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Definition, connotation and model of maturity of SNS in university libraries

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ABSTRACT

Definition of maturity of SNS in university libraries is proposed according to maturity research, and the definition is interpreted from process and consulting. It is pointed out that SNS can be accepted by college students and can create true values only in case of good process management and knowledge consulting. In order to reveal the development process that university libraries conduct service innovation with utilization of SNS, maturity model of SNS in university libraries is established from library, librarian and organization, process, consulting and service performance these five parts, and each maturity grade and characteristics are analyzed.

KEYWORDS

University library; Social network service (SNS); Maturity; Evaluation model; Knowledge information.



INTRODUCTION

With continuous development of network and information technology, information technology has been utilized by many university libraries successively to strengthen services, and assistance and improvement of Social Network Services (SNS) to university libraries is just an important one. As is restricted by number of librarians, places, opening hours and other factors, services which can't be realized through traditional library can be made up through social network. Because of online access whenever and wherever possible, social network makes service space and period of library greatly extend. In the meantime, online communication model and interactivity of the social network also make library services more tridimensional and vivid, and librarian also can make timely communication with readers. Besides, social network breaks through intrinsic resource constraints, and through social network, libraries can timely provide readers with lacked resources from other readers or associated libraries through document delivery, greatly meeting readers' diversified and multifarious knowledge demands. Today, social network not only produces significant impact on mode of information spreading, but also produces great influences on library business development. SNS plays an active and obvious role in enhancing added value of university libraries as well as promoting college students' knowledge learning and vision expansion etc., thus becoming an important channel for college students inquiring latest information and promoting their knowledge learning. In addition to actively promoting construction of SNS, each university library has had high expectations on SNS, and improvement of service capability automatically becomes a focus of attention by more and more managers. However, until now, the problem that service quality of SNS is not good has always been existing^[1,2], and compared with that at abroad, there are large gaps no matter on integrated application^[3] of technology or service concept^[4] concerning SNS in university libraries in China. Therefore, it is necessary to find an effective method to visually, comprehensively and accurately measure SNS services so as to provide decision support for each university library to understand and grasp operation status of SNS.

Since proposition of Capability Maturity Model (CMM), theory concerning maturity has been widely accepted and used, and it has been greatly applied in the field of library and information research. In order to better master process evolution rule of SNS in university libraries from immaturity to maturity, here concept of maturity is attempted to introduce in SNS service field in university libraries to describe and reflect conditions of SNS in university libraries through application of maturity.

DEFINITION AND CONNOTATION OF SNS IN UNIVERSITY LIBRARIES

Existing maturity model research and deficiency

Maturity standards or models with great influence in network information service field include CMMI-SVC (CMMI for services) proposed by SEI referring to capability maturity integrating model suitable for services, ITSM (Information Technology Service Management, being referred to as ITSM for short) model and Knowledge Management Maturity Model (KMMM). CMMI-SVC model takes improvement of operation process as orientation, and follows consistent maturity division of CMMI, and provides objectives and approaches for organization and continuous process improvement of provided services. ITSM combines 3P which are absolutely necessary for high-quality service management, referring to process, people and product elements, and makes information sectors separated from the role of traditional technical support to upgrade to service orientation. However, as social network technology has been gradually mature, social network services have been widely accepted in the whole society, and as the communication platform for many users, there are few technical elements in SNS management; and SNS in university libraries is non-profit service, the purpose of provision of services is not earning profits, so the above model centering on resources and process and ensuring realization of service goal is not completely applicable to SNS evaluation. Currently, there are many knowledge management maturity models developed by foreign scholars, and knowledge management is the important part of implement strategy of university libraries^[5]. However, the basic object of library work is "knowledge information", and the essence of library activities is knowledge information transfer and service^[6], so application of the above model in evaluation of SNS knowledge community^[7] in university libraries focusing on interpersonal relationship is not applicable either.

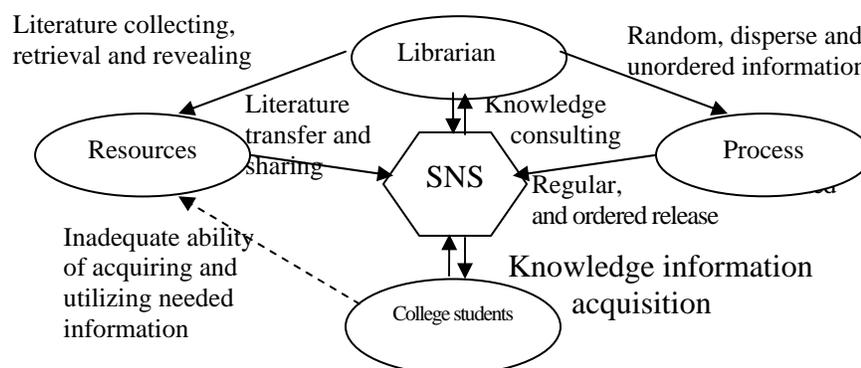


Figure 1 : Conceptual framework of SNS in university libraries

Proposition and connotation of definition of maturity of SNS in university libraries

Maturity of SNS in university libraries refers to effective utilization degree of SNS platform by university libraries, and it is knowledge information service provided by university libraries and librarians for college students on the basis of various knowledge resources inside and outside libraries through normalized process and specialized consulting method. The significance of maturity here lies in improvement of richness and quality of SNS as time goes on through paying attention to knowledge information management, and continuous development and optimization through maturity management, thus making college students more easily, faster and more directly receive various services in university libraries through clues provided by SNS. The conceptual framework of maturity of SNS in university libraries may be shown in the following figure:

As is shown in Figure 1, resource, people and process are important elements of SNS. In big data era, resource access not only requires specialized knowledge, but also requires information retrieval, information analysis, understanding of related data platforms as well as use of literature management tools and other basic literacies. However, most often college students don't understand contents of library resources or how to use all retrieval tools; or though they have basic knowledge on resources, abilities of accessing and using resources still stay at low level, they can't explore knowledge resources in libraries by effective means, so obtaining knowledge resources and services through participating in SNS in libraries becomes an important way for them.

In order to meet college students' learning need, in addition to exploring and analyzing library resources, librarians also need to conduct organization, processing and reorganization, and then timely release to SNS to help college students learn information needed. In addition to notice and lecture information of each department and college, generally transfer service also includes literature delivery, information retrieval skill training and brief introduction to database etc.; standardized and normalized work process management can make release and recommendation of knowledge information in SNS more effectively created, shared and utilized, and it constitutes basic contents of SNS in university libraries.

In order to realize more effective transfer and appreciation of library resources, there is consultative management of knowledge information in SNS. Consultation refers to intellectual work for clearing up doubts for users on the basis of analysis and processing of various reserved resources and information. With improvement of knowledge learning requirement, college students' consulting demand may grow up, and they are not passive receivers of library services any more^[8]. Therefore, the librarian shall be able to answer whatever puzzles and doubts of college students; and able to provide constructive suggestions and necessary guidance concerning various activities held by the school and library; in the meantime able to capture library resources and deliver knowledge information in shortest time to social network to promote college students' learning and communication.

Therefore, maturity of SNS in university libraries may be mainly discussed from two aspects according to different ways of provision of services. Process management evaluates improvement degree of process efficiency, research on how to release library resources, and pushing library resources and services to make knowledge information timely provided to college students for use are also basis of existence and development of SNS. However, improvement of service quality only through normalizing process management can not completely meet the requirements, as there are some urgent problems to be solved in service, such as failure of quick response may result in complaint of college students, so it makes consulting management important by contrast. Knowledge consulting cares more about whether providing knowledge to solve college students' problems^[9], improving pertinence and timeliness of knowledge information service, and improving SNS management level. Close cooperation between process management and knowledge consulting can better make knowledge information receive transfer and service, thus contributing to improvement of teaching quality, improvement of utilization efficiency of library resources, and also being beneficial to deeper development of SNS in libraries.

In conclusion, only through integration of unstructured knowledge consulting and structured process management, SNS can get accepted by college students, thus forming good interaction and creating real values, and all these need consideration of influences of library and librarian these factors on SNS during knowledge information provision process. Organization of librarian plays an important role in SNS, as in SNS, prearranged service level of university library can be reached only through efforts taken by librarian, and necessary resources can be effectively provided. Certainly, university libraries shall also stay clear-minded and be good at utilizing new SNS technology to greatly enlarge space for library services. Additionally, in order to better maintain and utilize SNS, librarians shall further strengthen communication with management personnel in university libraries to get official support during service discovery, and it is easier to realize sustainable development of SNS through identity authentication and maintenance by means of keeping in turns.

MATURITY MODEL OF SNS IN UNIVERSITY LIBRARIES

SNS provides an opportunity for expansion of knowledge services in university libraries, and university libraries also need to more widely and deeply utilize social network to provide colorful information services, but currently many university libraries only simply follow utilization of Renren and other social networks, and individualized services are lacked, and service modes are not imperfect. To more rationally promote development of SNS in university libraries, it is necessary to establish a stepped instructive frame system to evaluate service quality thus to specify road and direction. As maturity model can describe the condition that one thing develops with time, reached level and necessary conditions met for each level, maturity model is attempted to analyze the process of improvement of SNS capability in university libraries.

Maturity model of SNS in university libraries refers to a set of evaluation system provided for managing, measuring, controlling, optimizing and continuously improving SNS during implementation of SNS in university libraries, and it may show growing process of organization ability, experience and continuity of SNS in university libraries. Here maturity model is divided into library, librarian and organization, consulting and service performance these five parts in accordance with different evaluation contents, and grades are also divided into five levels. As is shown in Table 1, initial level is the lowest

level of SNS maturity model, and users in such level can only get rough information services, and accuracy and timeliness of such services are both low. With service advancement, difficulty and depth of provided services increase step by step, and quality of information service is optimized and developing to more mature direction. Through planning level and management level, integrating level have been able to provide full service as per users' needs; optimizing level is the highest level of the model, being able to constantly changing services to reach the best.

TABLE 1: Maturity model of SNS in university libraries

Item	First level (initial level)	Second level (planning level)	Third level (management level)	Fourth level (integrating level)	Fifth level (optimizing level)
Library	Library tries to get closed to readers through SNS. Full-time and part-time librarians are assigned, and tasks, responsibilities and authorities are specified. At the beginning of service, plans and methods to comprehensively improve services are lacked.	Service management plans or process implementation specification with specified objective are formulated, and systematic explanation is conducted on how to carry out services, and service reaches institutionalized and repeatable implementation degree.	Service system and standard are further detailed, and service steps into normalized and standardized stages. Through step-by-step service it may realize prearranged management objective.	Quantizable objective is established. Besides, all important activities in SNS may be evaluated and controlled. SNS becomes indispensable part of the library.	All activities in SNS may be planned and adjusted from a strategic height, and all service elements may be adjusted to reach best effect as per actual condition through dynamic management.
Librarian and organization	Due to lack of ability and experience, librarian is not clear about the work. Service is passive, service time limited and contents are single.	Librarian grasps certain service means and works in role, and starts to draw up promotion plan aiming at his own responsibilities and work, and many services in SNS are carried out.	Librarian is competent with knowledge and skills, and can meet requirements of the library no matter on information release or knowledge consulting.	Librarian grasps specialized knowledge to analyze information and deal with problems, and cooperation among librarians is good, additionally, management of SNS can be realized through conscious behaviors of the librarians.	Librarian is with excellent organizing ability and resource integrating ability, and SNS mainly depends on autonomous management of the librarians and team management.
Process	Only basic information and resource searching service are provided, arrangement of information service contents is cluttered, and service contents are not well organized.	Information service process is controlled, and readers can correctly find needed resources under guidance, and popularization of various activities is launched in order.	Estimation is conducted concerning related knowledge contents and various service activities needed by readers, and targeted, timely and continuous knowledge information may be provided within certain period.	Process information can be collected and service process may be improved, and various corresponding services may be provided for readers at different stages.	Not only readers' requirements can be foreseeingly observed, but also one kind of information environment can be actively established for readers, in addition, sincere services may make readers feel kind and respectful.
Consulting	Accuracy and timeliness of consulting service are low.	Consulting services may be provided by utilization of grasped knowledge, meeting certain reference consulting demand.	Information sensitiveness improves, being able to provide diversified services for readers till solving of problems or completion of tasks.	Information of readers concerning project planning, achievement assessment and paper publishing etc. can be collected, collated, analyzed,	Consulting is more active, professional and meticulous, being able to customize individualized services and expertise services for readers.

				integrated, reorganized and transferred.	
Service performance	Contents are hardly updated, and service process is not that stable. Because of lack of effective management, services wholly stay disordered status.	Services develop to direction of prearranged plans, and development of all services tends to be active.	Provision of information resources has greater expansion, and quality of knowledge service improves, and all institutions and standards in SNS are carried out.	Process information may be promotable and planned and can be constantly updated, and consulting services are also beyond readers' expectation.	SNS stays at a sustainable development process under continuous improvement and optimization, and excellent public relation ability may also make readers feel all-round reliable services.

CONCLUSION AND FUTURE RESEARCH

SNS provides new approaches for university libraries expanding ranges of services. As SNS vigorously grows up, how to improve knowledge information management capability to improve service provision has become an important problem faced by all university libraries. Adoption of maturity theory to reveal rules and characteristics of SNS in university libraries is good for managers learning and diagnosing current situation of SNS in university libraries, grasping development characteristics at the stage, thus specifically formulating performance improvement schemes to improve effectiveness of services; in the meantime providing reference basis for university libraries adjusting SNS service direction and improving utilization rate of limited resources, therefore, the research has certain theoretical and practical value. Empirical research concerning SNS maturity model may be enhanced in the future to help managers learn and grasp management level of SNS in university libraries with typical maturity cases.

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