

MINISTRY OF CULTURE, SPORTS AND TOURISM

MINISTRY OF EDUCATION AND TRAINING

HANOI UNIVERSITY OF CULTURE

PHAM TIEN TOAN

**RESEARCH ON THE APPLICATION
OF SOCIAL SOFTWARES TO ORGANIZATION
OF LIBRARY INFORMATION SERVICES
AT UNIVERSITIES IN VIETNAM**

**Major: Library - Information Science
Code: 62320203**

**SUMMARY
OF PhD THESIS ON LIBRARY – INFORMATION SCIENCE**

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INTRODUCTION

1. Reasons for selecting the topic

The emergence and development of social software is not only a momentum, but also providing the true value and long-term potential in deploying and organizing online information services of many sectors / fields on the Internet. Recognizing this trend, many university library services have implemented and deployed social softwares to improve service quality, diversify product types and make use of contribution from social community (Boulos & Wheeler 2007, p. 9).

However, in Vietnam, the recognition of the roles and significances in application of social software in organizing library and information services in universities has not been recognized and evaluated appropriately. In other words, for many different reasons, university libraries have not yet grasped the trend of social software applications and utilized the strengths of those to improve and enhance library information services.

As a result of this situation, It is evident that there is a series of emerging issues that Vietnam academic library services are facing such as lagging behind in the quality; does not catch up with tastes and needs of users.

With the basics mentioned above, together with the purpose of helping the university libraries well fulfill the task of supporting education, training and research; catch up with the changing trend of the times in the information society; have scientific arguments; be well perceive and know how to refer to the basic solutions in the application of social software to organize library information services effectively. That is the reason why I chose the topic "Research Applying social software to organize library information services at universities in Vietnam" as the title of the dissertation, under the area of science of library and information.

2. Overview of research

Many works have showed changes in university library information services when they are implimented social softwares: When library software was announced and applied to organization of library information services, they have gradually changed: Previously, there is a view that the service associated with library staff, however, once applied social softwares, university library services does not necessarily depend on library staff and specific products. Because those services automatically serve the users.

Many studies have been researched on applying social software in organizing library services and all of those confirmed this phenomenon is a natural trend in the world.

In the world as well as in Vietnam, there has not any work about the theories and practice of social software application in organizing information and library services at university libraries in Vietnam. The works have focused on specific aspects of applying social software in the library information service in general. Among those, a significant number of studies looks into the application of social software in library services, however they does not mention to the organization of university library services. Further more, the theoretical and practical issues mentioned in the works do not fully reflect the factors and aspects in the context of social software application in university libraries in Vietnam. At the same time, there are no work about models and solutions as well as the necessary and sufficient conditions in terms of both theory and practice. This work will focus on research gaps, focusing on the following topics:

- Research and develop the theory of social software and social software applications in library - information service organizations at universities.
- Figure out the reality of social software applications in organizing library information services at universities in the context of specific conditions in Vietnam
- Identify the reality of factors affecting the application of social software to the organization of library information service at universities in Vietnam.
- Introduce specific solutions, general application model of application of social software in the organization of library and information services to improve efficiency in meeting information needs.

3. Purposes and tasks of the research

3.1. Purposes of the research

Find out the scientific fundamentals to propose effective solutions of application of social software to organization of library information services to enhance the quality of library and information services.

3.2. Tasks of the research

- Study theoretical and practical bases of social software application in organization of library information services for universities in Vietnam.
- Research on the application of social software to the organization of library information services and related factors at universities in Vietnam.

- Studying and proposing solutions of applying social software to organize library information services with high efficiency.

4. Object and Scope of the research

4.1. Object of the research

Apply social software to the organization of library information services in universities in Vietnam.

4.2. Scope of the research

- Physical scope of research: study the application of social software in the organization of library information services for universities in Vietnam.

- Time scope of research: From 2013 to 2017 – this is the period, libraries in Vietnam started to pay attention to the application of social software to organization of library and information services.

5. The scientific hypothesis of the topic

The initial research shows that there is not full perception of the role of social software in university library services; there is no policy and technique of application of social software in organizing library services; there is no adequate preparation of the necessary conditions for successful application ... So if all of these issues as well as the original judgment on the research causes are dealt with on a scientific basis, it is possible that the application of social software to organizing library and information services at universities in Vietnam will be implemented widely and effectively.

6. Methodology and Methods of research

6.1. Methodology

The methodology used to develop the dissertation is dialectical materialism and historical materialism under the view of the Party and the State of Vietnam on information and communication technology, and the organization of library and information services at universities in Vietnam. Approaches are as following:

- Structured Systems Analysis Approach
- Qualitative & Quantitative approach
- Practical approach

6.2. Methods of research

- Methods of researching information / materials
- Testimonial solution (experts, scientists, lecturers, ...)
- Questionnaire survey method

7. Theoretical and practical significance of the dissertation

- The results of the dissertation help stakeholders such as state agencies, leaders of university and library – information institutions plan and issue policies in applying information technology and library information activities

and social software application in organization of library information service for universities particularly.

- The results of the dissertation provide university libraries in Vietnam with solutions to develop and improve the quality of library and information services. Along with this, the dissertation prepares necessary conditions for the successful application of social software in organizing library information services.

- The results of the dissertation are useful references for managers at all levels at higher education institutions and especially at university libraries. On the other hand, this is also a good reference for scientists, professionals, lecturers, students who are interested in the area of library information.

8. Structure of the dissertation

The dissertation includes three chapters:

Chapter 1. Theoretical and practical basis for application of social softwares in organizing library – information services at university library

Chương 2. The reality of application of social software in organizing library – information services at universities in Vietnam

Chương 3. Solutions of enhancing efficiency of application of social software in organizing library – information services at universities in Vietnam

Chapter 1

THEORETICAL AND PRACTICAL BASIS FOR APPLICATION OF SOCIAL SOFTWARES IN ORGANIZING LIBRARY – INFORMATION SERVICES AT UNIVERSITY LIBRARY

1.1. Social Softwares

1.1.1. Conception of social software

Social software is a technology-based online application that allows users to actively interact with information and with other users in the community. In particular, they can create, manage, and exploit information resources, and they can share information, communicate, connect, and collaborate in that environment.

1.1.2. History of social software

Until the early 2000's, social software applications really show their values and important roles. Social software has had a long history of development (since 1945). Looking back on the evolution of social software through its prominent events, we can see that basic social software ideas have been around for decades.

1.1.3. Basic features of social software

Advantages of social software: Easily create and share content; Real-time online interaction, and online collaboration; Community development;

Collect and utilize social intelligence; Information transparency; Low cost.
We can see this through the model below:



Hình 1: Model of community of social software users

Disadvantages of social software; Information interference; Difficult to control information quality; Waste of time user; Risks in the safety and confidentiality of information; Easy information piracy.

1.1.4. Some of popular social softwares

Instant messages; collaboration software; Blogs; RSS; Wikis; Social Software; Social Bookmarks; Services of sharing information resources

1.2. Organization of library and information services at library

1.2.1. Conception of library and information services

Library information service at universities is a set of activities and processes carried out by library staff. These activities/processes target information students' needs for information in research, teaching, learning and recreation.

Thus, the content of the concept of "university library information service" reflects three main areas:

- A set of activities or processes.
- Be carried out by library information experts.
- Meet the demand for information in the university environment.

1.2.2. Concept of organization of library and information services

Organization of library and information services is a set of activities including arranging, establishing the mechanism for operating work systematically within each service and between services. This mechanism ensure that the entire service system operates in an united, stable and interconnected manner on the basis of human resources, material resources, financial resources and trust. All of these activities aim to satisfy the needs and habits of using information of users in research, teaching and learning activities.

1.2.3. Types of library information services: Borrowing and renewal services; Service of searching and exploiting information; Providing information on request; Academic and research support services; Training services.

1.3. Social software application in the library information service organization at university library

1.3.1. The Role of Social Software Applications: Satisfying information needs for users of university libraries; Meet the user's search habits and exploit information; The effectiveness of library information services is a criterion for assessing the quality of universities; Rapidly approaching the trend of modernizing the library service organization in the world

1.3.2. Factors affecting the application of social software: Awareness of stakeholders; Human Resources; Team of consultants; Financial investment; Digital Resource; Facilities and equipment; Modern library information services; Service operation mechanism; User.

1.3.3. Basic requirements for the application of social software: general objectives and specific objectives for the application must be consistent; Ensure connectivity between high library information services; Procedures for using simple and friendly library information services; Unlimited time to serve library information services; The cost of organizing library information services is low; User satisfaction

1.3.4. Social software application process for organizing library information service

The mechanism and operation process of the library service system according to the following diagram: Identification of specific services; Deploy telecommunication services; Performance evaluation; Adjust after evaluation.

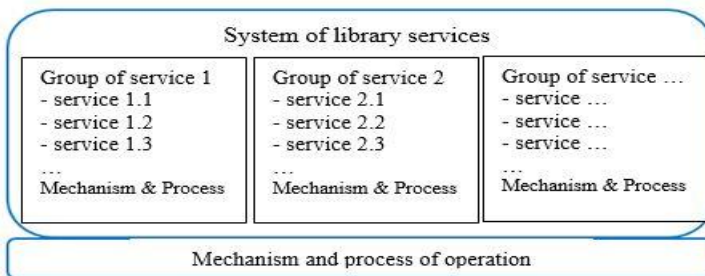


Figure 2: Library service mechanism and procedures

1.4. Application of social software in the organization of library information service at universities in the world

1.4.1. Blog application at Ohio University, USA

This blog is hosted by Chad Boeninger, an economics and business expert at the University of Ohio Library. Blogs are used to guide business researchers to the best databases, websites, books and reference tools to help them research. Although the primary audience of this blog is student and faculty members of the University of Ohio, however, others who are not affiliated with the university may find some useful content.

1.4.2. RSS application at the Library of Northeastern University, Boston, USA

The Northeastern University Library supports the training and research activities by strengthening and enhancing inter-departmental and external relations through the services of informational resources in various ways.

The library offers a wide range of information products and services to fulfill its mission. Among those, there is a services providing information as requested, which is RSS Feeds at <http://library.northeastern.edu/news-events/rss-feeds>.

1.4.3. Social networking application at library of Queensland University of Technology, Australia

QUT Wiki is a space for the QUT university user community as well as QUT library users to work collaboratively and share information. This includes creating, sharing, discussing ideas, projects, work, study, research in an online, free and open environment.

1.4.4. Library Success page

Library Success is one of the best examples of wiki applications in sharing information and ideas for a community of users interested in the field of library. The wiki allows users from all over the world, especially those working in the library, to share experiences, ideas, skills, and knowledge in the library.

1.4.5. Facebook page of the university library of technology Queensland

In addition to providing quick, timely and complete information about the library's activities, events, programs, the site also offers advisory services for students and lecturers. This service is available all days of the week, however, the weekend service is only available during office hours (no evening service).

1.4.6. Social bookmarking with citeulike service

Citeulike is a social bookmarking service that allows users to save and share citations of academic articles. The service works on the basis of promoting the sharing of scientific references by researchers. Citeulike offers users the ability to organize cited information by category for more systematic and united sharing.

1.4.7. Social bookmarking with Delicious Service

Delicious uses a hierarchical classification system that allows users to bookmark their favorite online resources by storing links to those resources. These links are simply described by storing addresses, declaring headers, describing them with keyword tags, and commenting. Thus, users can store their own resources online.

1.4.8. Podcasting Service of the library at Arizona University, USA

The Arizona State University Library's Podcast service is called "library channels." The service provides multimedia information for the community in the higher education environment.

1.4.9. Podcasting Service of Sunnyvale Library, USA

Beside providing information for the users, the service is effective communication channel connecting and developing library user communication. Information products can be stick to events, activities of the library.

1.5. The significance of using social software to organize the university library and information service in Vietnam

- Contribute to promoting socio-economic development
 - Improve the quality of training and scientific research
 - Accelerate the process of modernizing and automating university libraries
 - Improve the efficiency of information retrieval of users: Simple and convenient procedures; Be able to be exploited anytime anywhere;
- Advantages in interacting and accessing information resources

Chapter summary

Social software is an application that allows the social community to interact online in real time by specific activities such as: connecting, sharing, communicating, exchanging, collaborating, and exploiting online information. Social software applications have penetrated not only specific industries, but also the habits and needs of people in using technology and information. The organization of information services is not out of context and is under the significant influence of social software. Proper application will improve the quality of service at university.

In addition to explaining the concept of social software, the organization of library information services at universities, Chapter 1 of the thesis has stated that application is essential for the development of the library in general and for library services in particular. For the purpose of exploring fundamental theoretical issues for the next phase of practical research, this chapter also outlines the basic elements that affect the application process and the requirements and processes for applying effectively social softwares in organizing library services.

Although the application of social software is not yet popular and effective at university libraries in Vietnam, application in the world of application has a long history. Practical applications show that the quality and efficiency of the services of these libraries have increased significantly, while the types of social software application services have been maintained for a long time and are increasingly being improved. Practical application in the library of universities in the world shows that the efficiency of information

search and exploitation of users is enhanced, the information needs of users are satisfied better. In particular, in the university environment, the quality of training and research are two of the leading pillars, which are improving with the service efficiency of university libraries.

Chapter 2

REALITY OF SOCIAL SOFTWARE APPLICATION IN THE ORGANIZATION OF LIBRARY INFORMATION SERVICES AT UNIVERSITIES IN VIETNAM

2.1. Social softwares and groups of basic library information services at universities

2.1.1. The applied social software tools

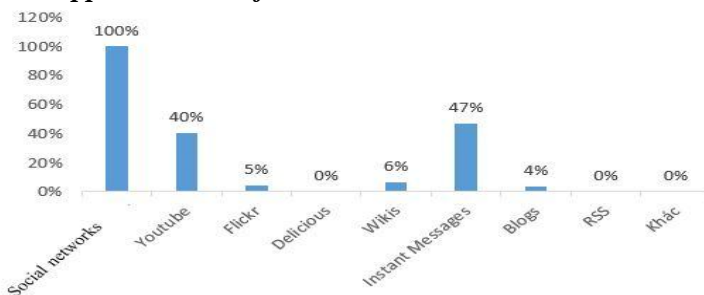


Chart 1: Social software applications at university libraries

- Social networking is a very popular application, so 100% of university libraries apply them to the services. The tools helps libraries to connect with users and deploy their services extensively to the user community. Because most library users have at least one social networking account and spend considerable time interacting on those social communities. This is also considered one of the most informative, informative, and user-friendly channels of communication. Librarians and users have their own facebook account and facebook, and spend much time on interaction online.

Meanwhile, the instant messages service is used at a higher rate (47%), as this is convenient communication tool. On the other hand, in addition to developing as a standalone tool, the application is also developed on most social networking services, supporting users to interact and connect in real time. This is also the reason why this application is used quite commonly in the social networking community.

2.2.2. Library services are applied social softwares: Borrow, return and renewal services; Service of searching and exploiting information; Providing information on request; Consultancy services; Training services

2.2. The process of applying social software applications to organizing library information services

2.2.1. Determine the purpose of using social software

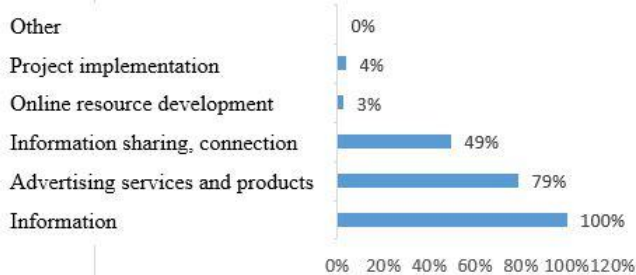


Chart 2: Purpose of using social software

Most college libraries use social softwares for the purpose of informing and promoting products, services, and social activities. Based on that, it is possible to draw the following conclusions: The purpose of application of social softwares at university libraries is to inform the information (100%). However, the purpose of applying new social software is at the basic and simplest level.

2.2.2. Develop policies and roadmap for the application of social software in library and information service organization

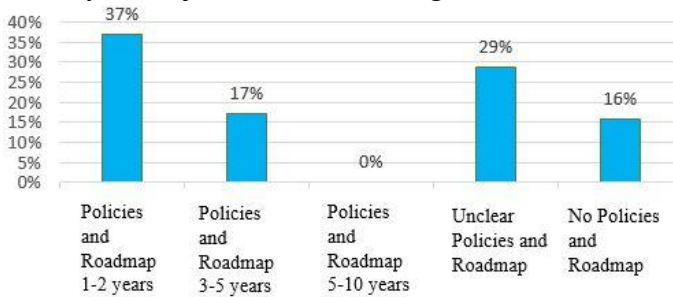


Chart 3: Policies and roadmap for social software in library and information service organization

There is also a significant proportion of libraries implementing policy and roadmap for the medium term of between 3 and 5 years. Interestingly, no library has a five to ten-year roadmap. This data shows that there are possibilities: the technology cycle can develop and change, so there is no need to build long-term roadmap; The short-term and medium-term roadmaps are suitable for reviewing and drawing lessons for the next stages.

2.2.3. Identify specific library information services that are compatible to social softwares

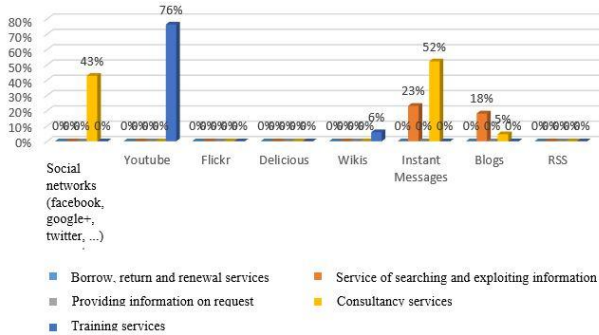


Chart 4: The compatibility of social softwares application and library – information services

The decision to choose of social softwares for types of services change from particular case to particular case. It can be seen that the library and information services focus on applying popular social softwares.

2.2.4. Deploy library information services

2.2.4.1. Human resource

The survey results show that when deploying services, the managers of libraries has focused on organizational works and related factors: to allocate resources, especially suitable human resources for deployment. Human resources focus on people who do not only have specialized competence in the field of library information, but also have extensive knowledge of science and technology, are capable of processing and analyzing information, having computer and foreign language skills.

2.2.4.2. Service organization model:

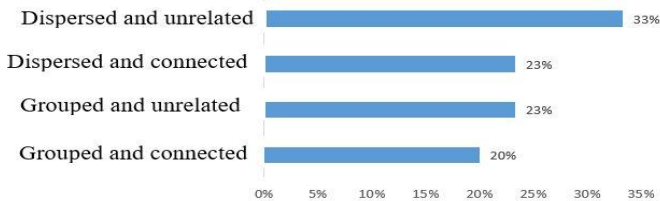


Chart 5: How to organize library information services

The way to organize services and the relationship between services at university libraries is inconsistent, even varied and varied as all four options have a significant selection rate (categorized into service groups and inter-group services are closely interrelated, grouped into service groups and inter-group services are NOT closely interrelated; There are close links between them, dispersing each service individually, and between these services are NOT interrelated.

2.2.4.3. Mechanism of services operation

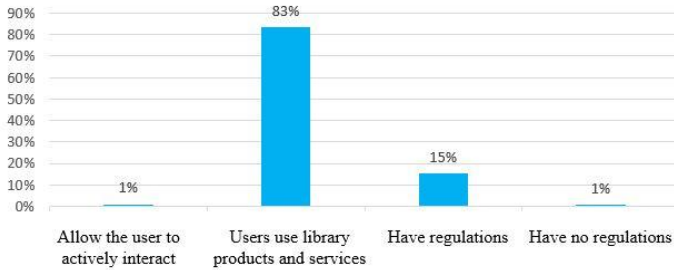


Chart 6: Mechanisms of interaction between library and user

Most library services regulate the interaction between library services and users. However, it is worth noting that these mechanisms provide for one-way interaction for users when exploring information, and interacting within user community.

2.2.5. Evaluate the performance of the services

Firstly, libraries have focused on the toolkit for evaluating the quality of services, first of all through the criteria of timeliness, friendliness, cost of services; Statistics of the number of users using the service and the number of visits by users to use various services of the library.

Secondly, the library conducted a survey on the level of satisfaction of information demand of users after using the library information services by collecting comments of users.

2.2.6. Adjust after evaluation

Post-evaluation adjustments are considered by libraries to be the final step in the library information service process at universities.

On the basis of the results obtained after the evaluation of users by different methods, as well as statistical information related as analyzed above, most of the university libraries have conducted meetings and adjusted after the evaluation.

2.3. Status of factors affecting the application of social software to organize the library information services

2.3.1. Perceptions of stakeholders

The process of implementing social software applications into library information service organizations engages many stakeholders, however, it can be divided into following groups: managers of universities, leaders of libraries, librarians, consultants and users (scientists, lecturers, students, students, students).

2.3.2. *The quality of the staff, information library experts*

Education level of human resources is quite high; The computer competency is quite modest; the normal rate is quite large account for 22%; In terms of foreign language, English is the most used language (84.7%).

2.3.3. *Finance and information technology infrastructure*

For public higher education libraries, their annual operating budget is the state budget, which is allocated from their parent institution. In addition to this source of funding, the library may have additional sources of revenue from projects, programs of co-operation, etc. However, the budget is limited compared to functions and tasks, and this status is quite popular to the university libraries.

For private universities, budgets are active and flexible. However, depending on the direction and development strategy of each university, the level of investment is determined. Therefore, 100% of university libraries have been computerized with well-equipped machines and internet connection. Room systems and facilities for library information services have been prioritized for investment. However, depending mainly on the concerns of the senior management along with the annual financial resources, the quality of IT infrastructure change from university library to university library.

2.3.4. *Electronic resources and copyright*

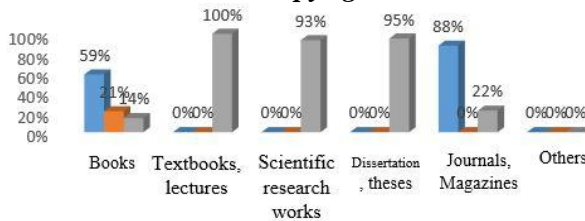


Chart 8: Information resources of university libraries

Printed materials are popular and make up a large proportion of magazines (88%) and books (55%).

2.3.5. *Mechanisms and policies on operation of library information services*

Libraries have their own operating policies that are appropriate to the specificity of the university's training and research. As a unit under the university, the policy of developing and operating the library always draws the vision and development strategy of the university as a guideline for developing the vision and development strategy. 100% of the libraries receive training, scientific research, knowledge transfer, and development services that serve as the basis for development.

2.3.6. User characteristics

2.3.6.1. Groups of users

User is a term commonly used instead of readers, library users, or library services customers. Information users are individuals, groups, organizations, agencies and organizations that use materials and library services to meet the specific needs of work and life. The information user is the person who needs information. User is one of the basic elements of all information systems.

Users are customers of information services, and they also produce new information. Groups of users:

+ leaders, managers

+ researchers

+ pupils, students, trainees, graduate students, staff

2.3.6.2. The purpose of using the library information service of the user

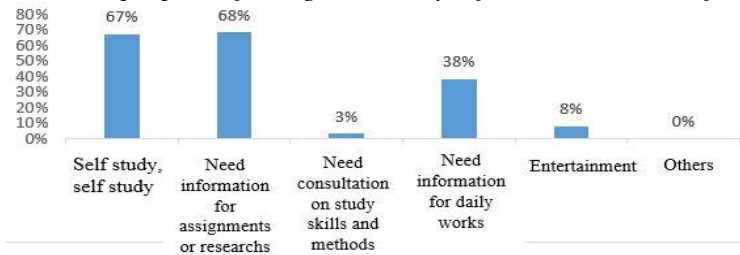


Chart 9: The purpose of using TTTV services

The primary and popular use of the university library user is to meet the information needs for doing assignments, or performing research tasks in the university environment.

2.3.6.3. The need to use information services of users

Regarding library users' access to library information services as follows:

Proportion of users know the services through faculty staff and friends account for 79%, next through the library website and e-mail with the rate ranging from 17% - 19%, through social softwares and Library Newsletter at the same rate of 9%. The survey shows that university libraries have not yet deployed social media software online effectively to connect and inform users.

On the frequency of going to the library information services

Chart shows that the frequency of going to library information services once a week of users is the highest rate, accounting for 30%. Meanwhile, the frequency of 3 days/ time accounted for 26%. The number of students going to service once a day accounts for 20%. In addition, 7% to 8% of users go to the library services once a month or once every few months. In particular, there are users who do not use library services and the proportion make up to 10%.

The percentage of users who visit the library at least once a week is quite high, accounting for about 76%. Meanwhile, up to 10% of users state that they do not use the library.

- *On the popular way that users usually follow*

57% of users use online services while 43% choose to use live services.

This shows that the need to access, exploit and use digital resources of users is very high due to the flexibility and usability of format.

The frequency of using the services of the user

The frequency of using the services of the users is not high, except the service of searching and exploiting electronic information. The remaining services are either used at low rates or at low frequencies.

- The service used by the users with the highest frequency (once a day) is the service of searching and exploiting electronic information. Remarkably, with this frequency, the rate for other services is 0%. The remaining services are not frequently used by users (once a day).

- Frequency once a week is selected for most services. Among them, the most popular choice is the Study and Research Support Service, followed by the Borrowing and Returning and Renewal service, and the provision of information services on request.

- The frequency of once a month is chosen with a high rate for Training services and with a certain percentage for Research and Academic Support Services and Borrowing and Renewal Services.

2.3.6.4. Consumer electronics users prefer to use to access social networking

The majority of users prefer to use mobile devices to exploit social software services, because of the ease of navigation, the speed with which to work and many other benefits suitable for active life with high productivity. This is also the reason why the majority of users choose to use mobile phones as the most popular tool used to exploit social software services with a choice rate of up to 57%. Meanwhile, mobile devices such as laptops, iPads, and devices which have larger size than phones account for 41%.

2.3.6.5. The time spent using social software every day of the user

- The survey results show that social network is the most popular application for user community in libraries with the usage proportion dominant over other social software applications.

- The second popular applications used at lower rates are Youtube, Instant Messages and Wikis. There are also applications that have a very low user rate as: Flickr, Blogs.

Notably, there are many social software tools that are used very little or are not even used by library users such as RSS, Delicious, etc.

2.3.6.6. The users' purpose of using the social software

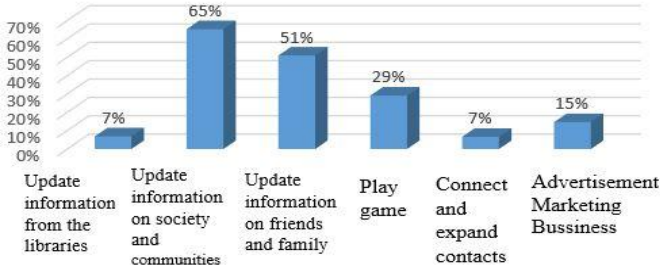


Chart 10: Purpose of using social software

2.3.6.7. Level of use of social software to exploit library information services

- Users are less likely to use social software to access library information services at university libraries. In that context, Instant Messages, Youtube and Social Networking are more popular applications in exploiting library services.

- Instant messaging are used by users because of its fast connectivity and real-time interaction.

2.4. Evaluate the effectiveness of social software application in the university library information service organization

2.4.1. Efficiency of social software applications

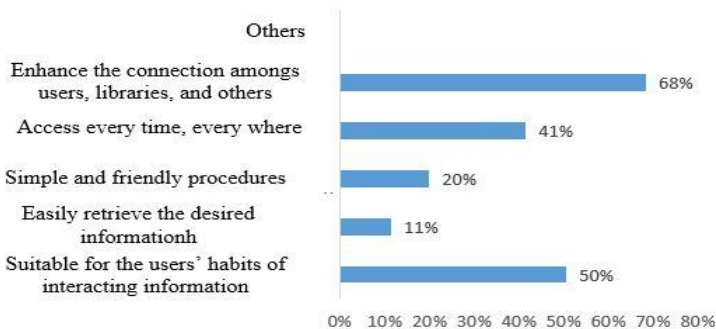


Chart 11: Benefits of using social security to organize library services

- The application of social softwares to the organization of library and information service brings many benefits. The benefits of enhancing the connectivity between the library and the community of users are at high rates. One of the key factors contributing to the success and effectiveness of social security is building, cohesion and community development.

- The important benefits of social softwares in general and the application in particular are emphasized such as: consistent with habits of using and exploiting information of users with many different devices. Users can use the services anytime and anywhere in the online environment.

- Other factors are also mentioned, but lower rates such as simple procedures, convenience, and quick access to essential information.

2.4.2. About the level of satisfaction of information needs

The results show that there is no very-satisfactory level”; the level of satisfaction is 35%; the level of normal-satisfaction is 31%; the level of information not-very-good satisfaction is up to 11%; The level of “no satisfaction” on the negative scale is 0%.

2.4.3. The standard of uniformity and interconnection between services

Evaluation of the unified and interrelated criteria between library services at a very good and not good level; normal level of 29%; The level is not good and not good is 0%.

Thus, this criterion for services when the application of social security is very important but very limited when the library is deployed.

2.4.4. About standard of simplicity, convenience and friendliness

0% of “very good”; proportion of good status account for 19%; normal level of 47%; the level of “not good” is 0%.

2.4.5. Unlimited space and time

The level of “not quite good” account for 48%. Thus, meeting the criteria of unlimited space and time is very limited.

2.4.6. Regarding the cost

“Very good” accounts 79%; the good is 21%; normal and not good with 0%. This is true because students have been supported a lot in terms of cost.

2.5. General remark on the application of social software to library information service organizations

2.5.1. Strengths

- Have a proper understanding of the role of social software applications
- The application of social software is growing diversedly.
- Has followed the process and met the requirements of the process
- The capacity of information literacy specialists has met the requirements
- Modern library information standards have been applied
- Information technology infrastructure and the level of investment are enhanced
- The information literacy of the users meets requirements

2.5.2. Limitations

- General limitations of social software application
 - All services have certain limitations, among these, resource constraints for electronic information retrieval and search services account for the highest rate of 61%. Next, the capacity constraints of staff in providing training service quality, constraints of services for borrowing, returning and renewal services.
 - Limited capacity of staff and limited service quality also accounted for a significant proportion ranging from 41% to 42%.

Other constraints such as infrastructure and IT also account for a certain

percentage. In addition, for each service group, all the restrictions mentioned above appear at a rate of around 10%.

- The interactions between existing services are not high
- The application of social software has no specific strategy and roadmap
- Digital resources and copyright issues are still limited
- The ability to attract and develop the community of users is not high
- Mechanisms, policies and operation of services are unclear

Chapter summary

The chapter focuses on the current status of social software applications in the organization of information and library services at universities. The situation is reflected on the basis of in-depth research on specific social software applications. Surveying and consulting the library as well as the user focus on studying the understanding and situation of social software application in the organization of library services.

Information from interviews and statistics shows that social software is being used in most of libraries in Vietnam. Along with that, there are specific applications into specific types of library services. The compatibility between information and library services and social softwares has also been figured out with the current status of policy and pathways of university libraries.

The survey also indicated that the users like using social software in the process of exploiting library and services. However, the application of social software to the services at university libraries in Vietnam has not been developed professionally and has not met the needs and habits of exploitation of users. Most libraries have applied social software, but the extent and scale of the application of the library is different. Remarkably, libraries with deep and wide-spread university libraries with have achieved much better results than university libraries that lack united direction, resources and appropriate policies and roadmaps.

Based on the analysis of the reality, problems and limitations, the dissertation provides the basis for building solutions to implement the application of social software into the service organization appropriately and efficiently.

Chapter 3

SOLUTIONS TO IMPROVE SOCIAL SOFTWARE APPLICATION INTO ORGANIZATION OF LIBRARY INFORMATION SERVICES FOR UNIVERSITIES OF VIETNAM

3.1. Solutions on policy and mechanism for the application of social software to organize library information services

- Raise awareness of the role of social software
- Unsure consistent directions with the units under the university
- Develop application policies
- Mechanism of managing and administering social software application
- Stick to the goals set by the university
- Develop a roadmap for developing social software applications

3.2. Technology solutions for the application of social software

3.2.1. Group model of social software applications to organize library information services

It can be divided into three groups of social software tools as follows: group of communication tools, group of building tools and information resource development, and group of community connection tools.

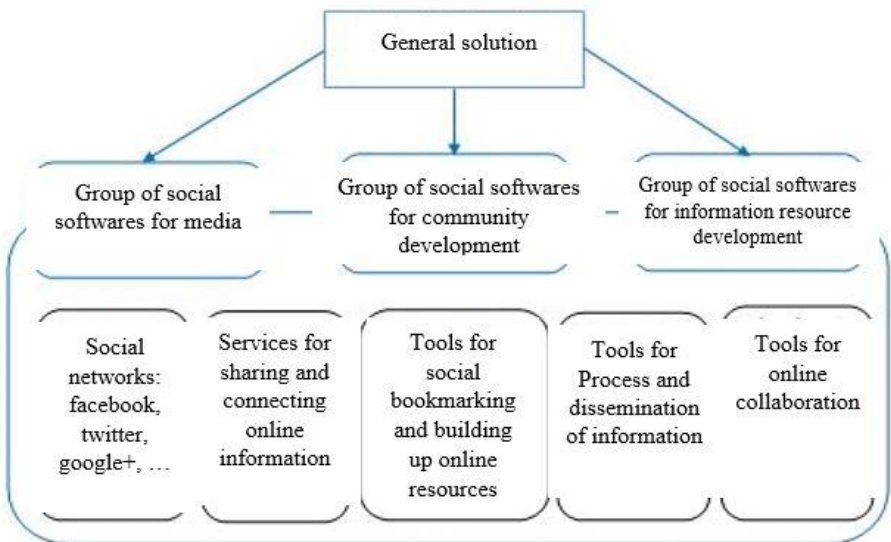


Figure 3: Total solution of social software applications in organization of library and information services

3.2.2. Organizing social media tools

Some of the social software tools appropriate for this function are:

Social networking is also considered as one of the tools for good implementation of communication activities.

Podcast applications in communication activities: to provide up-to-date information about events, activities, and services; to provide training and guidance information; to provide information about the products and services of the library.

Mashup is a tool that is suitable for combining popular communication tools used by users.

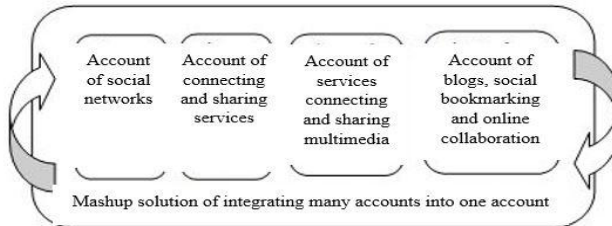


Figure 4: Model to combine many accounts into an account

3.2.3. Community development tools

Training, especially online training, is one of the most effective ways for a library to connect with the community, to form a community of users on social networks; deploy many projects; connect and managing social networking accounts.

3.2.4. Model of tools for developing information resources

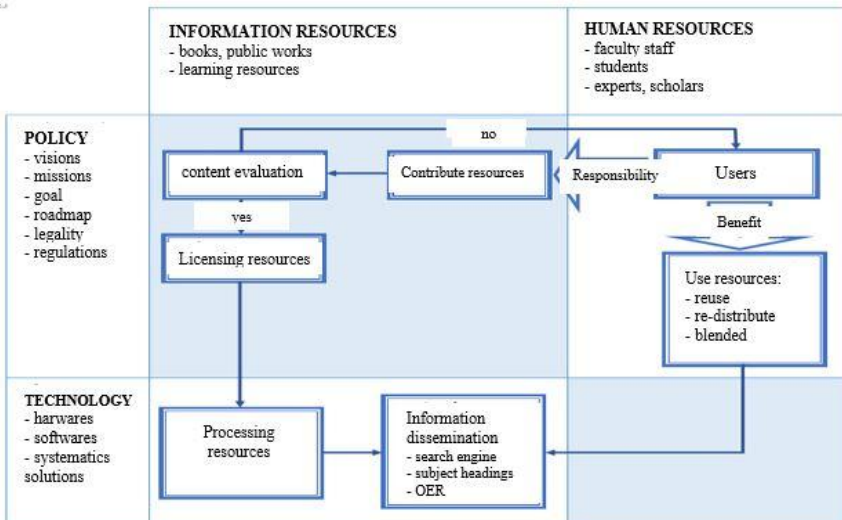


Figure 2: Model of developing information resources

3.2.5. Application of communication tools to specific services

3.2.5.1. Information search and retrieval service

Information portal can be integrated into information channels such as blogs, social networking accounts, or through instant messages. In addition, there should be videos for supporting and guiding other users to search and retrieve electronic information resources.

3.2.5.2. Information service on request

The auto-registration feature of the search syntax is fully equipped on most search engines of online databases and many popular search engines. On the other hand, users can use RSS tools to register and gather information from desired sources.

3.2.5.3. Academic and research support services

This is the first social software service that can be used to implement. Through specific social networking services, the library can provide academic and research support services to a diverse range of users in the higher education setting. Most social software tools can be applied to academic and research support services, as these tools serve as a bridge, a communication channel between the library and the users. There are basically two types of support: real-time support and face-to-face support.

3.2.5.4. Training services

There are many forms of training, however, the most common is the use of podcasts in training and education. Training courses can be in real time or recorded in multimedia formats to provide to the user.

3.2.5.5. Services for the development of projects involving the social community

One of the salient features of social software is social collaboration. When using social software, libraries can offer projects that encourage and engage the community of users, especially those with similar interests. The common software tool for this type of service is wikis, which allows the library to develop online merger projects for the library itself. On the other hand this service allows users to create their own collaborative projects.

3.2.5.6. Borrowing, returning and renewal services

This is a service that often requires direct interaction and involves specialized software libraries (integrated library management systems, library management software, etc.). However, with the goal of supporting the optimization of service performance and maximizing the level of satisfaction of information needs of users, while improving the unification of the system and enhance the connection and expansion of the community, university libraries can use social softwares as supportive tools.

3.3. Select library information services for application

Social software application priority for services: Training services; Academic and research support services; Providing information on request; Information retrieval and search services; Borrowing, returning and renewal services

3.4. General model of social software application

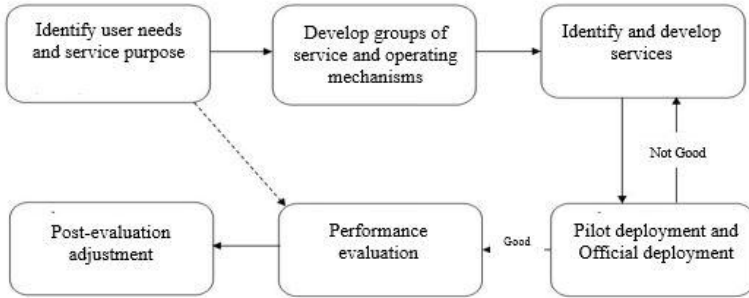


Figure 3: General model of social software application

3.5. The model of the application of social software pilot process into the library information service organization

In order to operate social software applications in the organization of library information services effectively, the thesis proposes a model of social software pilot application process as follows:

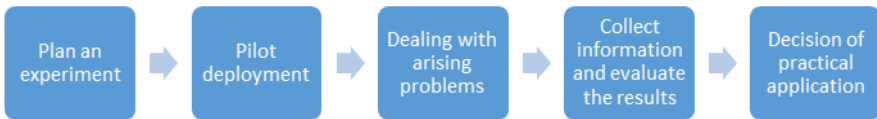


Figure 7: The pilot model of social software application

Model: Experimental planning; pilot deployment; dealing with arising issues; collecting information and evaluating results; decide how to apply in practice

3.6. Pay attention to other factors that affect the application of social softwares

- Train users and improve the capacity of library staff
- Ensure digital resource licensing

Chapter Summary

Based on theoretical and practical research on the application of social softwares in the organization of library information services, the chapter has proposed solutions for feasible and effective implementation. The solutions are localized into groups of solutions on management, operation, technology solutions, solutions of selecting services corresponding to technology and some other solutions. Solutions are divided into groups that demonstrate

systemativity in the application process, as well as diversity, in accordance with the application of university-specific libraries.

Groups of solutions follow closely the reality of organizing library services in universities in Vietnam with many specific solutions. Among the solutions mentioned, the technology is considered as the main solution group, focusing on tool groups: group of communication tools, group of community development tools, group of information resources development. In addition, the group of solutions play a direct role is the group of solutions of management. This group of solutions plays a decisive role in the process of applying social softwares in organization of library and information services.

For specific solutions that really fit the needs of each library, each unit under the university needs to be detailed and flexible to have desired results.

CONCLUSION

The idea of building social database management software has been mentined since the 1940s, but research into social software and the application became popular in the early 2000s. This is also the starting point for the development and powerful application of social softwares in various fields, in which the organization of library information services in universities is applied extensively and effectively. The results are evident when the quality of these services is increasingly enhanced.

The application of social software in the organization of library information services at university libraries has had a profound impact not only in practice but also in the theory of organizing information service systems. In addition to promoting the social elements of social software, such as community participation, sharing, proactive management, information management and participation in censorship of information to contribute new values, added values to the common knowledge of mankind. Especially, the operating mechanism of the services also changes in essence. There is no clear boundary between the user and the library, or between the user and the creator. In that environment, only one object is the users including the librarians and the end-users. Users can build, administer, censor, share, connect and exploit information on the basis of an interactive mechanism that coordinates and controls the library's information.

While social software is widely used in the organization of library information services abroad, in Vietnam, the application is quite sporadic, no plans, roadmap. There is not enough awareness of leadership at all levels and the determination of the university library.

The surveys show that the application of social software in the organization of library services at universities in Vietnam, despite some

difficulties, but convergence factors that make the application successfully. Be aware of this, many universities have invested in policy, technology, resources for the library to improve the quality of services, meet the new needs of users; The majority of users using social networking. Their accessibility, information habits not only make them easy to get acquainted, but they also stick to the library service system; The cost of applying social software to software applications is not too high.

The proposed social software solutions are based on scientific reasoning, reality and experience gained from the application of many libraries worldwide and nationwide. The solutions, which are mentioned in the thesis, shown in the groups as well as specific solutions, and also mention the way of application according to the current popular service groups of university libraries. Especially, these solutions take into account the particularities of university library conditions and the nature of the various types of library services in Vietnam. Once implemented accordingly, these solutions will greatly improve the quality of library information services of universities in Vietnam.

**LIST OF THE RESEARCH WORK PUBLISHED BY THE AUTHOR
RELATED TO THE THEME OF THESIS**

1. Pham Tien Toan (2014), “The principle of building standards-oriented University Library in Vietnam”, *Viet Nam Library Journal* (N.6), pp.33-37.
2. Pham Tien Toan (2016), “Explain the popularity of social software”, *Journal of Information and Documentation* (N.3), pp.15-19.
3. Pham Tien Toan (2016), “Application of Podcasting in libraries of universities in Vietnam”, *Viet Nam Library Journal* (N.4), pp.39-44.