout	Miniblog	United States R	1.70	0.10
Design mixi based	Layout	Profile	United States R	0.90	0.60
Design mixi based	Layout	Feeds	United States R	0.60	0.80
Design mixi based	Layout	Recommendation	United States R	0.30	0.80
Design mixi based	Layout	Total	United States R	0.70	1.20
Design LinkedIn based	Layout	Ad	Japan	0.41	0.20

APPENDIX B. QUESTIONNAIRE RESULTS

Design LinkedIn based	Layout	Miniblog	Japan	0.46	0.30
Design LinkedIn based	Layout	Profile	Japan	0.14	0.33
Design LinkedIn based	Layout	Feeds	Japan	0.37	0.34
Design LinkedIn based	Layout	Recommendation	Japan	0.31	0.24
Design LinkedIn based	Layout	Total	Japan	0.41	0.24
Design LinkedIn based	Layout	Ad	United States	1.02	0.65
Design LinkedIn based	Layout	Miniblog	United States	1.06	0.56
Design LinkedIn based	Layout	Profile	United States	0.90	0.87
Design LinkedIn based	Layout	Feeds	United States	1.16	0.90
Design LinkedIn based	Layout	Recommendation	United States	1.02	0.61
Design LinkedIn based	Layout	Total	United States	1.08	0.72
Design LinkedIn based	Layout	Ad	Japan R	0.17	0.00
Design LinkedIn based	Layout	Miniblog	Japan R	-0.17	0.00
Design LinkedIn based	Layout	Profile	Japan R	-0.33	0.17
Design LinkedIn based	Layout	Feeds	Japan R	0.33	-0.17
Design LinkedIn based	Layout	Recommendation	Japan R	0.17	0.33
Design LinkedIn based	Layout	Total	Japan R	0.17	0.00
Design LinkedIn based	Layout	Ad	United States R	1.10	0.20
Design LinkedIn based	Layout	Miniblog	United States R	0.60	0.60
Design LinkedIn based	Layout	Profile	United States R	1.00	1.10
Design LinkedIn based	Layout	Feeds	United States R	0.80	1.60
Design LinkedIn based	Layout	Recommendation	United States R	1.70	0.50
Design LinkedIn based	Layout	Total	United States R	0.90	0.80
Layout LinkedIn based	Design	Ad	Japan	0.43	0.19
Layout LinkedIn based	Design	Menubar	Japan	0.31	0.50
Layout LinkedIn based	Design	Miniblog	Japan	0.22	0.33
Layout LinkedIn based	Design	Profile	Japan	0.13	0.28
Layout LinkedIn based	Design	Feeds	Japan	0.36	0.23
Layout LinkedIn based	Design	Total	Japan	0.27	0.37
Layout LinkedIn based	Design	Ad	United States	0.96	0.76
Layout LinkedIn based	Design	Menubar	United States	0.71	1.22
Layout LinkedIn based	Design	Miniblog	United States	1.03	0.99
Layout LinkedIn based	Design	Profile	United States	0.87	1.43
Layout LinkedIn based	Design	Feeds	United States	1.09	0.95
Layout LinkedIn based	Design	Total	United States	0.97	1.03
Layout LinkedIn based	Design	Ad	Japan R	0.17	0.00
Layout LinkedIn based	Design	Menubar	Japan R	-0.17	0.00
Layout LinkedIn based	Design	Miniblog	Japan R	-0.33	0.17
Layout LinkedIn based	Design	Profile	Japan R	0.33	-0.17
Layout LinkedIn based	Design	Feeds	Japan R	0.17	0.33
Layout LinkedIn based	Design	Total	Japan R	0.17	0.00
Layout LinkedIn based	Design	Ad	United States R	1.10	0.20
Layout LinkedIn based	Design	Menubar	United States R	0.60	0.60
Layout LinkedIn based	Design	Miniblog	United States R	1.00	1.10



APPENDIX B. QUESTIONNAIRE RESULTS

Layout LinkedIn based	Design	Profile	United States R	0.80	0.20
Layout LinkedIn based	Design	Feeds	United States R	1.70	0.60
Layout LinkedIn based	Design	Total	United States R	0.90	1.10
Layout mixi based	Design	Ad	Japan	0.25	0.25
Layout mixi based	Design	Miniblog	Japan	0.39	0.45
Layout mixi based	Design	Feeds	Japan	0.28	0.47
Layout mixi based	Design	Recommendation	Japan	0.15	0.15
Layout mixi based	Design	News	Japan	0.18	0.48
Layout mixi based	Design	Total	Japan	0.29	0.53
Layout mixi based	Design	Ad	United States	0.75	0.90
Layout mixi based	Design	Miniblog	United States	0.67	1.05
Layout mixi based	Design	Feeds	United States	0.90	1.18
Layout mixi based	Design	Recommendation	United States	0.79	0.83
Layout mixi based	Design	News	United States	0.60	1.18
Layout mixi based	Design	Total	United States	0.81	1.30
Layout mixi based	Design	Ad	Japan R	0.17	0.17
Layout mixi based	Design	Miniblog	Japan R	0.50	0.33
Layout mixi based	Design	Feeds	Japan R	1.00	0.00
Layout mixi based	Design	Recommendation	Japan R	0.00	0.17
Layout mixi based	Design	News	Japan R	0.50	0.00
Layout mixi based	Design	Total	Japan R	0.33	0.17
Layout mixi based	Design	Ad	United States R	0.90	-0.10
Layout mixi based	Design	Miniblog	United States R	0.70	0.60
Layout mixi based	Design	Feeds	United States R	1.20	1.10
Layout mixi based	Design	Recommendation	United States R	1.30	0.50
Layout mixi based	Design	News	United States R	0.50	1.40
Layout mixi based	Design	Total	United States R	1.10	0.90
Layout Facebook based	Design	Ad	Japan	-0.45	-0.52
Layout Facebook based	Design	Menubar	Japan	0.24	0.60
Layout Facebook based	Design	Miniblog	Japan	0.09	0.37
Layout Facebook based	Design	Feeds	Japan	0.22	0.22
Layout Facebook based	Design	Recommendation	Japan	0.25	0.26
Layout Facebook based	Design	Total	Japan	-0.07	-0.05
Layout Facebook based	Design	Ad	United States	1.03	0.49
Layout Facebook based	Design	Menubar	United States	1.30	1.08
Layout Facebook based	Design	Miniblog	United States	1.65	0.68
Layout Facebook based	Design	Feeds	United States	1.50	0.97
Layout Facebook based	Design	Recommendation	United States	1.27	0.71
Layout Facebook based	Design	Total	United States	1.39	0.77
Layout Facebook based	Design	Ad	Japan R	0.67	0.00
Layout Facebook based	Design	Menubar	Japan R	0.67	0.67
Layout Facebook based	Design	Miniblog	Japan R	0.50	0.67
Layout Facebook based	Design	Feeds	Japan R	0.67	0.50
Layout Facebook based	Design	Recommendation	Japan R	1.17	0.50

APPENDIX B. QUESTIONNAIRE RESULTS

Layout Facebook based	Design	Total	Japan R	-0.17	-0.17
Layout Facebook based	Design	Ad	United States R	0.70	0.50
Layout Facebook based	Design	Menubar	United States R	1.90	1.50
Layout Facebook based	Design	Miniblog	United States R	1.50	1.00
Layout Facebook based	Design	Feeds	United States R	2.10	1.00
Layout Facebook based	Design	Recommendation	United States R	1.50	1.10
Layout Facebook based	Design	Total	United States R	1.50	1.30
Video Sharing	Layout	Ad	Japan	0.72	0.28
Video Sharing	Design	Ad	Japan	0.60	0.40
Video Sharing	Layout	Menubar	Japan	0.63	0.37
Video Sharing	Design	Menubar	Japan	0.60	0.40
Video Sharing	Layout	Contents Info	Japan	0.67	0.33
Video Sharing	Design	Contents Info	Japan	0.63	0.40
Video Sharing	Layout	Video Player	Japan	0.66	0.34
Video Sharing	Design	Video Player	Japan	0.62	0.38
Video Sharing	Layout	Comments	Japan	0.60	0.40
Video Sharing	Design	Comments	Japan	0.55	0.45
Video Sharing	Layout	Total	Japan	0.67	0.33
Video Sharing	Design	Total	Japan	0.64	0.36
Video Sharing	Layout	Ad	United States	0.87	0.13
Video Sharing	Design	Ad	United States	0.66	0.34
Video Sharing	Layout	Menubar	United States	0.76	0.24
Video Sharing	Design	Menubar	United States	0.70	0.30
Video Sharing	Layout	Contents Info	United States	0.83	0.17
Video Sharing	Design	Contents Info	United States	0.73	0.27
Video Sharing	Layout	Video Player	United States	0.81	0.19
Video Sharing	Design	Video Player	United States	0.74	0.26
Video Sharing	Layout	Comments	United States	0.79	0.21
Video Sharing	Design	Comments	United States	0.68	0.32
Video Sharing	Layout	Total	United States	0.83	0.17
Video Sharing	Design	Total	United States	0.75	0.25
Video Sharing	Layout	Ad	Japan R	0.83	0.00
Video Sharing	Design	Ad	Japan R	0.50	0.50
Video Sharing	Layout	Menubar	Japan R	0.33	0.67
Video Sharing	Design	Menubar	Japan R	0.67	0.33
Video Sharing	Layout	Contents Info	Japan R	0.83	0.17
Video Sharing	Design	Contents Info	Japan R	0.67	0.33
Video Sharing	Layout	Video Player	Japan R	0.67	0.33
Video Sharing	Design	Video Player	Japan R	0.67	0.33
Video Sharing	Layout	Comments	Japan R	0.33	0.67
Video Sharing	Design	Comments	Japan R	0.67	0.33
Video Sharing	Layout	Total	Japan R	0.67	0.33
Video Sharing	Design	Total	Japan R	0.50	0.50
Video Sharing	Layout	Ad	United States R	0.60	0.40

APPENDIX B. QUESTIONNAIRE RESULTS

Video Sharing	Design	Ad	United States R	0.30	0.70
Video Sharing	Layout	Menubar	United States R	0.50	0.50
Video Sharing	Design	Menubar	United States R	0.50	0.50
Video Sharing	Layout	Contents Info	United States R	0.70	0.30
Video Sharing	Design	Contents Info	United States R	0.60	0.40
Video Sharing	Layout	Video Player	United States R	0.50	0.50
Video Sharing	Design	Video Player	United States R	0.60	0.40
Video Sharing	Layout	Comments	United States R	0.60	0.40
Video Sharing	Design	Comments	United States R	0.40	0.60
Video Sharing	Layout	Total	United States R	0.50	0.50
Video Sharing	Design	Total	United States R	0.70	0.30
Streaming	Layout	Ad	Japan	0.50	0.50
Streaming	Design	Ad	Japan	0.52	0.48
Streaming	Layout	Menubar	Japan	0.61	0.39
Streaming	Design	Menubar	Japan	0.64	0.36
Streaming	Layout	Contents Info	Japan	0.69	0.31
Streaming	Design	Contents Info	Japan	0.64	0.35
Streaming	Layout	Video Player	Japan	0.58	0.42
Streaming	Design	Video Player	Japan	0.53	0.37
Streaming	Layout	Comments	Japan	0.59	0.41
Streaming	Design	Comments	Japan	0.59	0.41
Streaming	Layout	Total	Japan	0.63	0.37
Streaming	Design	Total	Japan	0.64	0.36
Streaming	Layout	Ad	United States	0.64	0.36
Streaming	Design	Ad	United States	0.57	0.43
Streaming	Layout	Menubar	United States	0.67	0.33
Streaming	Design	Menubar	United States	0.68	0.32
Streaming	Layout	Contents Info	United States	0.80	0.20
Streaming	Design	Contents Info	United States	0.69	0.31
Streaming	Layout	Video Player	United States	0.67	0.33
Streaming	Design	Video Player	United States	0.77	0.23
Streaming	Layout	Comments	United States	0.72	0.28
Streaming	Design	Comments	United States	0.78	0.22
Streaming	Layout	Total	United States	0.75	0.25
Streaming	Design	Total	United States	0.75	0.25
Streaming	Layout	Ad	Japan R	0.50	0.50
Streaming	Design	Ad	Japan R	0.17	0.83
Streaming	Layout	Menubar	Japan R	0.50	0.50
Streaming	Design	Menubar	Japan R	0.83	0.17
Streaming	Layout	Contents Info	Japan R	0.50	0.50
Streaming	Design	Contents Info	Japan R	0.33	0.67
Streaming	Layout	Video Player	Japan R	0.33	0.67
Streaming	Design	Video Player	Japan R	0.33	0.67
Streaming	Layout	Comments	Japan R	0.50	0.50

APPENDIX B. QUESTIONNAIRE RESULTS

Streaming	Design	Comments	Japan R	0.33	0.67
Streaming	Layout	Total	Japan R	0.50	0.50
Streaming	Design	Total	Japan R	0.33	0.67
Streaming	Layout	Ad	United States R	0.20	0.80
Streaming	Design	Ad	United States R	0.40	0.60
Streaming	Layout	Menubar	United States R	0.20	0.80
Streaming	Design	Menubar	United States R	0.10	0.90
Streaming	Layout	Contents Info	United States R	0.50	0.50
Streaming	Design	Contents Info	United States R	0.40	0.60
Streaming	Layout	Video Player	United States R	0.40	0.60
Streaming	Design	Video Player	United States R	0.30	0.70
Streaming	Layout	Comments	United States R	0.70	0.30
Streaming	Design	Comments	United States R	0.50	0.50
Streaming	Layout	Total	United States R	0.40	0.60
Streaming	Design	Total	United States R	0.70	0.30
Social Bookmark	Layout	Menubar	Japan	0.49	0.51
Social Bookmark	Design	Menubar	Japan	0.45	0.55
Social Bookmark	Layout	Categories	Japan	0.48	0.52
Social Bookmark	Design	Categories	Japan	0.47	0.53
Social Bookmark	Layout	News	Japan	0.43	0.57
Social Bookmark	Design	News	Japan	0.38	0.62
Social Bookmark	Layout	Search	Japan	0.44	0.56
Social Bookmark	Design	Search	Japan	0.52	0.48
Social Bookmark	Layout	Hot Topic	Japan	0.42	0.58
Social Bookmark	Design	Hot Topic	Japan	0.43	0.57
Social Bookmark	Layout	Total	Japan	0.44	0.56
Social Bookmark	Design	Total	Japan	0.46	0.54
Social Bookmark	Layout	Menubar	United States	0.75	0.25
Social Bookmark	Design	Menubar	United States	0.62	0.38
Social Bookmark	Layout	Categories	United States	0.77	0.23
Social Bookmark	Design	Categories	United States	0.75	0.25
Social Bookmark	Layout	News	United States	0.62	0.38
Social Bookmark	Design	News	United States	0.77	0.23
Social Bookmark	Layout	Search	United States	0.75	0.25
Social Bookmark	Design	Search	United States	0.71	0.29
Social Bookmark	Layout	Hot Topic	United States	0.81	0.19
Social Bookmark	Design	Hot Topic	United States	0.75	0.25
Social Bookmark	Layout	Total	United States	0.78	0.22
Social Bookmark	Design	Total	United States	0.73	0.27
Social Bookmark	Layout	Menubar	Japan R	0.83	0.60
Social Bookmark	Design	Menubar	Japan R	0.50	0.70
Social Bookmark	Layout	Categories	Japan R	0.33	0.50
Social Bookmark	Design	Categories	Japan R	0.50	0.60
Social Bookmark	Layout	News	Japan R	0.83	0.80

APPENDIX B. QUESTIONNAIRE RESULTS

Social Bookmark	Design	News	Japan R	0.67	0.90
Social Bookmark	Layout	Search	Japan R	0.33	0.40
Social Bookmark	Design	Search	Japan R	0.83	0.70
Social Bookmark	Layout	Hot Topic	Japan R	0.33	0.80
Social Bookmark	Design	Hot Topic	Japan R	0.33	0.80
Social Bookmark	Layout	Total	Japan R	0.67	0.70
Social Bookmark	Design	Total	Japan R	0.50	0.80
Social Bookmark	Layout	Menubar	United States R	0.17	0.40
Social Bookmark	Design	Menubar	United States R	0.50	0.30
Social Bookmark	Layout	Categories	United States R	0.67	0.50
Social Bookmark	Design	Categories	United States R	0.50	0.40
Social Bookmark	Layout	News	United States R	0.17	0.20
Social Bookmark	Design	News	United States R	0.33	0.10
Social Bookmark	Layout	Search	United States R	0.67	0.60
Social Bookmark	Design	Search	United States R	0.17	0.30
Social Bookmark	Layout	Hot Topic	United States R	0.67	0.20
Social Bookmark	Design	Hot Topic	United States R	0.67	0.20
Social Bookmark	Layout	Total	United States R	0.33	0.30
Social Bookmark	Design	Total	United States R	0.33	0.20

# Bibliography

- [1] Doubleclick ad planner by google. <http://www.google.com/adplanner/>, June 2011.
- [2] Anping Xie, P.-L. Patrick Rau, Yuchien Tseng, Hui Su, and Chen Zhao. Cross-cultural influence on communication effectiveness and user interface design. *International Journal of Intercultural Relations*, 33(1):11 – 20, 2009.
- [3] Shuangyue Zhang and Susan L. Kline. Can I Make my Own Decision? A Cross-Cultural Study of Perceived Social Network Influence in Mate Selection. *Journal of Cross-Cultural Psychology*, 40(1):3–23, 2009.
- [4] The Honorable Richard A. Posner. *A Failure of Capitalism: The Crisis of '08 and the Descent into Depression*. Harvard University Press, 1 edition, 5 2009.
- [5] Eran Fisher. *Media and New Capitalism in the Digital Age: The Spirit of Networks*. Palgrave Macmillan, 3 2010.
- [6] Dr Paul Bagguley. *The New Capitalism The Sociology of Post-Fordism (Published in association with Theory, Culture & Society)*. Sage Publications Ltd, 8 2012.
- [7] Raluca Georgescu. Phil libin - how to web. <http://blog.how-to-web.net/tag/phil-libin/>, December 2010.
- [8] Evernote. <http://www.evernote.com/>, June 2008.
- [9] Kevin Hemker. Tms: Advocating for the importance of science and technology. *JOM Journal of the Minerals, Metals and Materials Society*, 61:16–16, 2009. 10.1007/s11837-009-0096-5.
- [10] JAY DERAGON. 4 composite functions of social media — relationship economy. <http://www.relationship-economy.com/?p=8109>, December 2009.
- [11] Will Fitzgerald. Models for cross-cultural communications for cross-cultural website design. Technical Report 5764147, NRC Institute for Information Technology; National Research Council Canada, April 2004.

- [12] Geert Hofstede, Gert Jan Hofstede, and Michael Minkov. *Cultures and Organizations: Software for the Mind, Third Edition*. McGraw-Hill, 3 edition, 5 2010.
- [13] Gabrielle Ford and Helene Gelderblom. The effects of culture on performance achieved through the use of human computer interaction. In *Proceedings of the 2003 annual research conference of the South African institute of computer scientists and information technologists on Enablement through technology*, SAICSIT '03, pages 218–230, , Republic of South Africa, 2003. South African Institute for Computer Scientists and Information Technologists.
- [14] Clearly cultural. <http://www.clearlycultural.com/geert-hofstede-cultural-dimensions/power-distance-index/>, April 2009.
- [15] Vincenzo Cosenza. World map of social networks — vincos blog. <http://www.vincos.it/world-map-of-social-networks/>, December 2010.
- [16] Jenifer Tidwell. *Designing Interfaces*. Oreilly & Associates Inc, illustrated edition edition, 11 2005.
- [17] TAKATORI Yasuyuki. The influence on cross-cultural contact seen in different generations. *Collection of International Management Studies*, 25:425–445, 2003-03.
- [18] Giles. Social media usage by age groups and demographics — media badger, social media research & consultants. <http://www.mediabadger.com/2009/03/age-groups-and-social-media-habits/>, March 2009.