

Social Software Engineering as non profit technologies: Trends and Future Potentials for Social Informatics and Digital Humanities

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ABSTRACT

Software Engineering and its application and integration to the community or society is called as Social Software Engineering. This is a concept and procedure rather than tools and products towards design, development and management of products, software, application and system for the society or community, directly and indirectly and thus social Software Engineering gain popularity recently for building Social Computing and Social Informatics much more advance and popular. In other sense, such Engineering practice may also known as Non Profit Technologies. This paper is talks about Social Software Engineering including its basic feature and characteristics. Paper also illustrated some technologies and products which are helps in promotion of Digital Humanities and Digital product application too.

Keywords: Social software engineering, SSE, digital humanities, social information system, information culture, knowledge management, information science, software engineering

Social Software Engineering (SSE) is actually a branch of Social Engineering and Development. Social Software Engineering is mainly concerned with the social aspects and community development by the design, development, management, implementation and further promotion of computer, system, products and application or software. Social Software Engineering is virtually a non profit technology as it as comprises with the information and communication technologies which support the goal of NGO, non profit trust, third sector and so many mission based organizations [Paul, Govindarajan and Sarangi, 2012]. Hence, ultimately Social Software Engineering responsible in the community or society and indirectly it is helps in promotion and creation of Digital Humanities. Social Software Engineering is focuses on so many challenges and issues for its further promotion thus we need to develop software and application with all modern Software Engineering principle and norms (Paul, 2013); Paul and Ganguly, 2013.

OBJECTIVE

This paper is mainly talks about several aspects related to Social Software Engineering and Digital Humanities which are illustrated as follows—

- To know basic about the Social Software Engineering; including its basic feature and characteristics;
- To know about the Social Software Engineering; including its basic need and importance for development of social informatics and computing;
- To learn about the main challenges and opportunities of Social Software Engineering in Indian and developing countries perspectives;
- To know about the need and importance of Social Software Engineering as non profit technologies for the promotion of Digital Humanities.

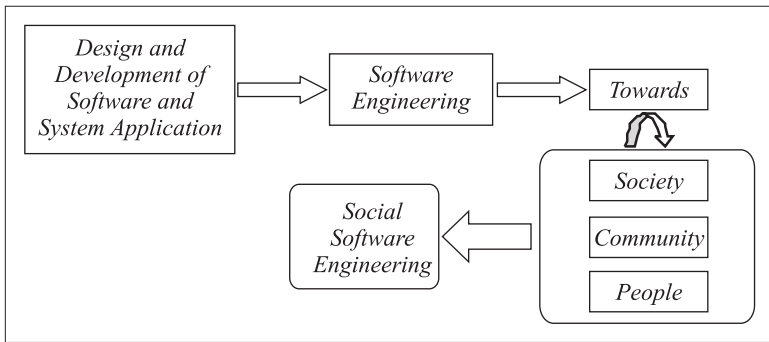


Fig. 1: Showing SSE as a domain and direct and indirect facets

Fundamentals

Social Software Engineering is actually a branch of Software Engineering and Software development towards community or society applications and packages. In Social Software Engineering practice, technologist or developer mainly engaged in software and application or product development towards community and social promotion. With Social Software Engineering, it is easily possible to develop Digital culture among the common people for removing Digital Divide.

In simple sense, it is very much different to express about SSE; but mainly deals or may be with following characteristics [according to SoSEA, 2008]:-

- Social Software Engineering is mainly responsible for the producing software and products for the community and society directly and thus SSE is '**Community Centric**'.
- Developing IT tools, products and software for the community needs proper **collaboration** for initial development and development of application and software.

- **Relationship or Companionship** is another important feature of Social Software Engineering which is mainly deals with making explicit the various associations among people (White and McCain, 1997).
- **Community and Human activities** is another important feature of Social Software Engineering as in this case software is specially designed consciously to support human activities and solve social and community problems.

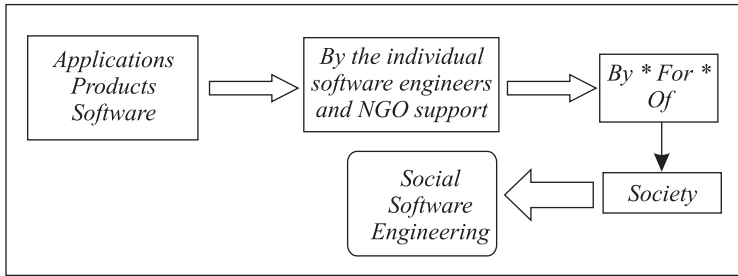


Fig. 2: Depicted Social Software Engineering and its ultimate role and objectives

Social Software Engineering as Non Profit Technologies: Current Potentials

Development of software not only deals with developing programmes but also developing of a wide spectrum of related components; which constitute software and other applications. Hence Social Software Engineering is actually a process or system or mechanism through which software design, development and maintenance is possible. Thus, Social Software Engineering is mainly way's playing an important role towards non profit technology which helps in community and society many ways [Paul, Ghosh and Chatterjee, 2013; Paul, Ganguly and Chatterjee, 2013; White and McCain, 1997].

In communication sector, we are witness of so many online and electronic mailing systems which helps us to share information, text, and audio and video instantly and hence this is promoting community culture towards digital world. Gmail, Rediffmail, Hotmail, Sify are some common application which are free to use and helps in Digital Humanities many ways. In Education, Business, Government and Social Purposes such E-Products are very much popular (Paul and Ganguly, 2013).

In Information Sector, we can see one tool which is directly involves with the society or community i.e. Social Networks. We know that, information is prime mover of the society and needed in almost all the sector irrespective of profit making or non profit making. With social networking site, it is easily possible to share (Paul and Ganguly, 2013; Paul, 2013; , White and McCain, 1997).

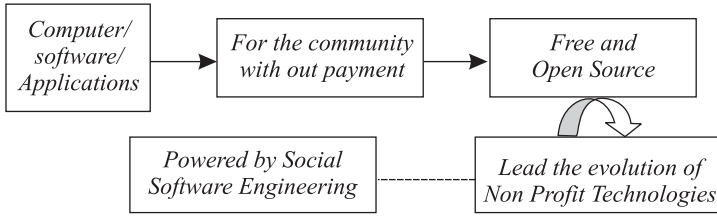


Fig. 3: Depicted Non Profit Technologies and its need and background

Information, audio and video directly to any one or group of user at any time and this information transfer ultimately improving our existing information infrastructure and indirectly promoting Information Society.

In core computing and software world, we can see several tools and technologies which are directly and indirectly helps in Social Informatics promotion and development. Database is very much important for social and community information system; which will be helpful in information collection, selection, processing and dissemination towards community and in this regard some free software are- MySQL, Green Stone, KOHA and so on [Paul, Ghosh and Chatterjee, 2013].

In Business Community too, all the above technologies are applicable and day by day changing. In small business and micro level commercial activities, IT hardware and software are very much important and valuable; but we can see so many tools and technologies which are able to build virtualization and some popular name in this regard are—

In many cases, because of higher product and software development small organization, social organization and social informatics agencies are facing various problem and thus, it is very much good way to introduce Social Software Engineering powered tools, techniques and products for the community development. According to Wikipedia, ‘Not Profit Organization also uses both properly and open source software as well as various tools like- www, e-mail, social networking, wikis and blogs and so on’. And this way some non profit groups may leverage web based services in their media outreach, using online news writes such as free and online news paper. Free Encyclopedia, Dictionaries, and other electronic material too now days freely available and in this category Wikipedia, Britannica Encyclopedia are important example [Paul, Ganguly and Chatterjee, 2013].

Suggestion

- Still most of the software and applications are mainly available for the business sector and profit making agency but there is a great importance

and potential to introduce Social Software Engineering for complete social development by Social Informatics practices;

- In many organization and IT companies it is essential to implement corporate social responsibility agenda for better Digital Humanities practice [Paul, 2013];
- It is essential to introduce much more products and services in wide range of sector such as business, education, Government, policies, Social Work and so on for all round development.
- Proper planning and funding is very much essential for development of Social Software Engineering and complete Non Profit Technologies.

Activities	Application/ Programme
Community Connection	Facebook, Orkut, Twitter
E-Mail	Gmail, Rediffmail, Hot Mail
Data Storage	My SQL, DBASE
Domain Based Social Networking	Linkid, Academic Research, Med 2.0

Fig. 4: Depicted some software and application which are brought us by healthy Social Software engineering practice

CONCLUSION

Social organization and non profit organization are uses computer, internet, networking system and operating system are important name in the field of Social Software Engineering. Gmail, Rediffmail, Whats Apps, Android based application, Linux, www are important name to modernize information sector many ways (Paul, Govindarajan and Sarangi, 2012; White and McCain, 1997). Some technology is created specifically for use by Non profit organization and for instance, there are more than 30 software packages designs for non profit organization for several NGO activities such as volunteer management, donor management, Financial Application, Multimedia application, Information dissemination and so on.

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