CHAPTER 4

DATA ANALYSIS

In this study, data were gathered from various sources, and used various processes. This chapter describes the analysis of data by the major process of the study. In conclusion, this chapter describes the analysis of data as the following sequence.

1. Analysis of data gathered in the preparing process

    1.1 Data from questionnaires survey with directors of the university computing centers

    1.2 Data from interviews with the presidents of universities/institutions, and experts

    1.3 Data from official documents

    1.4 Data from the Internet Resources

2. Analysis of data gathered in the technical analysis process

    2.1 Data from questionnaires survey with policy stakeholders

    2.2 Data from interviews with the presidents of universities/institutions

3. Analysis of data gathered in the analysis of study recommendations process

The details of data analysis are as follows.

ANALYSIS OF DATA IN PREPARATION PROCESS

In the preparation process, the data and information about general environment of the Internet use policy context were collected. The required data at this process of the

study are the general information about the university Internet services, and the existing key policy issues of the Internet Use policy, if one is existing.

There are three major sources of data gathered in this process. These sources of data are questionnaire survey with the director of university computing centers, the interview with presidents of universities/institutions and experts, and Internet resources. The details of the data analysis are described as follows.

1. The questionnaire survey with the directors of university computing centers

The general data and information on the implementation of the Internet in universities were collected through the questionnaires. These questionnaires were sent to the directors of university computing centers of the public universities under the control of the Ministry of University Affairs. Table 4.1 to Table 4.3 show results of the data gathering on this issue.

Table 4.1   The universities/institutions Internet connection year and the existing of the
university chief information officer (CIO)

Institution	Connection date	Total years of connection	CIO
1. Chulalongkorn University	July, 1992	6	Y
2. Thammasat University	1991	7	Y
3. Kasetsart University	1991	7	Y
4. Mahidol University	October 1, 1993	5	Y
5. Silpakorn university	February, 1994	4	Y
6. Chiang Mai University	1994	4	Y
7. Khon Kaen University	July, 1993	5	Y
8. Prince of Songkla University	1987	11	Y
9. Srinakarinwirot University	1996	2	Y
10. Taksin University	N/A	N/A	N/A
11. Burapa University	1996	2	Y
12. Ubon Ratchathani University	N/A	N/A	N/A
13. Naresaun University	October,1998	Less than 1	Y
14. Maejo University	August 18,1995	3	Y
15. Mahasarakham university	May, 1997	1	Y
16. King Mongkut's Institute of Technology Ladkrabang	June 22, 1995	3	Y
17. King Mongkut's Institute of Technology North Bangkok	May, 1992	6	Y
18. National Institution of Development and Administration	N/A	N/A	N/A
19. Sukhothai Thammathirat University	N/A	N/A	N/A
20. Ramkhamhang University	1992	6	N

Prince of Songkhla university is the first university that connected to the Internet.
This connection has been for 11 years. Naresaun University is the latest university that
connected to the Internet last year. The average years of Internet connection is about 5
years. Recently, all universities/institutions are connected to the Internet. And most of
the universities/institutions assigned chief information officers (CIO) to be responsible for
the management and administration of the university information technology.

Table 4.2 Numbers of university Internet users account by status

Institution	Instructors	University staffs	Students	Others	Total
1. Chulalongkorn University	20,060	10,112	25,285	-	55,457
2. Thammasat University	N/A	N/A	N/A	N/A	N/A
3. Kasetsart University	N/A	N/A	N/A	N/A	N/A
4. Mahidol University	2,350*	-	12,120	213**	14,683
5. Silpakorn university	206	127	787	19***	1139
6. Chiang Mai University	N/A	N/A	N/A	N/A	N/A
7. Khon Kaen University	1,400	600	3,200	-	5,200
8. Prince of Songkla University	2,320	300	9,099	-	11,719
9. Srinakarinviroj University	N/A	N/A	N/A	N/A	
10. Taksin University	N/A	N/A	N/A		
11. Burapa University	58	65	2,908	-	3,082
12. Ubon Ratchathani University	N/A	N/A	N/A	N/A	N/A
13. Naresaun University	677	50	10,000	-	10,727
14. Maejo University	230	301	800	-	1,331
15. Mahasarakham University	71	149	352	-	572
16. King Mongkut's Institute of Technology Ladkrabang	1,709*	-	13,580	-	15,289
17. King Mongkut's Institute of Technology North Bangkok	789	407	20,735	-	21,931
18. National Institution of Development and Administration	N/A	N/A	N/A	N/A	N/A
19. Sukhothai Thammathiraj University	N/A	N/A	N/A	N/A	N/A
20. Ramkhamhang University	500	200	2,000	-	2,700

* number of instructors and university support staff
**number of alumni
***number of government organizations out side the university

Table 4.3 The existence of the universities/institutions Internet Use Policy and Regulations

Institution	Internet policy	Internet regulations
1. Chulalongkorn University	N	Y
2. Thammasat University	N	Y
3. Kasetsart University	N	Y
4. Mahidol University	N	Y
5. Silpakorn university	N	Y
6. Chiang Mai University	N	Y
7. Khon Kaen University	N	Y
8. Prince of Songkla University	N	Y
9. Srinakarinwirot University	N	Y
10. Taksin University	N	Y
11. Burapa University	N	Y
12. Ubon Rajthani University	N	Y
13. Naresaun University	Y	Y
14. Maejo University	N	Y
15. Mahasarakham University	N	Y
16. King Mongkut's Institute of Technology Ladkrabang	N	Y
17. King Mongkut's Institute of Technology North Bangkok	N	Y
18. National Institution of Development and Administration	N	Y
19. Sukhothai Thammathiraj University	N/A	N/A
20. Ramkhamhang University	N	Y

All universities/institutions developed the rules and regulations to administer the Internet use and services of their institutions. However, the policy body specific to the Internet Use is existing at Naresaun University only.

In addition, apart from the data and information that respondents filled in the questionnaires, attached with the returned questionnaires are official forms related to the university Internet services, and the university regulations on the use of the Internet. From the collected documents, the regulations covered these issues: entitle users,

charges, objective of the university Internet services, restriction of use, privacy, censorship, and procedure to request for the service.

2. **The interview with the president of university/institution and expert in the Internet technology and Internet services for higher education institutions**

In the preparation process of the study, apart from the questionnaire survey, the interviews with policymakers and experts were conducted as well. The purpose of this interview was to collect the presidents and experts' opinions on the existing environment of the Internet Use policy making process, and the openness of the opportunity to conduct the policy research study of the Internet Use Policy for higher education institutions.

The Interviews were conducted by a researcher. The informants of these interviews were two presidents of the universities, and two experts in the Internet technology and Internet services for higher education institutions.

The interview guide to collect the presidents and experts' opinions is used as a guideline to conduct the interview. According to this interview guide, there are basically six issues which were planned to be interviewed. These issues are:

a. The benefits of the Internet to higher education institutions

b. Needs of the Internet to the higher education institutions

c. University tasks or activities that might be used the Internet to support and enhance of those activities.

d. Needs of the university Internet Use Policy

e. Key policy issues of the Internet Use Policy

f. The policy making process of the Internet Use Policy

The analysis of data from these interviews were described by the issue in the interview, and are shown in Table 4.4 to Table 4.9 as the following.

2.1 The benefits of the Internet to higher education institutions

The main question used to collect the data on the issue of the benefits of the Internet to higher education institutions is "Do you think the Internet has benefits to higher education institutions? If yes, in what areas? If not, why?" The responses to this question from the informants are shown in Table 4.4.

Table 4.4 Summary of the transcript of the interview with presidents and experts on the issue of "the benefits of the Internet to higher education institutions"

Informants	Responses
IF1	"The benefits are a lot!" "Especially, for the communications, like e-mail. It can save much money." "It is very convenient, fast and effective communication medium , especially for the co-operation of the research project with foreign countries." "Teaching and learning to get the most of benefit from the Internet." "Numerous data and knowledge available on the Internet. Nowadays, student may know more than the teacher if they search the information from the Internet and the teacher does not use the Internet" "There's still a lot of benefits of the Internet to the university that need to be explored and studied." "We need sometime to integrate it to our university culture and operations.
IF2	"Very useful, very useful" "We just spent a lot of money to implement the Internet in our university." "We encourage our teachers to develop the HomePage of the courses that they teach." "To me I like the function of e-mail. I can deal with the organizations in other countries faster than before. Moreover, with less money. " "I can check news around the world, no need to wait for the news report in the Thai newspaper anymore, faster news" "I use an e-mail." "Everybody can mail to me." "I have two accounts, one for the president's business, another one is for teacher business, as my another role is a professor". "For the president's account, my secretary checks the mail- box for me every day."

(continue)

Table 4.4 (Continued) Summary of the transcript of the interview with presidents and experts on the issue of "the benefits of the Internet to higher education institutions"

Informants	Responses
IF3	"We have many format of <u>distance learning</u> in the past. But now all the format can be included in one medium, the Internet." "It will be very useful for the university that has many campuses, located in different areas" "Moreover, not only the student of the university will get benefit, but the people, <u>the public</u> may gain this benefit too." "If we think.about the <u>cost-effectiveness</u>, it's cheaper than other distance education, and more impressive to the student, especially, the <u>communication</u> between the student and teacher." "It can be done interactively or not interactive." "The technology's ready, just waiting for people to explore."
IF4	"It can be applied to <u>most of the university activities</u>., nearly all activities, depends on the creativity of the users. " "Very obvious is for the <u>teaching and learning</u>." "There are a lot of information on the Internet resources." "Some of them are ready made for teachers, such as the exercises for the course, the lesson plan, projects, summary of reviewed literature, and so on... <u>plenty of resources</u> on the Internet." "However, the other side of the Internet is also needed to be aware of, the bad information.. or we can say there are also a lot of <u>garbage</u> on the Internet."

All informants agreed that the Internet has benefits to the university. It can be used to facilitate communications, support and enhance teaching and learning, and information searching.

2.2 Needs of the Internet to the higher education institutions

The question used to gather the data on the issue of needs of the Internet to the higher education institutions is "Please consider these two phrases –'nice to have' and 'need to have'– which one best represents the current needs of the Internet to the university?" The responses to this question from informants are shown in Table 4.5.

Table 4.5 Summary of the transcript of the interview with presidents and experts on the issue of "needs of the Internet to the higher education institutions"

Informants	Responses
IF1	"<u>need to have</u>" "If we do not start it now, we will miss the train." "As we move into the information age, Internet is a major technology that we can not ignore." "The world is moving very fast now. The world has changed. Long time ago we fought with weapons, but now the power come with the information. And the Internet is one of the keys to success and survival."
IF2	"rather <u>nice to have</u>" "We are at the beginning of it. Just the introduction period." "But I am sure that in the future, it will be- a need to have. Because of the need on information, and fast and effective communication." "However, at present some group of users might need to have it" "Because they have been used to it for sometime and integrate it to their routine. If they do not have the Internet to use, they may shout and blame the university."
IF3	"It's just <u>nice to have</u>" "We do not in the stage of need to have it" "This is for the average of university members" " Actually, there may be some groups such as researchers who need to have. But over all, just <u>nice to have</u>."

Table 4.5   (Continued)   Summary of the transcript of the interview with presidents and experts on the issue of "needs of the Internet to the higher education institutions"

Informants	Responses
IF4	"I preferred the nice to have" "We can see from the numbers of the users account and the current usage of the university users" "Still a lot of teachers and students that do not use the Internet." "Most of the students that use the Internet are the students in the computer and communication field." "Or other fields involved directly with this technology." · "Most activities are e-mail." "We still under utilize the potential of the Internet which we had invested a lot of money or budget." "Considering the total number of university members, if today the Internet is down, not so many of the university members will be in trouble."

Most of the informants agreed that the current needs of the Internet to the university is in the point of "nice to have". However, informants projected that in the future the university will "need to have" the Internet.

·2.3 University tasks that can used the Internet to support or enhance

The question used to gather the data on the issue of university tasks that can use the Internet to support or enhance is "In your opinion, what activities or tasks of the university can Internet be applied to support or enhance?" The responses to this question from informants are shown in Table 4.6.

Table 4.6 Summary of the transcript of the interview with presidents and experts on the issue of "the university tasks that can use the Internet to support and enhance"

Informants	Responses
IF1	"Communication, especially to outside country." "Moreover, it should be used to support teaching and learning, we aim at this activity, but need sometime to build better infrastructure. And the more tools and equipment to have the better services." "In the university management and administration, the student no longer need to come to the university to register for courses. They can make it from home if they have a computer at home." "About research, it is also very useful for research. But the utilization on this activity is not much right now."
IF2	"Many tasks and activities." "The most obvious one is for communication. An e-mail should be a good point to start with. We are setting up the network for all university management. So we don't need to use paper for memo or letters anymore. It will be faster, more convenient, and no one can say that the memo is lost on the way." "We must educate our members about the benefits and how to apply it to our work."
IF3	"Nearly all activities can make use of the Internet." "The four missions of the university: instructional, research, public services, and cultural conservation: could use the Internet to support it's activities."
IF4	"Most of the university's activities could use the Internet for support." "But we need to educate our people first, and change their attitudes." "Before the Internet, we tried to implement the Office Automation concept, but it did not work Well." "For the Internet, it is similar to that case." "However, I am sure that the external forces will stimulate and force our people to utilize the Internet, finally."

All informants replied that the Internet could be used to support most of the university tasks and activities.

2.4 Needs of the university Internet Use Policy

The question to gather this issue from the informants is "In order to manage and administer the use of the university Internet. And if the university does not have the specific policy about the use of the Internet. Do you think the university needs to formulate the Internet Use Policy?" The answers from informants were summarized and shown in Table 4.7.

Table 4.7   Summary of the transcript of the interview with presidents and experts on the issue of "needs of the university Internet Use Policy"

Informants	Responses
IF1	"No need, we already have the policy from the government about the Information Technology." "In addition, it is the government investment, and the government is already forcing us to do something that follow the government policy by the regulations of National Budgeting Department." "Moreover, the computing center was developed the rules and regulations for our users. I think that is enough." "I think money is more important than policy, budget is the key to this issue."
IF2	"Good, if we have it, it would be nice." "Need, we need it." "But in deed we do have the rule and regulations to use the university Internet, isn't it the policy?" "Anyway, if not we need to develop one."
IF3	"Actually, it would be good to have such a policy." "And we need it. It can be used as a guideline for all sections of the university. So the operation will have the direction. Everybody will share the same direction. So some problems may reduce."
IF4	"It is common in Thailand that we can implement something and operate it as our common instinct leads us to do." "We will develop the policy or rules when something bad happen. We never anticipate the phenomena before it happen." "Actually, we should plan and set up policy, might be the general or overview policy in the first time." "The guideline that we have, if some existing, just copy from other countries, like US, because we follow them in the technology. And we copy their policy or regulations as well." "We should develop our own because we are different in many aspect, especially the history and culture of people."

Some informants replied that the university should need the Internet Use Policy, while some informants had opinions that the Internet Use Policy is not a need since they can use other policies for guidelines. Moreover, the university rules and regulations can be used to manage the use of the Internet in the university.

2.5 Key policy issues of the Internet Use Policy

The question to gather this issue from the informants is "If the university develops an Internet Use Policy for the university, what are the key issues that should be included in this policy?". The answers from informants were summarized and is shown in Table 4.8.

Table 4.8 Summary of the transcript of the interview with presidents and experts on the issue of "the key policy issues of the Internet Use Policy"

Informants	Responses
IF1	"The issue that can <u>make the Internet available for all university members</u>" "Reach wider and more people than this" "The issue about <u>control</u>. How can we control the use of our users, to use it for the development of their potential and the <u>academic issue</u>, the <u>useful use</u>, not waste resources and use for wrong activities." "However, the policy <u>should not be too restricted</u>, because we are at the introduction period. We should persuade people to use now. Then after they need it and use it more than this, we can formulate more restrictions and important rules."
IF2	"The <u>freedom to use</u>. Let them enjoy using it." "The policy is freedom of use." "This is an academic society, no need to control them. However, the <u>general guideline</u> can be developed for the administration." "The policy that <u>supports and encourages people to use</u> it, especially to support the <u>teaching and learning</u>."
IF3	"The guidelines for the services, how the university provides this service, how to <u>charge</u> for the services, how to <u>control the use</u> of the Internet and the university resources."
IF4	"The issue to <u>control the use</u>, to <u>protect the violation</u> to other users' rights." "The issue of <u>objectives of use</u> should be clearly specified." "The issue on how to <u>built a good culture</u> of using this global medium in our users."

The informants suggested to include these issues in the Internet Use Policy: service distribution, control of use, freedom of use rules and regulations about the use, service charges, and objectives of the use.

2.6 The policy making process of the Internet Use Policy

The question used to gather the data about the policy making process of the Internet use Policy is " It the university would like to formulate an Internet Use Policy, whom will you (Should it be the president of the university) consult with?. And who will make the final decision about the policy?" The responses from the informants are shown in Table 4.9.

Table 4.9   Summary of the transcript of the interview with presidents and experts on the issue of "the policy making process of the Internet Use Policy"

Informants	Responses
IF1	"I will make the decision, with the suggestions from the director of the university Internet services unit, and the outside consultant company of the Internet Technology." "Instructors are important. We have to listen to them. If we do not get cooperation from them. It will fail." "However, it is impossible to listen to them all, I mean students and staff. So it should work out through the special committee for this issue."
IF2	"We will set up the committee for this matter. And the decision of this committee will be considered." "However, in the past we consulted with experts in other universities who have the experience on implementing the Internet to the university. And we will consult with them as well." "Instructors are the most powerful group in the university context, everybody knows that."
IF3	"It should work out as a committee proposal." "Normally, the president will consult with the director of the university computing center who responsible for providing the Internet services. Right now, there is a CIO of the university, so he may have a role in this committee."
IF4	"We should establish a working group on this matter. And this group will study and propose the policy to the university. This group should consist of people in the university involved in the use of the Internet such as the library, the computing center, the faculty, etc."

The informants who was a president of the university replied that he will make the decision with the suggestions of the experts and consultants, both from inside and outside the university. However, experts suggested that the policy formulation should be done by a committee.

3. Data collected from the official documents

The official documents of Thai higher education which related to the Internet use are collected through the request mailed to the director of university computing centers and the Internet resources. The data analysis of these collected official documents are described as follows:

Table 4.10 The policy issues collected from the official document related to the Internet Use of Thai higher education institutions

Issues related to the Internet use
Charges
Commercial use
Contents of the materials
Copy of software
E-mail.
Information stored on the network
Objectives of Internet services
Password
Privacy
Responsibility
Server
Terminal facility
The user rights
Use of network resources
User account

4. Data from the Internet resources

The Internet policies of universities around the world were compiled from the Internet resources. Table 4.11 and Table 4.12 show data on the policy titles and policy issues of the Internet Use policies or related policies.

Table 4.11   List of policy titles relative to the Internet use

Names of Policies
Acceptable Use Policy
Appropriate Use of Campus Computing and Network Resources
Computer and Network Use Policy
Computing Policy
Electronic Mail Policy
Guidelines for the Use of Information Technology Resources and Internet Access
Information Technology Policy
Internet Policy
Internet Use policy
Network Policy
Policy for Responsible Use of Information Technology
Policy for the Access and Utilization of Campus Computing Facilities

The titles of the policies used to govern the use of university Internet were varied. Samples of the policy title are shown in Table 4.11.

Table 4.12   Policy issues in the Internet Use Policy or related policies collected from

the Internet resources

Policy Issues
Objectives of use
Academic freedom
Acceptable Use
Access to facility
Censorship
Charges
Due Process
E-mail policy
Enforcement
Equity
Ethical Use
Freedom of Expression
Individual Rights
Information
Intellectual Property
Netiquette
Network Connections
Privacy
Proper Use
Responsibility
Security
Server Policy
Unacceptable Use
Improper Use
User Rights
Violation

ANALYSIS OF DATA COLLECTED IN THE TECHNICAL ANALYSIS PROCESS

In the technical analysis process of the study, there were seven sources of data. These sources of data were rectors or presidents of the universities/institutions, policymakers, Internet users, official documents, literature, and Internet resources. The data from the rectors or president of the universities/institutions were gathered by the interview. The questionnaires were used to gather the data from policymakers and Internet users. In addition, the data collected from the official documents, literature and Internet resources were gathered by the focused synthesis method.

1. Data from the interview

In the technical analysis process of this study, the interviews with key policy decisionmakers were conducted. The purpose of this interview was to survey the key policymakers' opinions on the key issues related to the Internet use, and on the policies. There were fourteen issues that were used in the interview.

Data collected and analysis of data from the interview in the technical analysis are as follows.

1.1 The right to use the university Internet

The question used to gather the data on the issue of the rights to use the university Internet is "In your opinion, is the use of the university Internet a right or a privilege of the university members?"". Table 4.13 shows the data analysis on this issue.

Table 4.13 Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: the right or the privilege to use the university Internet

Informants	Responses
IF1	"It should be a privilege that the university offer to all university members."
IF2	"It is a right of the faculties, staffs, and students of the university to use the university Internet."
IF3	"This issue should be addressed as a privilege to use the university Internet." "We do not need to provide to all members of the university. Some of them do not need to use it."
IF4	"A right of all the faculties and students, for the staffs it should be a privilege."
IF5	"A right for the faculties, and staffs, but a privilege to the students." "The Internet is a tool to support the work of the faculties and staff, the students will be provided the Internet only those who need it."
IF6	"The university owns the network, then it should be a privilege to use for the user, not a rights."
IF7	"A privilege to all the university members." "Not a rights because the university must have the rights to cancel the account of the users who violate the rules and regulations."
IF8	"A rights to the use with responsibility."

1.2 Objectives of the Use of the university Internet

The question used to gather the data on the issue of objectives of the use of the university Internet is "In your opinion, what should be the objectives of the use of the university Internet? For academic related activity or some other activities or objectives?". The responses to this question from the informants are shown in Table 4.14.

Table 4.14 Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: objectives of the use of the university Internet

Informants	Responses
IF1	"To support teaching and leaning." "To support the management activities such as the distribution of memo or letters, we can use e-mail, instead of paper" "For research activities, we can use both the information available on the Internet. And we can use the Internet as the communication channel between Researcher, both within the university and the outside university."
IF2	" To support the internal services of the university, like the course registration, communication between staffs." "Support the teaching and learning , both traditional courses and online-courses." "We might provide on-line degrees in the future."
IF3	"Teaching and learning, we are developing the Resources Based Learning. Focused on multi-media, the Internet can be used to support these activities, teaching and learning." "Moreover, research activities also get benefits from the Internet. We are encouraging our staffs to utilize the Internet in their project such as e-mail to communicate within the research team. Or exchange ideas and experiences from the researcher or experts in other countries."

(continue)

Table 4.14 (Continued) Summary of the transcript of the Interviews with presidents of the universities and representatives on the issue: objectives of the use of the university Internet

Informants	Responses
IF4	"For information searching" "This searching may be used to support teaching or learning or research of both teacher and student." "Actually, we started the Internet for the intranet. We aim to implement our Intranet first by using the Internet technology."
IF5	"To support the communication activity." "To support teaching and learning. Literature searching, up-date news or other knowledge needed for the Information age." "To support the university operations, such as the courses registration, the library, the university information distribution such as schedules, meetings, seminars, etc.." "The objectives of the Internet should come from the university not the student."
IF6	"It can be used to support various activities, up to the competency of the users." "Recently, the most use of the Internet is just communication, e-mail. But the Internet has more potential than e-mail." "As we have many campuses, located in many areas, the teleconference should be one of the activities for make use of Internet technology, however, practically it doesn't work. People, still need face to face meeting." "The culture should change first, then the Internet can be used to support most activities."
IF7	"Communication activities." "Document or information searching for the teaching and learning."
IF8	"To support communication activities" "To support the information searching, especially the academic information." "To provide services, such as the library data base" "To support teaching and learning, especially the distance learning"

The objectives of the use of the university Internet according to the informants' opinions are to support the communication activities, to search for information, to support teaching and learning, to support the research project, and to support the general operation of the university.

1.3 Proper use of the university Internet

The question used to gather the data on the issue of proper use of the university Internet is "What type of usage should be considered as the proper use of the university Internet?". The responses to this question from the informants are shown in Table 4.15.

Table 4.15 Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: Proper use of the university Internet

Informants	Responses
IF1	"For work, not personal use." "However, the personal use may be allowed if not too much use." "Making money , is not allowed."
IF2	"The proper use is hard to identify." "Proper for who?" "Should be proper for university, not for teachers and students as individuals" "To develop and enhance the knowledge is acceptable."
IF3	"Used for doing their duty, duty of a teacher, duty of a staff, duty of a student." "Personal use should be prohibited. We still have limited resources and budget, so personal use should not be allowed." "If personal use is allow, should be charge for the services."
IF4	"Use for academic purpose" "Polite use" "Used as needed, not waste" "Not try to destroy and interrupt the system, like spread virus."
IF5	"For teaching and learning related activities." "Should not use for personal matters, but it is hard to control."
IF6	"Use for the university activities, and public service, as we are in the regional area. The university should provide Internet services to other organizations in this regional." "Personal use is okay, because they pay for the services." "But not to make business, make money from the university Internet."

(continue)

Table 4.15 (Continued) Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: Proper use of the university Internet

Informants	Responses
IF7	"Of course for the <u>university activities</u>." "If used for personal matter it must have limitations, the same as the use of office telephone for personal matters. We freely use the office telephone for local, but long distance is prohibited." "The use of the Internet for personal matters should also have limitations like the telephone."
IF8	"Should be used for <u>academic purposes</u>." "Or <u>the management and administration of the university</u>." "The use for leisure or others, such as pornography ٠ searching should not be allowed for use." "The use for making business for personal gains should not allowed as well." "The use for university <u>public services</u> should be allowed, even fees, but this money just covers the expenses for the services, not intended to make a lot of profit.'

The proper use of the university Internet collected from the informants were: the use for academic purposes; the use for university management and administration activities; the use for public services; and the use for necessary matters. However, personal use should not be allowed.

1.4 Responsibility in using the university Internet

The question used to gather the data on the issue of responsibility in using the university Internet is "In your opinion, who should be responsible for the use of the university Internet, the user or the university?". The responses to this question from the informants are shown in Table 4.16.

Table 4.16 Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: Responsibility in using the university Internet.

Informants	Responses
IF1	"Both the university and the users should take responsibility." "We can not reject the responsibility if someone does something illegal in our own house, the same as the university." "But we have to declare, clearly, which part is the university responsibility. Which part is the users' responsibility." "Unlike other matters, the Internet is out of the university control, it involves many boundaries. For the local, I mean the university scope, the university should take care with the users, but something outside the university control, the users should responsible for themselves.
IF2	"The one who dose, is the one responsible." "Very basic rule" "The users should have responsibility in using the university Internet. Responsible to follow the rules of usage. And responsible to look after the university property. The university staffs are not enough, users have to help." "The university will be responsible for the services, make the system reliable, and keep performance."
IF3	"There are two sides of responsibility, one is for the users, another one is for the service provider. Both parties share responsibility." "The university is responsible for the service provided, and the users responsible for the use of services." "However, something that is out of control, we are not happy to take responsibility. But we have to do our best first, that is our responsibility."
IF4	"No! The university need not take any responsibility in the use of Internet of users. Users have to be responsible for their own usage." "However, the university may have the responsibility in the operation of the network system. Take care of the security system and performance of the system."

Table 4.16 (Continued) Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: Responsibility in using the university Internet.

Informants	Responses
IF5	"Right will be followed by responsibility." "Whatever are your rights, these are your responsibilities." "The users should be responsible for their own usage."
IF6	"Must be responsible." "Users must be responsible for their use of the university Internet." "They have to take care of their own account, not to share with other, if they share they have to responsible for everything which cause from their account."
IF7	"The users should have responsibility in using the Internet." "Use it right, means use it as stated in the regulations or suggestions of the university." "The university has the responsibility to control the usage, keep the use of users within the frame of the plan or rules."
IF8	"The university should be responsible in the use of the Internet of their users in some cases, and should not in some cases." "Users also should have their own responsibility in their use. Responsible to follow the regulations and the network etiquette."

Regarding the issue of responsibility in using the university Internet, the informants replied that both university and users should take responsibility in using the university Internet. The university should be responsible for providing the service, while the users should be responsible for their own usage or activities on the Internet.

1.5 Privacy in using the university Internet

The question that used to gather the data on the issue of privacy in using the university Internet is "In your opinion, do users need to have privacy in using the university Internet? Does the university need to monitor or record their usage or does the university need to screen or check their personal files?". The responses to this question from the informants are shown in Table 4.17.

Table 4.17 Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: Privacy in using the university Internet

Informants	Responses
IF1	"It is for the public services, not for personal services. So why expect for privacy'" "For the e-mail is okay, the university should not read users' mail."
IF2	"It should have a clear boundary, how private?" "In some things the university need to be involved, but some things users may have privacy. It depends on the issue." "Personal e-mail, should be a personal matter."
IF3	"Yes, you will have privacy. Do whatever you want, but within the limitation of the regulations." "The personal files should not be read by anyone, not only the university. If this is privacy it is okay."
IF4	"We don't need to know what you are doing. We are an academic society." "Reading others' mail is not good, so e-mail also applies the same rule. However, actually, no one can read your mail if they don't have your password." It is your own responsibility to protect your privacy." "The university Internet services staffs ? No they should not do that. They have no duty on checking other people messages, it is the etiquette."
IF5	"There is a line between personal area and public area." "We should discuss in our own group, the university, to draw a line. Because it is new to us. Take other's line of privacy may not be suitable for us."
IF6	"All users should have privacy of using the Internet." "They are adults and educated. No need to monitor and control." "Must let them have privacy." "It is a human right."

(continue)

Table 4.17 (Continued) Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: Privacy in using the university Internet

Informants	Responses
IF7	"I agree that we should create the atmosphere of privacy for the users." "We can not take look at them all the time. And no need to look at them when they use the internet." "Users should respect each other's personal area."
IF8	"Yes, the users should have privacy in using the Internet. But there must be some measurements to protect their privacy. I am not sure if the technology can do it or not."

Some informants agreed with the idea of giving the users privacy in using the university Internet while some informants thought that it is a public service, the users should not expected for privacy when using it.

1.6 Security in using the university Internet

The question used to gather the data on the issue of security in using the university Internet is "In your opinion, are the security procedures to protect the system important? How important? ". The responses to this question from the informants are shown in Table 4.18.

Table 4.18 Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: Security in using the university Internet

Informants	Responses
IF1	"This is a very important issue." "This should be a focused of the service. The user sometimes do not understand. Users prefer fast running operation. But the security program may cause the system slower. And the users do not like it." "The password is also another important issue. We are not so cautious about the password."
IF2	"The security issue should be taught or told the users. We are quite careless about this issue." "The university has a lot of hackers trying to break through the log-in password. But the more serious is our users sharing the password to outside members." "We have to implement a mechanism to protect our system."
IF3	"The security of the university system network is very important." "Because we link our Intranet to the Internet line. However, we may not put sensitive data or information in the Intranet, though, I am not sure if the clever and bad users can break into our Intranet or not."
IF4	"I think the security issue is important. Especially our information used for administration. We need to protect our information. If someone can break through and change our data it will damage our work. Like the registration of courses. "
IF5	"Now, we don't have sensitive data on the network. But we may have them in the future. Right now the security issue is not serious for us. We have nothing to be afraided, we have nothing to be taken away."
IF6	"It is not a big issue, it's about the power of technology. If we have enough money we can buy the best technology for security system."

(Continue)

Table 4.18 (Continued) Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: Security in using the university Internet

Informants	Responses
IF7	"The security issue is important. Especially, when we have limited resources. There are a lot of unauthorized users outside our university. This is a big problem for us. We should have more effective security system. " "The software for the security may be useless, if our peopleware, our users are not aware of the security issue."
IF8	"Right now, most of our users are not concerned about the security issue. We implement the Firewall, and they complained that it made the system slow. The users do not see the security as an important issue."

The informants expressed their ideas that the security issue is important to the use of the university Internet. However, some informants did not think that it is important because currently, they do not have sensitive information on the network.

1.7 Equity in using the university Internet

The question used to gather the data on the issue of equity in using the university Internet is "In your opinion, do we need to provide equal services for all users? Does the instructor, staff, and student need to have equity in access to the Internet and using university resources?". The responses to this question from the informants are shown in Table 4.19.

Table 4.19 Summary of the transcript of the Interviews with presidents of universities
and representatives on the issue: Equity in using the university Internet

Informants	Responses
IF1	"There is no <u>need for equity</u> use." "<u>People differ in needs to use</u> the Internet, the one who needs it more will get more services. People have different duties, some duties may need more services. So no need to have eq'\al use for aii users."
IF2	"Should not set the priority of use, <u>should be equal.</u> A student, teacher or staff, should have equal opportunity to use. It is a service for all university members. We implement it for the university. So the more people who use it, the more benefit for the university."
IF3	"We still <u>have limited resources</u> so we have to allocate to the one who need to use it first. We <u>can not give equal services</u> for all users."
IF4	"It is the belief <u>of human right, people are equal.</u> So we have to provide equal services for all university members. Otherwise they may blame us, they may say that we have discrimination in the university. We have class of people in the university."
IF5	"People in the university vary. They are different in their duties. <u>They do not need the same services of the Internet</u>. So we don't need to give equity. We provide the services by need of users. The users who need to use the Internet for their work or study will get the services first."
IF6	"<u>All users are equal</u>." "But, since the resources are limited, we will set priorities on the necessity of use it. The users whose needs are more necessary will get the services first." "But basically, all users are equal."
IF7	"Actually, <u>not every body need to use the Internet</u>. Such as the contractors, so there is no need to set the right to use the university Internet as equal to all university members." "The instructors may need more services than the student, the graduate student may need more services than the undergraduate student." "It depends on many factors."

Table 4.19 (Continued) Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: Equity in using the university Internet

Informants	Responses
IF8	"The university should provide equal opportunity for all university member." "We should encourage everybody in the university to utilize this facility, we invest a lot on it. So better give the opportunity to all members."

Regarding the issue of equity in using the university Internet, some informants preferred to give equal opportunity of access to the Internet for all university members. But some informants preferred to set the priority of usage according to the necessity to use the Internet.

1.8 The use of intellectual property on the Internet

The question used to gather the data on the issue of the use of intellectual property on the Internet is "What do you think of the use intellectual property on the Internet? Do we need to respect and follow the regulations about intellectual property rights of other countries?". The responses to this question from the informants are shown in Table 4.20.

Table 4.20 Summarized of the transcript of the Interviews with presidents of universities and representatives on the issue: the use of intellectual property on the Internet

Informants	Responses
IF1	"We have to follow the laws." "It is global in scope so we have to respect the global rule." "Especially, we are the academic institution. We should honor intellectual property and use it with respected to the owner's rights."
IF2	"We are poor, if we have to buy all original programs for all machines, we cannot afford that." "However, for the use of other intellectual property such as academic paper, we have to respect the owner of the paper, we have to cite the source of data when we use it.".
IF3	"The users have to respect the owner's rights when they use the intellectual property on the Internet. But it is difficult to control. We can only tell them that they should respect, but in practice we can not control them all the time."
IF4	"Yes ! we have to respect the law of intellectual property rights." "The university plans to put the research findings, theses and other academic knowledge to the network. We have to respect the rights of the owner of these property. At the same time we have to respects other's property as well."
IF5	"Many resources are available on the Internet, and many of them are intellectual property. These property should be used according to the laws that govern the use of it."
IF6	"The university should tell the users about how to use intellectual property. This is quite a new issue. Some users may not know the rule and the laws." "It is important to educate our users. But to control the users is difficult to do. We can tell them what they should do, but we can not follow them when they use it."

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Table 4.20 (Continued) Summarized of transcript of the Interviews with presidents of universities and representatives on the issue: the use of intellectual property on the Internet

Informants	Responses
IF7	"It is difficult to control the users, but the university must create a rule that the users have to respect intellectual property rights." "Moreover, it is the laws. If users do not listen to the university, the law will force them to do so."
IF8	"The university should encourage the users to respect intellectual property rights." "Some day we will have a lot of intellectual property on the network. And we will want others to respect our rights as well." "We should create a good habit of using intellectual property from now on."

Most of the informants agreed that all users and the university should respect the principle of intellectual property rights, and use the intellectual property on the Internet by following the principles of the laws or regulations related to the use of intellectual property.

1.9 Academic freedom in using the university Internet

The question used to gather the data on the issue of academic freedom in using the university Internet is "In your opinion, should the university apply the principle of academic freedom from the constitution to the use of the university Internet? Should the university give this freedom to users?". The responses to this question from the informants are shown in Table 4.21.

Table 4.21 Summarized of the transcript of the Interviews with presidents of universities and representatives on the issue: Academic freedom in using the university Internet

Informants	Responses
IF1	"It is like the library, you can read whatever you want to read." "The web-site that is not suitable for the students should be blocked."
IF2	"Freedom is not necessary, instead we should limit the scope of use. Many bad things are on the Internet. If we open the opportunity of free use, it may have a problem, such as pornography." "So we should not mention about academic freedom in using the university Internet."
IF3	"Yes. It is the law. We can not oppose." "We already have the academic freedom policy in the university, the use of the Internet should be included in that principle as well.
IF4	"Should give the users freedom in academic activities." "How can we deny this principle, we are an academic organization. We can not refuse this principle." "The university has to accept this principle and apply it to the use of the Internet, too."
IF5	"We have to accept the principle of academic freedom in using the university Internet. If the university ignores or rejects this right, the users can protest and ask for it." "We can not control the use of the Internet as long as it is under the principle of academic freedom."
IF6	"We can not refuse this principle." "It is the basic and most important principle for the operation of the university, as an academic organization." "However, we need to identify or clarify more, specifically for the use of the Internet, in order to make the users understand the principle better."

(Continue)

Table 4.21 (Continued) Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: Academic freedom in using the university Internet

Informants	Responses
IF7	"It is a law, can we reject the law?" "Yes, we certainly should give the freedom of using the Internet to our users as long as it is not beyond the scope of academic, we can not control that use."
IF8	"I am not happy to give this freedom to all users, especially the students. Some student are still young and not mature enough to get this freedom. They still enjoy braking the rule of use, such as share account. If we give them this freedom they may create some problem." "However, we need to accept this principle of academic freedom."

Most of the informants agreed that the university should apply the principle of academic freedom from the national constitutions to the university policy on the use of Internet.

1.10 Freedom of expression on the university Internet

The question that used to gather the data on the issue of freedom of expression on the university Internet is "In your opinion, should the university give freedom of expression on the university Internet to users?". The responses to this question from the informants are shown in Table 4.22.

Table 4.22 Summary of the transcript of the interviews with presidents of universities and representatives on the issue: Freedom of expression in using the university Internet

Informants	Responses
IF1	"Should limit the scope of expression" "The expression should be limited in the academic purpose and field of study." "Not every topic can be expressed on the university Internet."
IF2	"The user should have the freedom to express their opinion or ideas on the university Internet." "However, it should be done in the proper manner, creative, not rude.
IF3	"We should censor or screen the information on expression of ideas first, because we have to be concerned about the correct or the academic contents distributed via the university Internet."
IF4	"Do we believe in democracy?" "Can we control the expression of our university members in other media?" "Practically, we may able to control the expression, but in principle, we cannot reject the principle of freedom of expression, as they are also citizens of the country."
IF5	"We already give our users the freedom of expression." "We never control their ideas to conduct the activities on the Internet." "You can see from our Chat-Board. The students freely express their ideas."
IF6	"Yes. We need to give the freedom. However, we need to control it in some cases, it has to be in the scope of the rules and regulations, and the law as well."

(Continue)

Table 4.22 (Continued) Summary of the transcript of the Interviews with presidents

of universities and representatives on the issue: Freedom of expression

in using the university Internet

Informants	Responses
IF7	"Some activities should be censored or screened, but some can have freedom of use or expression." "If it is related to the academic, the users can freely express their ideas."
IF8	"It is concerned about the issue of expression. If it violates other's rights, this issue should not control the expression of idea, but if it is a discussion on academic topics, it should give the freedom to users."

Most informants replied that the university needs to give the users freedom of expression on the university Internet. While some informants did not agree with this idea of giving the freedom of expression to the users.

1.11 Network etiquette and ethics in using the university Internet

The question used to gather the data on the issue of network etiquette and ethics in using the university Internet is "What is your opinion about etiquette and ethics in using the university Internet? Do you think it is an important issue that should be taken into consideration by the university?". The responses to this question from the informants are shown in Table 4.23.

Table 4.23 Summary of the transcript of the Interviews with presidents of universities and representatives on the issue: network etiquette and ethics in using the university Internet

Informants	Responses
IF1	"It is not only used in the university, it involves outside the university, so that etiquette on the use of the network has to be followed."
IF2	"There exits rules or guidelines for use of the Internet. We should follow the guidelines." "Use the university network with good manners is one of the users' responsibilities."
IF3	"I think many users still do not know what are the network etiquette, since the Internet is a new practice in our university." However, this issue is important. We should build our culture to have good manner in using the network, this also involves outside the university, our users may visit other networks." "So etiquette and ethics in using the Internet is important."
IF4	"We need to emphasize on the ethics issue." "Our culture is threatened by the Internet, such as pornography and other obscene material." "We have to pay a lot of attention to this issue." "Regarding etiquette, it is not so serious compared to the ethics issue."
IF5	"As we are an academic organization, our users should behave on the net in a proper manner, however, the etiquette of using the Internet is new to our users. We have to introduce them to this issue." "Regarding the ethics issue, it is a very important issue. Especially for our youth, they just had a chance to touch the western culture or information from the Internet. We have to beware of the negative effect of it. Such as pornographic material or other bad things."

(Continue)

Table 4.23 (Continued) Summary of transcript of the Interviews with presidents of universities and representatives on the issue: Network etiquette and ethics in using the university Internet

Informants	Responses
IF6	"The ethical use is very important." "This is the period of introduction of this technology to our members, so if we set up good practice at the beginning, the chance of unethical use may be reduce or do not occur at all." "We are Buddhists. The issues related to religion must be made aware of all the time. The misunderstanding and misuse of the Internet may destroy our belief and culture, especially for the young, new generation." "We have to emphasize on the ethical issue in using the university Internet."
IF7	"There is the other side of the Internet that we should be careful in using it." "Many information and material are not suitable for our students. We have to teach our children to cope with the bad challenge of new media. They may do something without knowing the side effects of their performance. " "The ethical use of the university Internet should be high-lighted."
IF8	"The etiquette should be followed and taught to our users in using the Internet. Not only on the network but also in the computer lab. Such as not just surfing the net with no objective while many friends are waiting to use it for their assignment. Or just enjoy using UCQ while many people are waiting to use the terminal." "About the ethics issue, it is definitely important and can not be ignored. We have to stress on this issue for our users."

Most informants replied that the ethics issue is very important to the use of the university Internet. In addition, the network etiquette issue is also important. They suggested the university to educate the users about network etiquette and ethical use of the university Internet.

1.12 The use of data and information on the university Internet

The question used to gather the data on the issue of the use of data and information on the university Internet is "What should be considered when using the information on the university Internet?". The responses to this question from the informants are shown in Table 4.24.

Table 4.24 Summarized of the transcript of the Interviews with presidents of universities and representatives on the issue: The use of data and information on the university Internet

Informants	Responses
IF1	" We should set up the criteria of information and the guidelines to use in each type of information" "Moreover, not all information can be used by users, such as the personal files if the owner did not give the permission that others can use his or her file then other users can not use it."
IF2	"The copyright should be clarified." "However, if it involves the intellectual property rights, we have to carefully issue the policy about the use of information on our network." "Personal information, public information, university information should be identified and a set of criteria to differentiate these information."
IF3	"The use of the information should have rules or regulations to govern." "However, we have to check the law about the use of information, because it is in the attention of the public now."
IF4	"Information is the most important asset on our network." "We have to set up guidelines on how to create the information, how to store, distribute, update, and so on.." "An important issue is the copyright and the right to use and distribute."
IF5	"The use of data should be carefully controled." "Especially, if we have sensitive information on the network." "We should develop guidelines for using the information, starting from the beginning. If we are late it may make too many problems to solve."

(Continue)

Table 4.24 (Continued) Summary of the transcript of the Interviews with presidents

of universities and representatives on the issue: The use of data and

information on the university Internet

Informants	Responses
IF6	"The information should have a security system to block unauthorized users to use it." "Moreover, we should set up criteria of the data that will be used in our network, not all kinds of data can be stored in the network. We don't have much resources for services. "We also need to study the information Act and the intellectual property rights since these may be involved in the use of information."
IF7	"The university should develop guidelines for the use of information, such as the contents of the information, the format in computer code, the copyright, and other related issues."
IF8	"The use of information is the heart of the network usage." "We use the Internet because of the information. And the information makes the Internet useful." "We should encourage our members to create more information, right now most of the information are created from other users, or we can say most are not information, just data or garbage sometimes." "We should train our users to create information then we can share knowledge to each other, moreover we can do public relations about our organization through this information."

Informants replied that the use of the information in the university network is an important issue. And the university should set up guidelines about the use of information such as guidelines to classify data, guidelines to create information, guidelines to store information, and guidelines on the contents of data that will be used on the university Internet.

1.13 Service charges for using the university Internet

The question used to gather data on the issue of service charges for using the university Internet is "What should be the basic principle on the charge for university Internet services? Should the university charge the users for this services?". The responses to this question from the informants are shown in Table 4.25.

Table 4.25 Summarized of the transcript of the Interviews with presidents of universities and representatives on the issue: the university Internet service charges

Informants	Responses
IF1	"It is difficult to charge the users exactly as we spend the money on providing the services to them. Now we charge a very small rate." "However, most users want to use it for free." "We have limited budget, we need to charge some from the users."
IF2	"We do not charge our staff, but we charge the students." "Because we need our staff to use it, to enhance their potential, moreover, they get low pay, so we don't want to charge them. If we charge them nobody will use it."
IF3	"It should be a welfare for our staff, so we should not charge the staff." However, we charge the students the same as we charge for other services. But we didn't charge them much, just for record maintenance and make it valuable for the student.."
IF4	"We didn't charge for this service." "We provide it for free. We want everybody to use it. However, in the future we may need to charge for this Service since we have to spend a lot of money. But right Now we just want people to know and learn about it so we cannot charge for the service."

(Continue)

Table 4.25 (Continued) Summary of the transcript of the Interviews with presidents

of universities and representatives on the issue: the university Internet

service charges

Informants	Responses
IF5	"We have limited budget to support this service <u>so we need some money to support it</u>." "We need to charge for the service, however, we charge our users a very small amount of money."
IF6	"<u>We do not charge our users</u>, both the teachers and students. We want them to use it as much as possible." "We already invest on it, to charge or not to charge is not a big deal, just make it used by as many people as possible is what we want."
IF7	"<u>We want to charge but we cannot charge</u>, especially for the instructors, if we charge them, they will not use it, and we will waste our investment on the Internet." "We need our staff to utilize it, as it is believed that it will play a great role in the future." "We do not charge the students now, but in the future we may charge them, not for the use of Internet, but for the use of material or office supply which we cannot afford."
IF8	"<u>We do not charge</u>, it should be a service for teachers and staff." "<u>we charge the students</u> as we charge them for the library services."

Most of the informant did not agreed with the idea to charge the instructors for the Internet services, while most of the informants agreed to charge the students.

1.14 The key issue that should be included in the Internet Use Policy for higher education institutions

The question used to gather the data on the key issue that should be included in the Internet Use Policy for higher education institutions is "In your opinion, regarding the twelve issues that we have discussed, what issue should be the key

policy issues to include in the Internet Use Policy for higher education institutions? And what other issues that we did not talk about, should be the key policy issues in the Internet Use Policy?". The responses to this question from the informants are shown in Table 4.26.

Table 4.26   List of key policy issues that should be included in the Internet Use Policy for higher education institutions according to the opinions of the informants

Issues
User entitlement
Objective of use
Academic freedom
Action for violation
Equity of use
Etiquette and ethical use
Freedom of expression
Privacy of use
Proper use
Responsibility in use
Security of use
Service charges
Use of information
Use of Intellectual Property

There are fourteen issues that the informant replied that should be considered as key policy issues to include in the Internet use Policy.

2. Data from the questionnaire

There were two major parts of the data collected from the policymakers and Internet users. The first part were the general information about the respondents, the second part were the opinions of the respondents on the Internet use issues and policies.

2.1 General data and information about the respondents to the questionnaires

There were five issues regarding the general information of the respondents gathered from the questionnaire. These issues were: personal data, Internet experience, level of knowledge about the Internet, the reason to use the Internet, and the projected situation if the university Internet services is not available.

2.1.1 Internet experiences

For the respondents in the Internet users group only the experienced users of the Internet were selected, while the respondents of the policymakers group were randomly selected from the list in the university directory. The data on experience on the Internet usage of respondents is shown in Table 4.27.

Table 4.27 Frequency and percentage of policymakers' experience in using the Internet

Internet experience		Policymakers
Have been using the Internet	Frequency	81
	%	42.86
Never used the Internet	Frequency	108
	%	57.14
Total	Frequency	189
	%	100.00

2.1.2 Level of knowledge about the Internet

Table 4.28 shows data analysis on level of knowledge on the Internet of the respondents.

Table 4.28 Frequency and percentage of respondents self-assessments of level of knowledge and skills in utilizing the Internet

Level		Policymakers	Internet users	Total
Illiterate	Frequency	19	16	35
	Group%	54.29	45.71	100.00
	Within group%	10.38	7.08	8.56
	Total %	4.65	3.91	8.56
Literate	Frequency	118	139	257
	Group%	45.91	54.09	100.00
	Within group%	64.48*	61.50*	62.84*
	Total %	28.85	33.99	62.84
Efficient	Frequency	41	62	103
	Group%	39.81	60.19	100.00
	Within group%	22.40	27.43	25.18
	Total %	10.02	15.16	25.18
Expert	Frequency	5	9	14
	Group%	35.71	64.29	100.00
	Within group%	2.73	3.98	3.42
	Total %	1.22	2.20	3.42
Total	Frequency	183	226	409
	Group%	44.74	55.26	100
	Within group%	100.00	100.00	100
	Total %	44.74	55.26	100

* mode

Table 4.28 shows that most of the respondents, about sixty-three percent, assessed their knowledge and skills in utilizing the Internet as the literate level. Considering the policymakers group, more than half of the respondents, about sixty five percent, assessed their knowledge and skills in utilizing the Internet as the literate level as well. Similar to the Internet users group, most of the respondents, approximately sixty-two percent, assess their knowledge and skills in utilizing the Internet as the literate level.

2.1.3 The reason to use the Internet

Table 4.29 shows data analysis on the reason to use the Internet by the respondents.

Table 4.29 Frequency and percentage of underlying reasons to utilize the Internet

Reasons		Policymakers	Internet users	Total
Condition of workplace/study	Frequency	28	79	107
	Group%	26.17	73.83	100
	Within group%	17.07	35.11	27.51
	Total %	7.20	20.31	27 51
Self motivation	Frequency	100	121	221
	Group%	45.25	54.75	100
	Within group%	60.98*	53.78*	56.81*
	Total %	25.71	31.11	56.81
Others reason	Frequency	36	25	61
	Group%	59.02	40.98	100
	Within group%	21.95	11.11	15.68
	Total %	9.25	6.43	15.68
Total	Frequency	164	225	389
	Group%	42.16	57.84	100.00
	Within group%	100.00	100	100.00
	Total %	42.16	57.84	100.00

* mode

More than half of the respondents, about fifty-seven percent, used the Internet because of their own motivation. About twenty-eight percent of the respondents used the Internet because of the requirement of their workplace or their studies. The underlying reason of utilizing the Internet is not different between the policymakers group and the Internet users group, that is, they used the Internet because of their own motivation.

2.1.4 Projected situation if the university Internet is not available

Table 4.30 shows data analysis on projected situation if the university Internet is not available to respondents. .

Table 4.30 Frequency and percentage of respondents about the forecasted levels of difficulty if the university Internet services is not available

Level		Policymakers	Internet users	Total
Not difficult	Frequency	54	59	113
	Group%	47.79	52.21	100.00
	Within group%	29.67	26.11	27.70
	Total %	13.24	14.46	27.70
Not sure .	Frequency	35	34	69
	Group%	50.72	49.28	100.00
	Within group%	19.32	15.04	16.91
	Total %	8.58	8.33	16.91
Difficult	Frequency	86	125	211
	Group%	40.76	59.24	100.00
	Within group%	47.25*	55.31*	51.72*
	Total %	21.08	30.64	51.72
No idea	Frequency	7	8	15
	Group%	46.67	53.33	100.00
	Within group%	3.85	3.54	3.68
	Total %	1.72	1.96	3.68
Total	Frequency	182	226	408
	Group%	44.61	55.39	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.61	55.39	100.00

*mode

About half of the respondents, approximately fifty-two percent,   specified that they will be confronted with difficulties in working or studying if there is no university Internet services available to them,   while, about twenty-eight percent of the respondents replied that they will suffer if the university Internet is not available. However, about seventeen percent of the respondents were not sure whether they will suffer or not.

2.1.5 Opinions on the Internet use issues and policies

There were fourteen issues that were collected the respondents opinions. These issues were: entitle users, objective of the use of university Internet, proper use of the university Internet, responsibility in using the university Internet, the use of intellectual property on the Internet, privacy in using the university Internet, security in using the university Internet, equity in using the university Internet, ethics in using the university Internet, network etiquette in using the university Internet, academic freedom in using the university Internet, freedom of expression in using the university Internet, the use of data and information on the university Internet, and the charges for the university Internet services.

2.1.5.1 Entitle users

There were two aspects used to collect data regarding the entitlement of users to the university Internet: assumption of the use of the university Internet, and the individuals who should have the right to use the university Internet. The data analysis of these data is shown in Table 4.31 and 4.32.

Table 4.31 Frequency and percentage of respondents' opinions about the assumption of the use of the university Internet

Assumptions		Policymakers	Internet users	Total
Right	Frequency	161	209	370
	Group%	43.51	56.49	100.00
	Within group%	88.95*	92.89*	91.13*
	Total %	39.66	51.48	91.13
Privilege	Frequency	10	5	15
	Group%	66.67	33.33	100.00
	Within group%	5.52	2.22	3.69
	Total %	2.46	1.23	3.69
Other assumptions	Frequency	10	11	21
	Group%	47.62	52.38	100.00
	Within group%	5.52	4.89	5.17
	Total %	2.46	2.71	5.17
Total	Frequency	188	225	406
	Group%	44.58	55.42	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.58	55.42	100.00

Almost all of the respondents, about ninety-one percent, held the assumption on the use of university Internet services as their right. Only a small percentage of the respondents, about four percent, considered the right to use this service as a privilege.

Table 4.32 Frequency and percentage of respondents' opinions on entitlement of users to the university Internet

Entity		Policymakers	Internet users	Total
Students	Frequency	159	198	355
	Group%	44.50	55.50	100.00
	Within group%	96.40	98.50	97.50
	Total %	43.40	54.1	97.50
Instructors	Frequency	164	187	351
	Group%	49.70	53.30	100.00
	Within group%	99.40	93.00	95.90
	Total %	44.80	51.10	95.90
University support staffs (permanent employee)	Frequency	160	151	311
	Group%	51.40	48.60	100.00
	Within group%	97.00	75.10	85.00
	Total %	43.70	41.30	85.00
University support staffs (contractor)	Frequency	112	134	246
	Group%	45.50	54.5	100.00
	Within group%	67.90	66.70	67.20
	Total %	30.60	36.60	67.20
Alumni	Frequency	66	106	172
	Group%	38.40	61.60	100.00
	Within group%	40.00	52.70	47.00
	Total %	18.00	29.00	47.00
Government officers in other organizations	Frequency	23	49	72
	Group%	31.90	68.10	100.00
	Within group%	13.9	24.40	19.70
	Total %	6.30	13.40	19.70
General Public	Frequency	22	46	68
	Group%	32.40	67.60	100.00
	Within group%	13.30	22.90	18.60
	Total %	6.00	12.60	18.60
Total	Frequency	165	201	366
	Group%	45.10	54.90	100.00

*mode

More than half of the respondents agreed that students, instructors, university support staffs, both permanently employed and contractors should have the right to use the university Internet. Approximately, forty-seven percent of the respondents agreed

that the university alumni should have the right to use the university Internet. However, about twenty percent of the respondents agreed that the public should be allowed to use the university Internet.

2.1.5.2 Objective of the use of university Internet

Table 4.33 to 4.37 shows data analysis on objective of the use of the university Internet according to respondents' opinions.

Table 4.33 Frequency and percentage of respondents' opinions on the university objectives of the use of Internet.

Objectives		Policymakers	Internet users	Total
Teaching and learning	Frequency	183	226	409
	Group%	44.74	55.26	100.00
	Within group%	100.00	100.00	100.00
	Total %	100.00	100.00	100.00
Research and development	Frequency	183	226	409
	Group%	44.74	55.20	100.00
	Within group%	100.00	100.00	100.00
	Total %	100.00	100.00	100.00
Public services	Frequency	180	224	404
	Group%	44.75	55.45	100.00
	Within group%	98.36	99.11	98.78
	Total %	44.01	54.77	98.78
Conserving and promoting national culture	Frequency	175	200	375
	Group%	46.67	53.33	100.00
	Within group%	95.63	88.49	91.69
	Total %	42.78	48.90	91.69
Support university management and administration	Frequency	183	226	409
	Group%	44.74	55.26	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.74	55.26	100.00
Generate revenue to university	Frequency	8	15	23
	Group%	34.78	62.22	100.00
	Within group%	4.37	6.64	5.62
	Total %	1.95	3.67	5.62
University Human Resource Development	Frequency	179	220	399
	Group%	44.86	53.14	100.00
	Within group%	97.81	97.34	97.55
	Total %	43.76	53.78	97.55
Improve the quality of University services	Frequency	176	218	394
	Group%	44.67	55.33	100.00
	Within group%	96.17	96.46	96.33
	Total %	43.03	53.30	96.33
Others	Frequency	3	2	5
	Group%	60.00	40.00	100.00
	Within group%	1.64	0.88	1.22
	Total %	0.73	0.48	1.22
Total	Frequency	183	226	409
	Group%	44.74	55.26	100.00

*mode

All the respondents preferred that the objective of the use of the university Internet should be for conducting teaching and learning activities, university research

and development, and for supporting the university management and administration. In addition, about ninety-nine percent of the respondents replied that the university should use the Internet to provide the services to the public as well. About ninety-seven percent of the respondents replied that the university should use the Internet to develop knowledge and potential of university members, and improve the university services. Furthermore, about ninety-two percent of the respondents replied that the university should use the Internet to conserve and promote national culture.

Table 4.34   Frequency and percentage of respondents' opinions on activities that should allow personal account to conduct on the university Internet

Activities		Policymakers	Internet users	Total
Academic related activities which generate revenue	Frequency	131	120	251
	Group%	52.19	47.81	100.00
	Within group%	71.58	53.10	61.37
	Total %	32.03	29.34	61.37
Academic related activities which do NOT generate revenue	Frequency	156	188	344
	Group%	45.35	54.65	100.00
	Within group%	85.25*	83.19*	84.11*
	Total %	38.14	45.97	84.11
Academic unrelated activities which generate revenue	Frequency	53	51	104
	Group%	50.96	49.04	100.00
	Within group%	28.96	22.57	25.43
	Total %	12.96	12.47	24.43
Academic unrelated activities which do NOT generate revenue	Frequency	51	94	145
	Group%	35.17	64.83	100.00
	Within group%	27.89	41.59	35.45
	Total %	12.47	22.98	35.45
Total	Frequency	183	226	409
	Group%	44.74	55.26	100.00

*mode

Most of the respondents, about eighty-four percent, preferred that the university should allow users to conduct academic related activities which do not aim at generating income. In addition, about sixty percent of the respondents replied that the university should allow users to conduct academic activities which generate revenue. However, about twenty-five to thirty-five percent of the respondents replied that

the university should allow the user to use the university Internet for academic unrelated activities as well.

Table 4.35 Frequency and percentage of respondents' opinions on activities allowed

for university units to conduct on the university Internet

Activities		Policymakers	Internet users	Total
Academic related activities which generate the revenue	Frequency	151	151	302
	Group%	50.00	50.00	100.00
	Within group%	82.51	66.81	73.84
	Total %	36.52	36.92	73.84
Academic related activities which do NOT generate the revenue	Frequency	146	169	315
	Group%	46.35	53.65	100.00
	Within group%	79.78*	74.78*	77.02*
	Total %	35.70	41.32	77.02
Academic unrelated activities which generate the revenue	Frequency	57	51	108
	Group%	52.78	47.22	100.00
	Within group%	31.15	22.57	26.41
	Total %	13.94	12.47	26.41
Academic unrelated activities which do NOT generate the revenue	Frequency	45	67	112
	Group%	40.18	59.82	100.00
	Within group%	24.59	29.65	27.38
	Total %	11.00	13.38	27.38
Total	Frequency	183	226	409
	Group%	44.74	55.26	100.00

* mode

Most of the respondents, about seventy-seven percent, preferred that the university should allow the university units to conduct academic related activities which are not aimed at generating income. Moreover, about seventy-four percent of the respondents preferred that the university should allow the university owned units to conduct academic related activities which generate the university revenue as well. However, about twenty-seven percent of the respondents agreed that the university should allow the university units to conduct academic unrelated activities on the Internet, whether it generates revenue or not.

Table 4.36   Rank of the needed services on the Internet according to respondents'
opinions

Services		Policymakers	Internet users	Total
Communications	Rank order	1*	2	2
	Assigned weight	771	866	1637
Information searching	Rank order	2	1*	1*
	Assigned weight	750	980	1730
Remote log-in	Rank order	2	3	3
	Assigned weight	405	546	951
Subscriber news/others	Rank order	2	5	5
	Assigned weight	280	658	658
File transfer	Rank order	4	4	4
	Assigned weight	350	852	852

Among the five of the Internet services, the respondents ranked the information searching services as the first order service that the respondents need to use most. Considering the differences in opinion between the policymakers and the Internet users, the policymakers ranked the communication services as the first order, while the Internet users group ranked the information searching as the first order. The third order that respondents ranked was the remote log-in service.

Table 4.37   Frequency and percentage of respondents' opinions on the use of the
Internet for personal matters

Opinions	Policymakers	Internet users	Total

Should allow to use for personal matters	Frequency	136	184	320
	Group%	42.50	57.50	100.00
	Within group%	75.56*	81.42*	78.82*
	Total %	33.50	45.32	78.82
Should·not allow to use for personal matters	Frequency	26	24	50
	Group%	52.00	48.00	100.00
	Within group%	14.44	10.62	12.32
	Total %	6.40	5.91	12.32
No idea	Frequency	18	18	36
	Group%	50.00	50.00	100.00
	Within group%	10.00	7.96	8.87
	Total %	4.43	4.43	8.87
Total	Frequency	180	226	406
	Group%	44.33	55.67	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.33	55.67	100.00

*mode

Most respondents, about seventy-nine percent, replied that the university should allow users to use the university Internet for their personal matters. However, about twelve percent of the respondents replied that the university should not allow users to use the university Internet for personal matters. Some of the reasons to support that the university should allow users to use the university Internet for personal matters are:

a. "I pay for it"
b. "difficult to control, similar to the use of telephone in the office"
c. "This technology is in an introduction period, allowing to use the Internet for personal matters is an appropriate strategy to get the attention of the student or staff to utilize this technology."
d. "It is common to do personal activities in the workplace, since people have a lot of responsibilities in their personal life but in order to do the personal activities, the main duty must not interfere and the office resources must not be wasted."
e. "Should be one of the Internet services, it will facilitate the students and staff: personal communication, it will reduce the time of absence from the workplace or university if they have to go out to use other services."
f. "It is one part of the practice to utilize this technology"
g. "should be the welfare service for the university instructor and staff"
h. "if not permitted for use in personal matters, the university must develop a control system which is not worth doing."

2.1.5.3 Proper use of the university Internet

Table 4.38 shows data analysis on proper use of the university Internet issue.

Table 4.38   Frequency and percentage of respondents' opinions on definition of
proper use of the university Internet

Definitions		Policymakers	Internet users	Total
Use with responsibility	Frequency	180	224	404
	Group%	44.75	55.45	100.00
	Within group%	98.36	99.11	98.78
	Total %	44.01	54.77	98.78
Effective use of resources	Frequency	175	215	390
	Group%	44.87	55.13	100.00
	Within group%	95.63	95.13	95.35
	Total %	42.79	52.57	95.35
Etiquette	Frequency	169	218	387
	Group%	43.67	56.63	100.00
	Within group%	92.35	96.46	94.62
	Total %	41.32	53.30	64.62
Ethics	Frequency	180	222	402
	Group%	44.78	55.22	100.00
	Within group%	98.36	98.23	98.29
	Total %	44.01	54.77	98.29
Creative & Innovative use	Frequency	156	198	354
	Group%	44.07	55.93	100.00
	Within group%	85.25	87.61	86.55
	Total %	38.14	48.41	86.55
Aware of security procedures	Frequency	182	220	402
	Group%	45.27	54.73	100.00
	Within group%	99.45	97.35	98.29
	Total %	44.50	53.79	98.29
Respect of laws	Frequency	179	219	398
	Group%	44.97	55.03	100.00
	Within group%	97.81	96.90	97.30
	Total %	43.77	53.55	97.30
Follow university objective	Frequency	180	221	401
	Group%	44.89	55.11	100.00
	Within group%	98.38	97.79	98.04
	Total %	44.01	54.03	98.04
Respect university rules & regulations	Frequency	181	224	405
	Group%	44.69	55.31	100.00
	Within group%	98.91	99.12	99.02
	Total %	44.25	54.77	99.02
Total	Frequency	183	226	409
	Group%	44.74	55.26	100.00

More than ninety-five percent of respondents agreed that the "proper use" of
the university Internet should be defined as the use with responsibility,   effective

utilization of resources, use with etiquette and ethics concern, aware of the security procedures, respect the related laws, follow the university objectives of the Internet use, and respect the university rules and regulations related to the use of the Internet. However, about eighty-seven percent of respondents agreed that the creative and innovative use should be included in the proper use issue.

2.1.5.4 Responsibility in using the university Internet

Table 4.39 to Table 4.42 shows data analysis on responsibility in using the university Internet.

Table 4.39 Frequency and percentage of respondents' opinions on responsibility in using the Internet that the university should enforce

Responsibility		Policymakers	Internet users	Total
University rules	Frequency	160	215	375
	Group%	42.67	57.33	100.00
	Within group%	89.39	95.13	92.59
	Total %	39.51	53.09	92.59
University regulations	Frequency	163	218	381
	Group%	42.78	57.22	100.00
	Within group%	91.06	96.46	94.07
	Total %	40.25	53.83	94.07
Laws	Frequency	143	198	341
	Group%	41.94	58.06	100.00
	Within group%	79.89	87.61	84.20
	Total %	35.31	48.89	84.20
Others	Frequency	15	20	35
	Group%	6.38	42.86	100.00
	Within group%	8.38	8.85	8.64
	Total %	3.70	4.94	8.64
Total	Frequency	179	226	405
	Group%	44.20	55.80	100.00

Approximately ninety-four percent of respondents agreed that the users should be responsible if they use the Internet against the university regulations. And about ninety-three percent of the respondents agreed that the users should be

responsible if they use the Internet against the university rules. In addition, about eighty-four percent of the respondents agreed that the users should take responsibility as to the related laws.

Table 4.40   Frequency and percentage of respondents' opinions on users responsibility to their own user account

Opinions		Policymakers	Internet users	Total
Agree	Frequency	108	120	228
	Group%	47.37	52.63	100.00
	Within group%	61.36*	53.57*	57.00*
	Total %	27.00	30.00	57.00
Not agree	Frequency	34	51	85
	Group%	40.00	60.00	100.00
	Within group%	19.32	22.77	21.25
	Total %	8.50	12.75	21.25
Not sure	Frequency	31	42	73
	Group%	42.47	57.53	100.00
	Within group%	17.61	18.75	18.25
	Total %	7.75	10.50	18.25
No idea	Frequency	3	11	14
	Group%	21.43	78.57	100.00
	Within group%	1.70	4.91	3.50
	Total %	0.75	2.75	3.50
Total	Frequency	176	224	400
	Group%	44.00	56.00	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.00	56.00	100.00

* mode

More than half of the respondents, about fifty-seven percent, agreed that the users should be responsible for the activities conducted via their own account, while twenty-one percent of the respondents did not agree with this issue. However, about eighteen percent of the respondents were not sure of their preference on this issue.

Table 4.41 Frequency and percentage of respondents' opinions on the university
responsibility to users' Personal Information stored in the central memory

Opinions		Policymakers	Internet users	Total
Agree	Frequency	82	134	216
	Group%	37.96	62.04	100.00
	Within group%	46.07*	59.56*	53.60*
	Total %	20.35	33.25	53.60
Not agree	Frequency	56	44	100
	Group%	56.00	44.00	100.00
	Within group%	31.46	19.56	24.81
	Total %	13.90	10.92	24.81
Not sure	Frequency	26	38	64
	Group%	40.63	59.38	100.00
	Within group%	14.61	16.83	15.88
	Total %	6.45	9.43	15.88
No idea	Frequency	14	9	23
	Group%	60.87	39.13	100.00
	Within group%	7.87	4.00	5.71
	Total %	3.47	2.23	5.71
Total	Frequency	178	225	403
	Group%	44.17	55.83	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.71	55.83	100.00

*mode

More than half of the respondents, approximately fifty-four percent, agreed that
the university should be responsible for the damage of users' Personal Information
stored in the central system memory. However, about twenty-five percent of the
respondents did not agree that the university should be responsible for this matter, while
about sixteen percent of the respondents were not sure about their opinions on this
issue.

Table 4.42 Frequency and percentage of respondents' opinions on the types of the
use of the Internet that should be punishable

Types		Policymakers	Internet users	Total
Irresponsible use	Frequency	113	124	237
	Group%	47.70	52.30	100.00
	Within group%	63.80	55.40	59.10
	Total %	28.20	30.90	59.10
Unetiquette use	Frequency	121	132	253
	Group%	47.80	52.20	100.00
	Within group%	68.40	58.90	63.10
	Total %	30.20	32.90	63.10
Unetical use	Frequency	143	159	302
	Group%	47.40	52.60	100.00
	Within group%	80.80	71.00	75.90
	Total %	35.70	39.70	75.90
Use different from university objective	Frequency	112	104	216
	Group%	51.90	48.10	100.00
	Within group%	63.30	46.40	53.90
	Total %	27.90	25.90	53.90
Total	Frequency	177	224	401
	Group%	44.14	55.86	100.00

Most of the respondents, about seventy-six percent, replied that the unethical
use of the university Internet should be punishable, and about sixty percent of the
respondents replied that the un-etiquette use of the university Internet should be
punishable. In addition, about fifty-four percent of the respondents replied that the use
of the university Internet different from the objective of the university should be
punishable as well.

2.1.5.5 The use of intellectual property on the Internet

Table 4.43 to Table 45 shows data analysis on the use
of intellectual property on the university Internet.

Table 4.43   Frequency and percentage of respondents' opinions on the university'
responsibility in providing legal intellectual property on the university
network

Opinions		Policymakers	Internet users	Total
Agree	Frequency	157	213	370
	Group%	42.43	57.57	100.00
	Within group%	88.20*	95.09*	92.04*
	Total %	39.05	52.99	92.04
Not agree	Frequency	50	50	113
	Group%	44.25	55.75	100.00
	Within group%	28.09	28.13	28.11
	Total %	12.44	15.67	28.11
Not sure	Frequency	20	20	52
	Group%	38.46	61.54	100.00
	Within group%	11.24	14.29	12.94
	Total %	4.98	7.96	12.94
No idea	Frequency	15	15	15
	Group%	42.86	57.14	100.00
	Within group%	8.43	8.93	8.71
	Total %	3.73	4.98	8.71
Total	Frequency	178	224	402
	Group%	44.28	55.72	100.00
	Within group%			
	Total %			

*mode

About ninety-two percent of the respondents agreed that the university
should provide legal intellectual property on the university network. However,   about
twenty-eight percent of the respondents did not agree with this issue.

Table 4.44 Frequency and percentage of respondents' opinions on the user
responsibility in using legal intellectual property on the Internet

Opinions		Policymakers	Internet users	Total
Agree	Frequency	157	213	370
	Group%	42.43	57.57	100.00
	Within group%	87.22*	96.38*	92.27*
	Total %	39.15	53.12	92.27
Not agree	Frequency	50	63	113
	Group%	44.25	55.75	100.00
	Within group%	27.78	28.51	28.18
	Total %	12.47	15.71	28.18
Not sure	Frequency	16	28	44
	Group%	36.36	63.64	100.00
	Within group%	8.89	12.67	10.97
	Total %	3.99	6.98	10.97
No idea	Frequency	10	12	22
	Group%	45.45	54.55	100.00
	Within group%	5.56	5.43	5.49
	Total %	2.49	2.99	5.49
Total	Frequency	180	221	401
	Group%	44.89	55.11	100.00

*mode

About ninety-two percent of the respondent agreed that the user should be responsible for their usage of intellectual property on the Internet. However, about twenty-eight percent of the respondents did not agree with this issue.

Table 4.45 Frequency and percentage of respondents' opinions on the issue of the university responsibility for the use of Intellectual Property of users

Opinions		Policymakers	Internet users	Total
Agree	Frequency	85	75	160
	Group%	53.13	46.88	100.00
	Within group%	48.12*	33.33	39.80*
	Total %	21.14	18.66	39.80
Not agree	Frequency	55	93	148
	Group%	37.16	62.84	100.00
	Within group%	31.07	41.33*	36.82
	Total %	13.68	23.13	36.82
Not sure	Frequency	30	42	72
	Group%	41.67	58.33	100.00
	Within group%	16.95	18.67	17.91
	Total %	7.46	10.45	17.91
No idea	Frequency	7	15	22
	Group%	31.82	68.18	100.00
	Within group%	3.95	6.67	5.47
	Total %	1.74	3.73	5.47
Total	Frequency	177	225	402
	Group%	44.03	55.97	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.03	55.97	100.00

*mode

About forty percent of the total respondents agreed that the university should be responsible for the use of Intellectual Property of the university internet users. However, about thirty-seven percent of the total respondents did not agree with this issue. Considering the Internet users group, about forty-one percent did not agree that the university should be responsible for the use of the Intellectual Property of the university Internet users, while about forty-eight percent of the policymakers group agreed that the university should be responsible for the use of Intellectual Property on the university Internet users.

2.1.1.6 Privacy in using the university Internet

Table 4.46 to Table 4.48 shows data analysis on user privacy in using the university Internet.

Table 4.46 Frequency and percentage of respondents' opinions on the university's right
to record users' performance and activities on the university Internet

Opinions		Policymakers	Internet users	Total
Agree	Frequency	155	151	306
	Group%	50.65	49.35	100.00
	Within group%	87.08*	67.11*	79.93*
	Total %	38.46	41.47	79.93
Not agree	Frequency	10	32	42
	Group%	23.80	76.19	100.00
	Within group%	5.62	14.22	10.42
	Total %	2.48	7.94	10.42
Not sure	Frequency	10	34	44
	Group%	22.73	72.27	100.00
	Within group%	5.26	15.11	10.92
	Total %	2.48	8.44	10.92
No idea	Frequency	3	8	11
	Group%	27.27	72.72	100.00
	Within group%	1.68	3.55	2.73
	Total %	0.74	1.99	2.73
Total	Frequency	178	225	403
	Group%	44.17	55.83	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.17	55.83	100.00

* mode

Most of the respondents, about eighty percent, agreed that the university
has the right to record the users' performance and activities which conducted on the
university Internet. However, about ten percent of the respondents did not agree with this
idea, while about eleven percent of the respondents were not sure of their own opinions
on this issue.

Table 4.47 Frequency and percentage of respondents' opinions on the issue that the
university has no right to use the users' personal information other than for
the activities related to providing the Internet services to users

Opinions		Policymakers	Internet users	Total
Agree	Frequency	171	208	379
	Group%	45.12	54.88	100.00
	Within group%	96.61*	92.44*	94.28*
	Total %	42.54	51.74	94.28
Not agree	Frequency	1	8	9
	Group%	11.11	88.89	100.00
	Within group%	.56	3.56	2.24
	Total %	.25	1.99	2.24
Not sure	Frequency	4	5	9
	Group%	44.44	55.56	100.00
	Within group%	2.26	2.22	2.24
	Total %	1.00	1.24	2.24
No idea	Frequency	1	4	5
	Group%	20.00	80.00	100.00
	Within group%	.56	1.78	1.24
	Total %	.25	1.00	1.24
Total	Frequency	177	25 .	402
	Group%	44.03	55.97	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.03	55.97	100.00

* mode

Most of the respondents, about ninety-four percent, agreed that the university
has no right to use the users' personal information in other activities other than activities
related to provide the Internet services to users, while only two percent of the
respondents did not agree with this issue. However, about two percent of the
respondents were not sure about this issue.

Table 4.48 Frequency and percentage of respondents' opinions on the issue of the users' Personal Information that the university collected should be treated as confidential data

Opinions		Policymakers	Internet users	Total
Agree	Frequency	140	197	337
	Group%	41.54	58.46	100.00
	Within group%	78.65*	87.56*	83.62*
	Total %	34.74	48.88	83.62
Not agree	Frequency	19	16	35
	Group%	54.29	45.71	100.00
	Within group%	10.67	7.11	8.68
	Total %	4.71	3.97	8.68
Not sure	Frequency	15	8	23
	Group%	65.22	34.78	100.00
	Within group%	8.43	3.65	5.71
	Total %	3.72	1.99	5.71
No idea	Frequency	4	4	8
	Group%	50.00	50.00	100.00
	Within group%	2.25	1.78	1.99
	Total %	.99	.99	1.99
Total	Frequency	178	225	403
	Group%	44.17	55.83	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.71	55.83	100.00

*mode

Most of the respondents, about eighty-four percent, agreed that their personal information that the university collected should be treated as confidential between the university and the user, while only nine percent of the respondents did not agree with this idea. However, about six percent of the respondents were not sure about their idea on this issue.

2.1.1.7 Security in using the university Internet

Table 4.49 to Table 4.50 shows data analysis on security in using the university Internet.

Table 4.49 Frequency and percentage of respondents' opinions on the university's right
to record the users' performance in using the Internet

Opinions		Policymakers	Internet users	Total
Agree	Frequency	146	138	284
	Group%	51.41	48.59	100.00
	Within group%	82.02*	61.33*	70.47*
	Total %	36.23	34.24	70.47
Not agree	Frequency	13	49	62
	Group%	20.97	79.03	100.00
	Within group%	7.30	21.78	15.38
	Total %	3.23	12.16	15.38
Not sure	Frequency	13	30	43
	Group%	30.23	69.77	100.00
	Within group%	7.30	13.33	10.67
	Total %	3.23	7.44	10.67
No idea	Frequency	6	8	14
	Group%	42.86	57.14	100.00
	Within group%	3.37	3.56	3.47
	Total %	1.49	1.96	3.47
Total	Frequency	178	225	403
	Group%	44.17	55.83	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.17	55.83	100.00

* mode

Most of the respondents, about seventy percent, agreed that the university has the rights to record the users' performance and activities conducted on the university Internet. However, about fifteen percent of the respondents did not agree on this issue, while about eleven percent of the respondents were not sure about their preference.

Table 4.50 Frequency and percentage of respondents' opinions on university security procedures

Procedures		Policymakers	Internet users	Total
Monitor all users	Frequency	30	42	72
	Group%	41.67	58.33	100.00
	Within group%	16.39	23.60	22.92
	Total %	9.55	13.37	22.92
Monitor only suspicious user	Frequency	112	134	246
	Group%	45.53	54.47	100.00
	Within group%	82.35	75.28	78.34
	Total %	35.67	42.66	78.34
Record all users	Frequency	44	48	92
	Group%	47.83	52.17	100.00
	Within group%	32.35	26.97	29.30
	Total %	14.01	15.27	29.30
Record only suspicious user	Frequency	100	106	206
	Group%	48.54	54.6	100.00
	Within group%	73.59	59.55	65.61
	Total %	31.85	33.76	65.61
Screen Personal Information Without notice	Frequency	50	43	93
	Group%	53.76	46.24	100.00
	Within group%	36.76	24.16	29.62
	Total %	15.92	13.69	29.62
Screen Personal Information With notice	Frequency	59	63	122
	Group%	48.36	51.64	100.00
	Within group%	43.38	35.39	38.85
	Total %	18.78	20.06	38.85
Total	Frequency	136	178	314
	Group%	43.31	56.69	100.00

Most of the respondents, about seventy-eight percent, replied that the university should monitor only the suspected users in using the university Internet, and about sixty-six percent of the respondents replied that the university should record only the suspected users in using the university Internet. However, about thirty-nine percent of the respondents agreed that the university should screen personal information of users with notice, and about thirty percent of the respondents agreed that the university should screen personal information without notice to users.

2.1.5.8 Equity in using the university Internet

Table 4.51 to Table 4.53 shows data analysis on equity in using the university Internet.

Table 4.51 Frequency and percentage of respondents' opinions on activities on the Internet that should be allowed for students to conduct

Activities		Policymakers	Internet users	Total
Personal Homepage	Frequency	69	164	233
	Group%	29.60	70.40	100.00
	Within group%	37.70	72.88	57.10
	Total %	16.91	40.20	57.10
Moderator of	Frequency	116	151	267
Interestgroup	Group%	43.40	56.60	100.00
	Within group%	63.38	48.00	65.44
	Total %	28.43	37.01	65.44
Moderator of Bulletin	Frequency	91	106	199
Board	Group%	45.70	54.30	100.00
	Within group%	49.72	48.00	48.77
	Total %	22.30	26.48	48.77
Total	Frequency	183	225	408
	Group%	44.85	55.15	100.00

Considering the Homepage activity, about fifty-seven percent of the respondents agreed that the university should allow the students to develop their personal Homepages. About sixty-five percent of the respondents agreed that the university should allow the students to be a moderator of the Interestgroup/Newsgroup. In addition, about forty-nine percent of the respondents agreed that the university should allow the students to be a moderator of the Electronic Bulletin Board.

Table 4.52   Frequency and percentage of respondents' opinions on activities that the
university should allow the instructors to conduct on the university Internet

Activities		Policymakers	Internet users	Total
Personal HomePage	Frequency	122	171	293
	Group%	41.6	58.40	100.00
	Within group%	78.70	84.65	82.07
	Total %	34.17		82.07
Moderator of Interestgroup	Frequency	149	177	326
	Group%	45.70	54.30	100.00
	Within group%	96.13	87.62	91.32
	Total %	41.74	49.58	91.32
Moderator of Bulletin Board	Frequency	122	148	270
	Group%	45.20	54.80	100.00
	Within group%	78.70	73.26	75.63
	Total %	34.17	41.46	75.63
Total	Frequency	155	202	357
	Group%	43.42	56.58	100.00

Most of the respondents, about eighty-two percent, agreed that the university should allow the instructors to develop personal Homepages. Moreover, about ninety-one percent of the respondents agreed that the university should allow the instructors to be a moderator of the Interestgroup/Newsgroup. In addition, approximately seventy-six percent of the respondents agreed that the university should allow the instructor to be a moderator of the Electronic Bulletin Board.

Table 4.53 Frequency and percentage of respondents' opinions on activities that the university support staffs should be allowed to conduct on the university Internet

Activities		Policymakers	Internet users	Total
Personal Homepage	Frequency	79	114	193
	Group%	40.90	59.10	100.00
	Within group%	58.08	64.04	61.46
	Total %	25.16	36.31	61.46
Moderator of Interestgroup	Frequency	126	131	257
	Group%	49.00	51.00	100.00
	Within group%	92.64	73.59	81.84
	Total %	40.13	41.72	81.84
Moderator of Bulletin Board	Frequency	107	105	212
	Group%	50.50	49.50	100.00
	Within group%	78.67	58.98	67.52
	Total %	34.08	33.44	67.52
	Frequency	136	178	314
	Group%	43.31	56.69	100.00

Most cf the respondents, about sixty-one percent, agreed that the university should allow the university support staff to develop personal Homepages. Moreover, about eighty-two percent of the respondents agreed that the university should allow the university support staffs to be a moderator of the Interestgroup/Newsgroup. In addition, approximately sixty-eight percent of the respondents agreed that the university should allow the university support staff to be a moderator of the Electronic Bulletin Board.

2.1.5.9 Ethics in using the university Internet

Table 4.54 shows data analysis on ethics in using the university Internet.

Table 4.54 Frequency and percentage of respondents' opinions on the ethics of using the university Internet

Criteria		Policymakers	Internet users	Total
Global ethics	Frequency	15	19	34
	Group%	44.12	55.88	100.00
	Within group%	8.72	8.30	8.42
	Total %	3.74	4.74	8.42
University network ethics	Frequency	10	33	43
	Group%	23.26	76.74	100.00
	Within group%	5.81	14.41	10.64
	Total %	2.49	8.23	10.64
Both	Frequency	142	142	310
	Group%	45.81	54.19	100.00
	Within group%	82.56*	73.36*	76.73*
	Total %	35.41	41.90	76.73
No idea	Frequency	5	5	14
	Group%	35.71	64.29	100.00
	Within group%	2.91	3.93	3.47
	Total %	1.25	2.24	3.47
Total	Frequency	172	229	401
	Group%	42.89	57.11	100.00

* mode

Most of the respondents, about seventy-seven percent, agreed that the scope of ethics in using the university network should cover both global ethics and the university network ethics. However, about eleven percent of the respondents preferred to use only the university network ethics, and about eight percent of the respondents preferred only the global network ethics.

2.1.5.10 Network etiquette in using the university Internet

Table 4.55 shows data analysis on network etiquette in using the university Internet.

Table 4.55   Frequency and percentage of respondents' opinions on the etiquette of using the university Internet

Criteria		Policymakers	Internet users	Total
Global etiquette	Frequency	13	20	33
	Group%	39.39	60.61	100.00
	Within	7.43	8.73	8.17
	group%	3.22	4.95	8.17
	Total %			
University network etiquette	Frequency	12	31	43
	Group%	27.91	72.09	100.00
	Within	6.86	13.54	27.91
	group%	3.01	7.67	27.91
	Total %			
Both	Frequency	145	170	315
	Group%	46.03	53.97	100.00
	Within	82.86*	74.24*	77.97*
	group%	36.34	42.08	77.97
	Total %			
No idea	Frequency	5	8	13
	Group%	38.46	61.54	100.00
	Within	2.86	3.49	3.22
	group%	1.25	1.98	3.22
	Total %			
Total	Frequency	175	229	404
	Group%	43.32	56.68	100.00

* mode

Most of the respondents, about seventy-eight percent, agreed that the scope of the etiquette in using the university network should cover both global etiquette and the university network etiquette. However, about twenty-eight percent of the respondents preferred to use only the university network etiquette.

2.1.5.11 Academic freedom in using the university Internet

Table 4.56 to Table 4.60 shows data analysis on academic freedom in using the university Internet.

Table 4.56 Frequency and percentage of respondents' opinions on the adoption of the
principle of the national constitution on academic freedom to be the
university policy on users academic freedom on the Internet

Opinions		Policymakers	Internet users	Total
Agree	Frequency	165	200	365
	Group%	45.21	54.79	100.00
	Within group%	92.18*	89.29*	90.57*
	Total %	40.94	49.63	90.57
Not agree	Frequency	4	4	8
	Group%	50.00	50.00	100.00
	Within group%	2.23	1.79	1.99
	Total %	0.99	0.99	1.99
Not sure	Frequency	9	10	19
	Group%	47.37	52.63	100.00
	Within group%	5.03	4.46	4.71
	Total %	2.23	2.48	4.71
No idea	Frequency	1	10	11
	Group%	9.09	90.91	100.00
	Within group%	0.56	4.46	2.73
	Total %	0.25	2.48	2.73
Total	Frequency	179	224	403
	Group%	44.42	55.58	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.42	55.58	100.00

*mode

Most of the respondents, about ninety-one percent, agreed that the university
should adopt the principle of the national constitution on academic freedom issue to use
as the policy for the university on academic freedom in using the university Internet.
While only one percent of respondents did not agree with this issue.

Table 4.57 Frequency and percentage of respondents' opinions on the censorship of

the university Internet

Opinions		Policymakers	Internet users	Total
Should censor	Frequency	126	169	295
	Group%	42.71	57.29	100.00
	Within group%	70.39*	74.78*	72.84*
	Total %	31.11	41.73	72.84
Should not censor	Frequency	36	34	70
	Group%	51.43	48.57	100.00
	Within group%	20.11	15.04	17.28
	Total %	8.89	8.40	17.28
No idea	Frequency	17	23	40
	Group%	42.50	27.50	100.00
	Within group%	9.50	10.18	9.88
	Total %	4.20	5.68	9.88
Total	Frequency	179	226	405
	Group%	44.20	55.80	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.20	55.80	100.00

* mode

Most of the respondents, about seventy-three percent, replied that the university should censor users' information before the distribution. Some reasons to support their answers were:

a. "We should control the quality of the distributed information."
b. "To protect the distribution of improper material via the university Internet."

However, about seventeen percent of the respondents replied that the university should not censor the users' information or expression.

Table 4.58 Frequency and percentage of respondents' opinions on blocking users access to some websites

Opinions		Policymakers	Internet users	Total
Should block	Frequency	40	51	91
	Group%	43.96	56.04	100.00
	Within group%	21.98	22.57	22.30
	Total %	9.80	12.50	22.30
Should not block	Frequency	130	161	291
	Group%	44.67	55.33	100.00
	Within group%	71.43*	71.24*	71.32*
	Total %	31.86	39.46	71.32
No idea	Frequency	12	14	26
	Group%	46.15	53.85	100.00
	Within group%	6.59	6.19	6.37
	Total %	2.94	3.43	6.37
Total	Frequency	182	226	408
	Group%	44.61	55.39	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.61	55.39	100.00

*mode

Most of the respondents, about seventy-one percent, agreed that the university should block the users access to some websites. However, about twenty-two percent of the respondents rejected this idea.

Table 4.59 Frequency and percentage of the respondents' opinions on types of users

account that should be blocked the access to some websites

User		Policymakers	Internet users	Total
Student	Frequency	79	109	188
	Group%	42.02	57.98	100.00
	Within group%	43.17	48.44	46.08
	Total %	19.36	26.72	46.08
Instructor	Frequency	37	50	87
	Group%	42.53	57.47	100.00
	Within group%	20.21	22.22	21.32
	Total %	9.07	12.25	21.32
University support staff	Frequency	53	53	106
(permanent employed)	Group%	50.00	50.00	100.00
	Within group%	28.96	23.55	25.98
	Total %	12.99	12.99	25.98
University support staff	Frequency	52	86	138
(contractor)	Group%	37.68	62.32	100.00
	Within group%	28.42	38.22	33.82
	Total %	12.75	21.09	33.82
Total	Frequency	183	225	408
	Group%	44.85	55.15	100.00

Considering the types of users account, about forty-six percent of respondents agreed that student user accounts should be the most type of user accounts that should be blocked the access to some websites. In addition, there were approximately twenty-six percent of respondents who agreed that the users account of the university support staff should be blocked the access to some websites as well. Furthermore, there were about twenty-one percent of the respondents who agreed that the instructor user accounts should be blocked the access to some websites.

Table 4.60 Frequency and percentage of respondents' opinions on the university

installation of the program for blocking sites

Opinions		Policymakers	Internet users	Total
Agree	Frequency	158	143	301
	Group%	52.49	47.51	100.00
	Within group%	88.76*	63.56*	74.69*
	Total %	39.21	35.48	74.69
Not agree	Frequency	10	52	62
	Group%	16.13	83.87	100.00
	Within group%	5.62	23.11	15.38
	Total %	2.48	12.90	15.38
Not sure	Frequency	9	24	33
	Group%	27.27	72.73	100.00
	Within group%	5.06	10.67	8.19
	Total %	2.23	5.96	8.19
No idea	Frequency	1	6	7
	Group%	14.29	85.71	100.00
	Within group%	0.56	2.67	1.74
	Total %	0.25	1.49	1.74
Total	Frequency	178	225	403
	Group%	44.17	55.83	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.17	55.83	100.00

*mode

Most of the respondents, about seventy-five percent, agreed with the university installation of a program for blocking sites to access of university Internet users. However, about fifteen percent of the respondents did not agree with the installation of a program for blocking access to sites.

2.1.5.12 Freedom of expression in using the university Internet

Table 4.61 to Table 4.63 shows data analysis on freedom of expression on the university Internet.

Table 4.61 Frequency and percentage of respondents ' opinions on the development of users Personal Homepage

Opinions		Policymakers	Internet users	Total
Should allow to develop	Frequency	81	147	228
	Group%	35.53	64.47	100.00
	Within group%	44.75*	65.04*	56.02*
	Total %	19.90	36.12	56.02
Should not allow to develop	Frequency	69	43	112
	Group%	61.61	38.39	100.00
	Within group%	38.12	19.03	27.52
	Total %	16.95	10.57	27.52
No idea	Frequency	31	36	67
	Group%	46.27	53.73	100.00
	Within group%	17.13	15.93	16.46
	Total %	7.65	8.85	16.46
Total	Frequency	181	226	407
	Group%	44.47	55.53	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.47	55.53	100.00

*mode

More than half of the respondents, about fifty-six percent, replied that the university should allow users to create their personal Homepages. Some reasons to support their answer were:

a. "The students can develop their potential in using the Internet technology through this activity."
b. "To create useful information to the community."
c. "It is academic freedom."
d. "If not allowed, it will limit the boundary of the access to knowledge"
e. "Nothing bad about it."
f. "Should allow to do so, if the university resources are sufficient."

However, about twenty-eight percent of the respondents replied that the university should not allow the users to develop personal Homepages. Some reasons used to support their answer were:

a. "The university resources will not be enough to support this activity."
b. "The organization Homepage should be allowed, not the personal."
c. "Difficult to control and manage."
d. "Reduce university expenses."

Table 4.62   Frequency and percentage of respondents' opinions on the adoption of the principle of the national constitution on freedom of expression to be the university policy on users freedom of expression on the Internet

Opinions		Policymakers	Internet users	Total
Agree	Frequency	163	199	362
	Group%	45.03	54.97	100.00
	Within group%	91.06*	88.84*	89.83*
	Total %	40.45	49.38	89.83
Not agree	Frequency	2	7	9
	Group%	22.22	77.78	100.00
	Within group%	1.12	3.13	2.23
	Total %	0.50	1.74	2.23
Not sure	Frequency	13	9	22
	Group%	59.09	40.91	100.00
	Within group%	7.26	4.02	5.46
	Total %	3.23	2.23	5.46
No idea	Frequency	1	9	10
	Group%	10.00	90.00	100.00
	Within group%	0.56	4.02	2.48
	Total %	0.25	2.23	2.48
Total	Frequency	179	224	403
	Group%	44.42	55.58	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.42	55.58	100.00

* mode

Most of the respondents, about ninety percent, agreed that the university should adopt the principle of the national constitution on the freedom of expression issue to use as the policy of the university on the freedom of users' expression on the university Internet, while only two percent of the respondents did not agree.

Table 4.63 Frequency and percentage of respondents' opinions on the limitation of topics for users expression and discussion on the university Internet.

Opinions		Policymakers	Internet users	Total
Should limited	Frequency	77	93	170
	Group%	45.29	54.71	100.00
	Within group%	42.08*	41.33*	41.67*
	Total %	18.87	22.79	41.67
Should not limited	Frequency	70	92	162
	Group%	43.21	56.79	100.00
	Within group%	38.25	40.89	39.21
	Total %	17.16	22.55	39.21
No idea	Frequency	36	40	76
	Group%	47.37	52.63	100.00
	Within group%	19.67	17.78	18.63
	Total %	8.82	9.80	18.63
Total	Frequency	183	225	408
	Group%	44.85	55.15	100.00
	Within group%	100.00	100.00	100.00
	Total %	47.85	55.15	100.00

*mode

Most of the respondents, about forty-two percent preferred that the university should limit the topics for users expression on the university Internet. Some reasons to support their opinions were:

    a. "To block a distribution of inappropriate information"
    b. "The university can control the use of the Internet."
    c. "To reduce expenses for non-sense activities."

However, about forty percent of respondents replied that the university should not limit the topics for users' expression and discussion on the university Internet. Some reasons to support their opinions were:

    a. "It is against the value of human rights."
    b. "It destroys the belief in academic freedom of the institution."
    c. "We are a democratic country."

2.1.5.13 The use of data and information on the university Internet

Table 4.64 to Table 4.68 show data analysis on the use of data and information on the university Internet.

Table 4.64 Frequency and percentage of respondents' opinions on ownership of users' data stored in the central system memory

Opinions		Policymakers	Internet users	Total
Agree	Frequency	117	150	267
	Group%	43.82	56.18	100.00
	Within group%	65.73*	66.67*	66.25*
	Total %	29.03	37.22	66.25
Not agree	Frequency	35	29	64
	Group%	54.69	45.31	100.00
	Within group%	19.66	12.89	15.88
	Total %	8.68	7.20	15.88
Not sure	Frequency	20	31	51
	Group%	39.22	60.78	100.00
	Within group%	11.24	13.78	12.66
	Total %	4.96	7.69	12.66
No idea	Frequency	6	15	21
	Group%	28.57	71.43	100.00
	Within group%	3.37	6.67	5.21
	Total %	1.49	3.72	5.21
Total	Frequency	178	225	403
	Group%	44.17	55.83	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.17	55.83	100.00

*mode

Most of the respondents, about sixty-six percent, agreed that the data that users stored in the personal account in the central system memory should belong to the users. However, about sixteen percent of the respondents did not agree on this issue, while about thirteen percent of the respondents were not sure about their opinions on this issue.

Table 4.65   Frequency and percentage of respondents' opinions on the issue of the users rights to know the objective of the university in collecting the users personal information

Opinions		Policymakers	Internet users	Total
Agree	Frequency	163	194	357
	Group%	45.66	54.34	100.00
	Within group%	91.66*	86.22*	88.59*
	Total %	40.45	48.14	88.59
Not agree	Frequency	7	13	20
	Group%	35.00	65.00	100.00
	Within group%	3.93	5.78	4.96
	Total %	1.74	3.23	4.93
Not sure	Frequency	6	10	16
	Group%	37.50	62.50	100.00
	Within group%	3.37	4.44	3.97
	Total %	1.49	2.48	3.97
No idea	Frequency	2	8	10
	Group%	20.00	80.00	100.00
	Within group%	1.12	3.56	2.48
	Total %	0.50	1.99	2.48
Total	Frequency	178	225	403
	Group%	44.17	55.83	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.17	55.83	100.00

* mode

Most of respondents, approximately eighty-nine percent, agreed that the users have the rights to know the objective of the university in collecting the users' personal information, while about five percent of the respondents did not agree with this idea. However, about four percent were not sure of their opinions on this issue.

Table 4.66   Frequency and percentage of respondents' opinions on the user' right to
verify their personal information recorded in the university central system

Opinions		Policymakers	Internet users	Total
Agree	Frequency	166	198	364
	Group%	45.60	54.40	100.00
	Within group%	93.26*	88.39*	90.55*
	Total %	41.29	49.25	90.55
Not agree	Frequency	5	11	16
	Group%	31.25	68.75	100.00
	Within group%	2.81	4.91	3.98
	Total %	1.24	2.74	3.98
Not sure	Frequency	4	10	14
	Group%	28.57	71.43	100.00
	Within group%	2.25	4.46	3.48
	Total %	1.00	2.49	3.48
No idea	Frequency	3	5	8
	Group%	37.50	62.50	100.00
	Within group%	1.69	2.23	1.99
	Total %	0.75	1.24	1.99
Total	Frequency	178	224	402
	Group%	44.28	55.72	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.28	55.72	100.00

* mode

Most of the respondents, about ninety-one percent, agreed that the users should have the right to verify their personal information that the university collected and stored in the central system, while only four percent of the respondents did not agree with this issue. However, about four percent of respondents were not sure about their opinions on this issue.

Table 4.67   Frequency and percentage of respondents' opinions on ownership of data
and information that users' develop and store on the university network

Opinions		Policymakers	Internet users	Total
Agree	Frequency	166	196	362
	Group%	45.86	54.14	100.00
	Within group%	93.26*	87.11*	89.83*
	Total %	41.19	48.64	89.83
Not agree	Frequency	4	10	14
	Group%	28.57	71.43	100.00
	Within group%	2.25	4.44	3.47
	Total %	.99	2.48	3.47
Not sure	Frequency	5	14	19
	Group%	26.32	73.68	100.00
	Within group%	2.81	6.22	4.71
	Total %	1.24	3.47	4.71
No idea	Frequency	3	5	8
	Group%	37.50	62.50	100.00
	Within group%	1.69	2.22	1.99
	Total %	.74	1.24	1.99
Total	Frequency	178	225	403
	Group%	44.17	55.83	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.17	55.83	100.00

* mode

Most of the respondents, about ninety percent, agreed that the users have the
ownership of the data and information which the users' developed and stored on the
university network, while only three percent of the respondents did not agree with this
idea. However, about five percent of the respondents were not sure about their opinions
on this matter.

Table 4.68   Frequency and percentage of respondents' opinions on the data and information used on the university network that should follow the law and university rules and policies.

Opinions		Policymakers	Internet users	Total
Agree	Frequency	145	175	320
	Group%	45.31	54.69	100.00
	Within group%	82.86*	78.13*	80.20*
	Total %	36.34	43.86	80.20
Not agree	Frequency	22	36	58
	Group%	37.93	62.07	100.00
	Within group%	12.57	16.07	14.54
	Total %	1.25	9.02	14.54
Not sure	Frequency	5	8	13
	Group%	38.46	61.54	100.00
	Within group%	2.86	3.57	3.26
	Total %	1.25	2.01	3.26
No idea	Frequency	3	5	8
	Group%	37.50	62.50	100.00
	Within group%	1.71	2.23	2.01
	Total %	0.75	1.25	2.01
Total	Frequency	175	224	399
	Group%	43.86	56.14	100.00

* mode

Most of the respondents, about eighty percent, agreed that the data and information used on the university network should follow the law, university rules, university regulations, and university polices. However, about fifteen percent of respondents did not agree with this idea.

2.1.5.14   The charges for the university Internet services

Table 4.69 shows data analysis on service charges for the university Internet services.

Table 4.69 Frequency and percentage of policy respondents' opinions on group of users

which should be charged for the university Internet services

Opinions		Policymakers	Internet users	Total
Students	Frequency	154	96	250
	Group%	61.60	38.40	100.00
	Within group%	82.79	42.67	60.82
	Total %	37.43	23.36	60.82
Instructors	Frequency	36	75	111
	Group%	32.43	62.57	100.00
	Within group%	19.35	33.33	27.01 ·
	Total %	8.76	18.25	27.01
University support	Frequency	23	86	109
staffs	Group%	21.10	78.90	100.00
	Within group%	12.37	38.22	26.52
	Total %	5.60	20.92	26.52
Alumni	Frequency	186	225	411
	Group%	45.26	54.74	100.00
	Within group%	100.00	100.00	100.00
	Total %	45.26	54.74	100.00
Other Individuals and	Frequency	186	225	411
organizations	Group%	45.26	54.74	100.00
	Within group%	100.00	100.00	100.00
	Total %	45.26	54.74	100.00
Total	Frequency	186	225	411
	Group%	45.26	56.14	100.00

All respondents agreed on the proposed alternatives to charge university alumni and other individuals and organizations outside the university for the use of the university Internet services. About sixty percent of the respondents agreed on charging the students for the Internet services. In addition, about twenty-seven percent agreed on charging of instructors and staff for the Internet services.

2.1.6 The opinions on the Internet Use policy

Table 4.70 and Table 4.71 show the data analysis of respondents opinions on the Internet Use policy.

Table 4.70 Frequency and percentage of the respondents who agreed to include the issues in the Internet Use Policy for Thai higher education institutions

Issues		Policymakers	Internet users	Total
The right to use	Frequency	162	198	360
	group%	45.00	55.00	100.00
	Within group%	90.50	88.39	89.33
	Total %	40.20	49.13	89.33
Objective of use	Frequency	160	195	355
	Group%	45.07	54.93	100.00
	Within group%	89.39	87.05	88.09
	Total %	39.70	48.39	88.09
Proper use	Frequency	158	190	348
	Group%	45.40	54.60	100.00
	Within group%	88.27	84.82	86.35
	Total %	39.21	47.15	86.35
Responsibility	Frequency	163	196	359
	Group%	45.40	54.60	100.00
	Within group%	91.06	87.50	89.08
	Total %	40.45	48.63	89.08
Privacy	Frequency	156	185	341
	Group%	45.75	54.25	100.00
	Within group%	87.15	82.59	84.62
	Total %	38.71	45.90	84.62
Security	Frequency	160	192	352
	Group%	45.45	54.55	100.00
	Within group%	89.39	85.71	87.34
	Total %	39.70	47.64	87.34
Equity	Frequency	163	194	357
	Group%	45.66	54.34	100.00
	Within group%	91.06	86.61	88.59
	Total %	40.45	48.13	88.59
Intellectual property	Frequency	158	189	347
	Group%	45.53	54.47	100.00
	Within group%	88.27	84.38	86.10
	Total %	39.21	46.89	86.10
Academic freedom	Frequency	170	201	371
	Group%	45.82	54.18	100.00
	Within group%	94.97	89.73	92.06
	Total %	42.18	49.87	92.06

(continue)

Table 4.70   (Continued) Frequency and percentage of the respondents who agreed to
include these issues in the Internet Use Policy for Thai higher education
institutions

Issues		Policymakers	Internet users	Total
Freedom of expression	Frequency	169	198	367
	Group%	46.05	53.95	100.00
	Within group%	94.41	88.39	91.07
	Total %	41.94	49.13	91.07
Ethics	Frequency	159	185	344
	Group%	46.22	53.78	100.00
	Within group%	88.83	82.59	85.36
	Total %	39.45	45.90	85.36
Etiquette	Frequency	155	182	337
	Group%	45.99	54.10	100.00
	Within group%	86.59	81.25	83.62
	Total %	38.46	45.16	83.62
Data and information	Frequency	158	190	348
	Group%	45.40	54.60	100.00
	Within group%	88.27	84.82	86.35
	Total %	39.21	47.14	86.35
Charges	Frequency	164	193	257
	Group%	45.94	54.06	100.00
	Within group%	91.62	86.16	88.59
	Total %	40.69	47.89	88.59
Total	Frequency	179	224	403
	Group%	44.42	55.58	100.00
	Within group%	100.00	100.00	100.00
	Total %	44.42	55.58	100.00

Approximately, more than eighty-four percent of the respondents agreed to
include these issues in the Internet Use policy for Thai higher education institutions: the
rights to use the university Internet, Objective of the university Internet usage, proper
use of the university Internet, responsibility in using the university Internet, privacy in
using the university Internet, equity in using the university Internet, the use of intellectual
property on the Internet, academic freedom in using the university Internet, freedom of
expression on the university Internet, ethics in using the university Internet, etiquette in
using the university Internet, the use of data and information on the university Internet,
and the charges for university Internet services.

Table 4.71   Frequency and percentage of the respondents who agreed to utilize the policy mechanisms to support each policy issue

Issues		Regulatory and control	Information Related	financial	operation	Policy function
The rights to use	Frequency	358	356	253	262	245
	Total %	88.83	88.34	62.78	65.01	60.79
Objective of use	Frequency	360	362	253	262	354
	Total %	89.33	89.83	62.78	65.01	87.84
Proper use	Frequency	365	370	346	265	250
	Total %	90.57	91.81	61.54	65.76	62.03
Responsibility	Frequency	366	372	245	285	270
	Total %	90.32	92.31	60.79	70.72	67.00
Privacy	Frequency	385	375	253	380	305
	Total %	95.53	93.05	62.78	94.29	75.68
Security	Frequency	363	338	342	358	320
	Total %	90.07	83.87	84.86	88.83	79.40
Equity	Frequency	350	306	253	352	365
	Total %	86.85	75.93	62.78	87.34	90.57
Intellectual property	Frequency	385	375	315	302	398
	Total %	95.53	93.05	78.16	74.94	98.76
Academic freedom	Frequency	360	362	253	262	354
	Total %	89.33	89.83	62.78	65.01	87.84
Freedom of expression	Frequency	370	365	242	255	382
	Total %	91.81	90.57	60.05	63.28	94.79
Ethics	Frequency	360	385	243	355	255
	Total %	89.33	95.53	60.30	88.09	63.28
Etiquette	Frequency	375	378	265	370	272
	Total %	93.05	93.80	65.76	91.81	67.49
Data and information	Frequency	375	370	290	246	385
	Total %	93.05	91.81	71.96	61.04	95.53
Charges	Frequency	370	299	287	365	382
	Total %	91.81	74.19	71.22	90.57	94.79

(N=403)

Approximately, more than seventy-five percent of the respondents agreed that the regulations and control, and the information related measures should be used to support all the proposed policies.   More than seventy-one percent of respondents agreed that the financial measures should be used to support the policy on security, intellectual property, and the use of data and information. In addition, more than seventy percent of respondents agreed that the operation measures should be used to support

on; responsibility use, privacy, security, equity, intellectual property, ethics, and etiquette. Moreover, more than seventy-five percent of the respondents agreed that the policy related measures to support the policies on; objective of use, privacy, security, equity, intellectual property, academic freedom, freedom of expression, and the use of data and information on the university Internet.

ANALYSIS OF DATA IN THE ANALYSIS OF STUDY RECOMMENDATIONS PROCESS

The data used in this process were collected from the questionnaire survey with rectors or presidents of universities/institutions, the chief information officers, and the directors of university computing centers.

Table 4.72 Frequency of key policy decisionmakers' opinions on the key policy issues that should be included in the Internet Use Policy for Higher Education Institutions

Key issues	President		CIO		director		total	
	Agree	Not agree	agree	Not agree	Agree	Not agree	Agree	Not agree
User entitlement	4	-	4	-	1	-	9	-
Objective of use	4	-	4	-	1	-	9	-
Proper use	4	-	4	-	1	-	9	-
Responsibility in use	4	-	4	-	1	-	9	-
Privacy of use	3	1	4	-	-	1	7	2
Security of use	4	-	4	-	1	-	9	-
Equity of use	3	1	4	-	-	1	7	2
Use of Intellectual Property	3	1	4	-	1	-	7	2
Academic freedom	4	-	4	-	-	1	8	1
Freedom of expression	4	-	4	-	-	1	8	1
Network etiquette	4	-	4	-	1	-	9	-
Ethics	4	-	4	-	1	-	9	-
Data and information	4	-	4	-	1	-	9	-
Service charges	4	-	4	-	1	-	9	-
Total respondents	4	-	4	-	1	-	-	-

There were five issues that some respondents did not consider to include in the Internet Use policy, these issues were privacy, equity, intellectual property, academic freedom and freedom of expression. Two respondents represented about twenty-two percent of the total respondents, disagreed on the issues of privacy, equity, and intellectual property, and one respondent disagreed on the academic freedom and freedom of expression issue. However, all respondents agreed to include these issues in the Internet use policy: user entitlement, objective of the use, proper use, responsibility, security, network etiquette, ethics, data and information, and charge.

Table 4.73 Frequency of key policy decisionmakers' opinions on the proposed
alternatives of addressing policy on user entitlement

Policies	rector		CIO		director		Total	
	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. The use of the university Internet is a privilege.	4	-	4	-	1	-	9	-
2. All university members are entitled to request for the Internet user account from the university.	4	-	4	-	1	-	9	-
3. The university reserves the right to issue or to terminate the Internet user account to individuals or organizations.	4	-	4	-	1	-	9	-
4. The right to use the university Internet for each specific individuals could not be transferred to other individuals.	4	-	4	-	1	-	9	-

All respondents agreed with all four proposed alternatives to address policies
regarding the user entitlement, these alternatives are shown in Table 4.73.

Table 4.74 Frequency of key policy decisionmakers' opinions on the alternative mechanisms to support the policies on user entitlement

Policies	rector		CIO		director		Total	
	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. Study the objective of the use of the university Internet and specify entitled users according to the university objective.	4	-	4	-	1	-	9	-
2. Set up and enforce the regulations on the user entitlement.	4	-	4	-	1	-	9	-
3. Set up and enforce the penalty of users who violate the regulations on the entitled users.	4	-	4	-	1	-	9	-
4. Circulate the regulations on the entitled users to university members, and ensure that all members receive the information regarding this issue.	4	-	4	-	1	-	9	-

All respondents agreed with all purposed alternatives of mechanisms to support the polices on user entitlement. The details of these mechanisms are shown in Table 4.74.

Table 4.75 Frequency of key policy decisionmakers' opinions on the proposed alternatives to address the policy on objective of the use of the university Internet

		rector		CIO		director		Total	
	Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1.	To utilize the potential of technology to support and enhance the major tasks of the university, these task are instructional, research and development, public service, and conserving and promoting national culture.	4	-	4	-	1	-	9	-
2.	The university supports and encourages the university member to use the Internet in activities that fulfill the university goals and mission.	4	-	4	-	1	-	9	-
3.	The university supports and encourages the university members to use the Internet to develop their knowledge and potential, and to improve the operation and services of the organization.	4	-	4	-	1	-	9	-
4.	The use of the university Internet for monetary profit is prohibited.	4	-	4	-	1	-	9	-

All respondents agreed with all four proposed alternatives to address the policy on user entitlement. The details of these addressings are shown in Table 4.75.

Table 4.76 Frequency of key policy decisionmakers' opinions on the proposed
mechanisms to support the policy on objective of the use of the university
Internet

Policies	rector		CIO		director		Total	
	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. Research and develop the university objective on the use of the Internet which responds adequately to the need of the university and the university members	4	-	4	-	1	-	9	-
2. Set up and enforce the regulations on objectives of the activities which are allowed to be conducted on the university Internet	4	-	4	-	1	-	9	-
3. Set up and enforce regulations on the objectives of the activities which are allowed to be conducted on the university Internet	4	-	4	-	1	-	9	-
4. The penalty for users who violate the policy on the objective of the use of the university Internet	4	-	4	-	1	-	9	-
5. Circulate the university objective of the use of the Internet to all university members.	4	-	4	-	1	-	9	-

All respondents agreed with all five proposed alternatives for mechanisms to
support the policy on objective of the use of the Internet. The details of these
mechanisms are shown in Table 4.76.

Table 4.77 Frequency of key policy decisionmakers' opinions on the alternatives to
address the issue on proper use

Policies	rector		CIO		director		Total	
	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. Use Internet with responsibility	4	-	4	-	1	-	9	-
2. Follow the ethical use of the Internet	4	-	4	-	1	-	9	-
3. Follow the network etiquette	4	-	4	-	1	-	9	-
4. The use that doesnot contradict national culture and norms	4	-	4	-	1	-	9	-
5. The use that is not against the law	4	-	4	-	1	-	9	-
6. The use which does not waste resources	4	-	4	-	1	-	9	-

All respondents agreed with all six proposed alternatives to address policy on
proper use of the university Internet. The details are shown in Table 4.77.

Table 4.78 Frequency of key policy decisionmakers' opinions on the mechanism to support the policy on proper use of the university Internet

Policies	rector		CIO		director		Total	
	Agree	not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. Set up and enforce the regulations on: the proper use of the university Internet	4	-	4	-	1	-	9	-
2. Set up the penalty for users who violate the regulations on the proper use of the university Internet	4	-	4	-	1	-	9	-
3. Circulate regulations on the proper use of the university Internet	4	-	4	-	1	-	9	-

All respondents agreed with all five proposed alternatives for mechanisms to support the policy on proper use of the university Internet. The details of these mechanisms are shown in Table 4.78.

Table 4.79 Frequency of key policy decisionmakers' opinions on the alternatives to
address the issue on responsibility of using the university' Internet policy

Policies	rector		CIO		director		Total	
	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. All users have to use the university Internet with responsibility by strictly following the recommendations, guidelines, rules, regulations, and policy of the university	4	-	4	-	1	-	9	-
2. The user has to be responsible for the activities conducted under the users account.	4	-	4	-	1	-	9 ·	-

All respondents agreed with the two proposed alternatives to address the policy
on responsibility in using the university Internet. The details are shown in Table 4.79.

Table 4.80 Frequency of key policy decisionmakers' opinions on the mechanism to support the policy on responsibility for using the university Internet mechanism

		rector		CIO		director		Total	
	Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1.	Set up and enforce the regulations on the responsibility of users in using the university Internet	4	-	4	-	1	-	9	-
2.	The penalty for users who violate the regulations of the user's responsibility in using the university Internet	4	-	4	-	1	-	9	-
3.	Circulate the regulations on the users responsibility in using the university' Internet	4	-	4	-	1	-	9	-
4.	Develop a positive attitude on the responsible use of the Internet by the users	4	-	4	-	1	-	9	-

All respondents agreed with all four proposed alternatives for mechanisms to support the policy on responsibility in using the university Internet. The details of these mechanisms are shown in Table 4.80.

Table 4.81 Frequency of key policy decisionmakers' opinions on the alternatives to
address the issue on user privacy in using the university Internet policy

	Policies	rector		CIO		director		Total	
		Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1.	Users have the right to use the university Internet in privacy	3	1	4	-	-	1	7	2
2.	The university will not violate the user privacy in using the Internet	4	-	4	-	-	1	8	1
3.	The personal data and information that users use and are recorded in the central system are treated as confidential and private.	4	-	4	-	-	1	8	1
4.	The university will not install a program to monitor or record the activities that users conducted on the Internet, except the activities that need to be used for providing services to users.	3	1	2	2	-	1	5	4

Four respondents disagreed on the proposed policy on "not to install the
program to monitor and record the activities that users conducted on the university
Internet", and two respondents disagreed with the proposed policy on "user has the
right to use the university Internet privately". In addition, one respondent disagreed on
the proposed policy on "the university will not violate user privacy" and "user's data and
information recorded in the central system are treated as confidential and private".

Table 4.82 Frequency of key policy decisionmakers' opinions on the mechanism to support the policy on user privacy in using the university' Internet policy

Policies	rector		CIO		director		Total	
	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. Set up and enforce the regulations on the user privacy in using the university Internet	4	-	4	-	-	-	8	-
2. The penalty for users who violate the regulations of the user's responsibility in using the university Internet	4	-	4	-	-	-	8	-
3. Research and develop the definition and scope of user privacy	4	-	4	-	-	-	8	-
4. Circulate the regulations on the users privacy in using the university Internet	4	-	4	-	-	-	8	-

All eight respondents agreed with all four proposed alternatives of mechanisms to support the policy on user privacy in using the university Internet. The details of these mechanisms are shown in Table 4.82.

Table 4.83 Frequency of key policy decisionmakers' opinions on the alternatives to
address the issue on security in using the university' Internet

	Policies	rector Agree	rector Not agree	CIO Agree	CIO Not agree	director Agree	director Not agree	Total Agree	Total Not agree
1.	The university considers that the security of the network is the most important issue in providing Internet services.	4	-	4	-	1	-	9	-
2.	The university will be responsible for the network system security, while the users will be responsible for their own data and files.	4	-	4	-	1	-	9	-
3.	All users have the responsibility to protect the network from unauthorized users, and have to report issues related to the security of the network to network administrators as soon as possible if found.	4	-	4	-	1	-	9	-
4.	When confronted with the problem of privacy of using the university Internet and the security of the network, the university will perform activities for protecting the network before protecting user privacy.	4	-	4	-	1	-	9	-

All respondents agreed with all four proposed alternatives to address the policy
on security in using the university Internet. The details are shown in Table 4.83.

Table 4.84 Frequency of key policy decisionmakers' opinions on the mechanism to
support the policy on security in using the university Internet policy

	Rector		CIO		Director		Total	
Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. Set up and enforce the regulations on the security procedure for users in using the university Internet	4	-	4	-	1	-	9	-
2. The penalty for users who violate the regulations of the security in using the university Internet	4	-	4	-	1	-	9	-
3. Circulate the procedure for securing the university network	4	-	4	-	1	-	9	-
4. The university allocates sufficient funds for the network security	4	-	4	-	1	-	9	-
5. Develop a plan which ensures that the network administrators have the knowledge and skills to secure the network.	4	-	4	-	1	-	9	-

All respondents agreed with all five proposed alternatives for mechanisms to support the policy on security in using the university Internet. The details of these mechanisms are shown in Table 4.84.

Table 4.85 Frequency of key policy decisionmakers' opinions on the alternatives to address the issue on equity in using the university Internet

		Rector		CIO		director		Total	
	Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1.	All university members are equal in acquiring the Internet user account. The university members include instructors, staffs, and students.	3	1	1	3	-	1	4	5
2.	All users are equal in utilizing the university resources.	3	1	1	3	-	1	4	5
3.	All users are equal in utilizing the global resources available on the Internet.	3	1	1	3	-	1	4	5
4.	In case that the university has limited resources, the university will set priorities for users to utilize the resources	4	-	4	-	1	-	9	-

All respondents agreed with all four proposed alternatives to address the policy on equity in using the university Internet. The details are shown in Table 4.85.

Table 4.86   Frequency of key policy decisionmakers' opinions on the mechanism to support the policy on equity in using the university Internet policy

		rector		CIO		Director		Total	
	Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1.	Develop the policy on the equity in using the university Internet.	4	-	4	-	1	-	9	-
2.	Set up and enforce regulations on equity in using the university Internet and resources	4	-	4	-	1	-	9	-
3.	Set up the penalty for users who violate the regulations of the entitled user and priority in using the university Internet	4	-	4	-	1	-	9	-
4.	Circulate the university equity policies and related regulations, and ensure that all users receive the information regarding this issue.	4	-	4	-	1	-	9	-
5.	The university allocates the budget or raise funds that are sufficient for supporting and providing the Internet services to all university members who need to utilize the Internet.	4	-	4	-	1	-	9	-

All respondents agreed with all five proposed alternatives for mechanisms to support the policy on equity in using the university Internet. The details of these mechanisms are shown in Table 4.86.

Table 4.87 Frequency of key policy decisionmakers' opinions on the alternatives to
address the issue on the use of intellectual property

Policies	rector		CIO		director		Total	
	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. The university respects the intellectual property law, and encourages the users to use intellectual property on the Internet by following the law.	4	-	4	-	1	-	9	-
2. The user who develops data, information, and files developed by the users will be respect	4	-	4	-	1	-	9	-
3. The users have to be responsible for their own usage of intellectual property.	4	-	4	-	1	-	9	-
4. The university will develop measures to ensure that users understand the concept and laws related to intellectual property	4	-	3	1	1	-	8	1
5. The university is responsible for intellectual property which the university installs in the central system for service to the users.	4	-	4	-	1	-	9	-

Only one proposed alternative which one respondent disagreed to include in the
Internet use policy, which was "The university will develop measures to ensure that
users understood the concept and laws related to the intellectual property." All
respondents agreed with the rest of the four of five proposed alternatives as shown in
Table 4.87.

Table 4.88 Frequency of key policy decisionmakers' opinions on the mechanism to support the policy on the use of intellectual property

	Policies	rector		CIO		Director		Total	
		Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1.	Set up and enforce regulations on the use of intellectual property.	4	-	4	-	1	-	9	-
2.	Set up and enforce regulations on the penalty for users who violate the regulations on the use of intellectual property.	4	-	4	-	1	-	9	-
3.	Circulate the concept, regulations, policies, and laws regarding the use of intellectual property on the Internet, and ensure that all users receive the information regarding this issue.	4	-	4	-	1	-	9	-
4.	Circulate studied and research on the cost of intellectual property that the university need to spend for providing the services, and ensure that the budget or funds are sufficiently allocated for the cost of intellectual property.	4	-	4	-	1	-	9	-

All respondents agreed with all four proposed alternatives for mechanisms to support the policy on the use of intellectual property on the university Internet. The details of these mechanisms are shown in Table 4.88.

Table 4.89 Frequency of key policy decisionmakers' opinions on the alternatives to
address the issue on academic freedom in using the university Internet

	rector		CIO		director		Total	
Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. The university supports and encourages the users to use the Internet for academic related activities.	4	-	4	-	1	-	9	-
2. The users have the freedom in using the university Internet within the scope of the national constitution regarding academic freedom of the citizens.	4	-	4	-	-	1	8	1
3. The university will not limit the topics of academic related activities conducted on the university Internet.	4	-	3	1	-	1	7	2
4. The university will not block the access to sites on the Internet which provide the information and knowledge related to the academic.	4	-	3	1	-	1	7	2
5. The university will not screen or censor the contents of academic material publicized on the university Internet.	4	-	2	2	-	1	6	3
6. The users have to be responsible for the activities that they conduct.	4	-	4	-	1	-	8	1

Three respondents did not consider the proposed policy on "The university will
not screen or censor the contents of academic material publicized on the university
Internet, and two respondents disagreed on the proposed policy on "The university will
not limit the topics of the academic related activities conducted on the university
Internet, and "The university will not block the access to sites on the Internet which

provide information and knowledge related to the academic.". In addition, one respondent disagreed on the proposed policy on "The users have the freedom in using the university Internet within the scope of the national constitution regarding academic freedom of the citizens." and "The users have to be responsible for the activities that they conduct.". However, only one proposed policy on academic freedom was considered by all the respondents to be included in the Internet use policy, that proposal was "The university supports and encourages the users to use the Internet for the academic related activities.".

Table 4.90 Frequency of key policy decisionmakers' opinions on the mechanism to support the policy on academic freedom

		rector		CIO		director		Total	
	Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1.	Set up and enforce the regulations on the academic freedom in using the university Internet.	4	-	4	-	-	-	-	-
2.	The penalty of users who violate the regulations on the academic freedom in using the university Internet.	4	-	4	-	-	-	-	-
3.	Circulate the concept and scope of academic freedom in using the university Internet, and ensure that all the users receive the information regarding this issue.	4	-	4	-	-	-	-	-
4.	Develop a demonstration project for the academic related activities.	4	-	4	-	1	-	9	-
5.	Allocate budget or funds to support academic related activities of users.	4	-	4	-	1	-	9	-

All respondents agreed with all five proposed alternatives for mechanisms to support the policy on academic freedom in using the university Internet. The details of these mechanisms are shown in Table 4.90.

Table 4.91 Frequency of key policy decisionmakers' opinions on the alternatives to address the issue on freedom of expression on the Internet

	rector		CIO		director		Total	
Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. The university supports and encourages the users to express their opinions and ideas in order to share knowledge among the users via the university Internet.	4	-	4	-	-	-	-	-
2. The users have freedom in expression on the university Internet within the scope of the national constitutions regarding freedom of expression of the citizens.	4	-	4	-	-	-	-	-
3. The university will not limit the topics of the user's expression on the university Internet.	4	-	4	-	-	-	-	-
4. The university will not screen or censor the contents of the users expression on the university Internet.	4	-	3	1	-	-	-	-
5. The users have to be responsible for their expression.	4	-	4	-	-	-	-	-

One respondent disagreed on the proposed policy on "The university will not screen or censor the contents of the users expression on the university' Internet." The rest four of five proposed policies as shown in Table 4.91 were considered to be included in the Internet use policy by all respondents.

Table 4.92 Frequency of key policy decisionmakers' opinions on the mechanism to support the policy on freedom of expression

Policies	rector		CIO		director		Total	
	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. Set up and enforce regulations on: freedom of expression on the university Internet.	4	-	4	-	1	-	9	-
2. Set up and enforce regulations on the penalty of users who violate the regulations on the freedom of expression on the university Internet.	4	-	4	-	1	-	9	-
3. Circulate the concept and scope of freedom of expression on the university Internet, and ensure that all the users receive the information regarding this issue.	4	-	4	-	1	-	9	-
4. Develop a demonstration project for the users' expression on the university Internet, in order to stimulate the sharing of ideas and knowledge among users.	4	-	4	-	1	-	9	-
5. Allocate budget or funds to support the users activities of expression on the university Internet.	3	1	4	-	1	-	8	1

All respondents agreed with the first four proposed alternatives for mechanisms to support the policy on objective of the use Internet as shown in Table 4.92. However, one respondent disagreed with the alternative to allocate budget and funds to support user activities for the expression on the university Internet.

Table 4.93 Frequency of key policy decisionmakers' opinions on the alternatives to address the issue on network etiquette

	rector		CIO		director		Total	
Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. Users have to use the university Internet by following the network etiquette in using the Internet.	4	-	4	-	1	-	9	-
2. The university adopts the global network etiquette to be the network etiquette on the use of university' Internet.	4	-	4	-	1	-	9	-
3. Besides the global etiquette, the university also develops the etiquette of the Thai context to the scope of the network etiquette of the university Internet.	4	-	4	-	1	-	9	-

All respondents agreed with the three proposed alternatives to address policy on network etiquette in using the university Internet. The details are shown in Table 4.93.

Table 4.94 Frequency of key policy decisionmakers' opinions on the mechanism to support the policy on network etiquette

Policies	rector		CIO		director		Total	
	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. Set up and enforce the regulations on the network etiquette of the university Internet.	4	–	4	–	1	–	9	–
2. Set up and enforce the penalty for the users who violate the university regulations and policies on the network etiquette of the university Internet.	4	–	4	–	1	–	9	–
3. Circulate the information about the network etiquette of the university Internet, and ensure that all users receive the information regarding this issue	4	–	4	–	1	–	9	–

All respondents agreed with all three proposed alternatives for mechanisms to support the policy on network etiquette in using the university Internet. The details of these mechanisms are shown in Table 4.94.

Table 4.95 Frequency of key policy decisionmakers' opinions on the alternatives to address the issue on ethics in using the university Internet

		rector		CIO		director		Total	
	Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1.	The users have to use the university' Internet by following the ethics of using the Internet.	4	-	4	-	1	-	9	-
2.	The university adopts the global ethical use of the Internet.	4	-	4	-	1	-	9	-
3.	Besides the global ethics, the university also develops the ethics in the Thai context to be the scope of the ethical use of the university Internet.	4	-	4	-	1	-	9	-

All respondents agreed with all three proposed alternatives to address the policy on ethics in using the university Internet. The details are shown in Table 4.95.

Table 4.96 Frequency of key policy decisionmakers' opinions on the mechanism to
support the policy on ethics in using the university Internet

		rector		CIO		director		Total	
	Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1.	Set up and enforce regulations on: ethical use of the university Internet.	4	-	4	-	1	-	9	-
2.	Set up and enforce regulations on penalty for the users who violate the university regulations and policies on the ethical use of the university Internet.	4	-	4	-	1	-	9	-
3.	Circulate the information about the ethical use of the university nternet, and ensure that all users receive the information regarding this issue.	4	-	4	-	1	-	9	-

All respondents agreed with all three proposed alternatives for mechanisms to support the policy on ethics of using the university Internet. The details of these mechanisms are shown in Table 4.96.

Table 4.97 Frequency of key policy decisionmakers' opinions on the alternatives to
address the issue on data and information used on the university network

Policies	rector		CIO		director		Total	
	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. The contents of data and information used by users on the university Internet must not be against the law, and university regulations and policies.	4	-	4	-	1	-	9	-
2. The university supports and encourages the users and the organizations of the university to search and access data and information on the Internet, and use the data and information with prudence and discretion.	4	-	4	-	1	-	9	-
3. The university supports and encourages users to share data and information to other users and the public, in order to develop knowledge and potential among users, and the public.	4	-	4	-	1	-	9	-
4. The university supports and encourages the organizations of the university to develop the university data and information into an electronic form and distribute to the public via the Internet.	4	-	4	-	1	-	9	-

All respondents agreed with all four proposed alternatives to address policy on
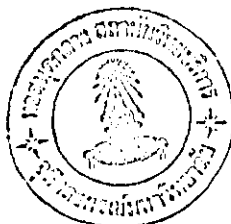data and information utilized on the university Internet. The details are shown in Table
4.97.

Table 4.98 Frequency of key policy decisionmakers' opinions on the mechanism to

support the policy on data and information used on the university Internet

	rector		CIO		director		Total	
Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. Set up and enforce regulations on the use of data and information on the university Internet.	4	-	4	-	1	-	9	-
2. Set up and enforce regulations on penalty for users who violate the university regulations and policies on the use of data and information.	4	-	4	-	1	-	9	-
3. Circulate the information about the regulations and policies of the university regarding the use of data and information on the university Internet.	4	-	4	-	1	-	9	-
4. Allocate budget or funds to support the development of university data and information into an electronic form.	4	-	4	-	1	-	9	-

All respondents agreed with all four proposed alternatives for mechanisms to support the policy on data and information utilized on the university Internet. The details of these mechanisms are shown in Table 4.98.

Table 4.99 Frequency of key policy decisionmakers' opinions on the alternatives to address the issue on charge for the university Internet services

		rector		CIO		director		Total	
	Policies	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1.	The university will not charge the users for making profit	4	-	4	-	1	-	9	-
2.	The university will not charge the university members for using the Internet if the university can allocate budget and funds which are sufficient to support the services.	4	-	4	-	1	-	9	-
3.	In case that the university issues the Internet user account to individuals or organizations outside the university, the university will charge the individuals or organizations for the Internet services.	4	-	4	-	1	-	9	-
4.	In the case that university charges the university members for the use of Internet, the charge will cover only the direct cost.	2	2	2	2	1	-	5	4
5.	In the case that the university charges the university members for the use of Internet, the rate of charges will not cause the unequity to university members in using the Internet.	3	1	2	2	1	-	6	3

All respondents agreed on the first three proposed mechanisms to support the policy on service charges for the Internet services as shown in Table 4.99. However, four respondents disagreed with the charges that cover only direct cost, some of them preferred to include the maintenance expenses to costs to charge the user as well. In

addition, three respondents disagreed to include the proposed alternative of "in the case that the university charges the university members for the use of Internet, the rate of charges will not cause the inequity among university members in using the Internet."

Table 4.100 Frequency of key policy decisionmakers' opinions on the mechanism to support the policy on the university Internet service charge

Policies	rector		CIO		director		Total	
	Agree	Not agree	Agree	Not agree	Agree	Not agree	Agree	Not agree
1. Study and research in order to get adequate costs and expenses of the university in providing the Internet services to users.	4	-	4	-	1	-	9	-
2. Set up and enforce regulations on charges of the university Internet services.	4	-	4	-	1	-	9	-
3. Set up and enforce regulations on penalty of the users who violate the regulations on the charges.	4	-	4	-	1	-	9	-
4. Raising funds from other sources besides the budget from the government, to support the costs and expenses in providing the Internet services.	4	-	4	-	1	-	9	-

All respondents agreed with all four proposed alternatives for mechanisms to support the policy on service charges for the university Internet services. The details of these mechanisms are shown in Table 4.100.