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SOCIAL COMPUTING IN INDIAN SCENARIO

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ABSTRACT

The interaction between society and social behavior, computational systems and cognitive science partially are considered as social computing. Fundamentally social computing may be define as, the mechanism and systems utilization of computing and allied tools and mechanism in or for the social. The stakeholders of social computing are computing and technologies, society and community and human being. Fundamentally social computing is more related with human computer interaction HCI .this paper mentions various aspects of social computing including meaning, nature, relationship, interacting principles, roles and future potential; brief manner .Though apart from these, paper also try to highlight about the technologies behind social computing ; its emerging challenges and issues in Indian scenario.

INTRODUCTION

Commonly social computing refers as the computing mechanism which supports any type of social cognitive behavior with the help of computing or computational systems or intelligence. it is actually application of intelligent systems and computing devices for societal interaction and more clearly utilization, so if the recent tools and name here raises social computing phenomenon are- E mail, Telefax, Instant message, Social Networking sites, Orkut, Facebook, Internet, Community informatics, Wikis.

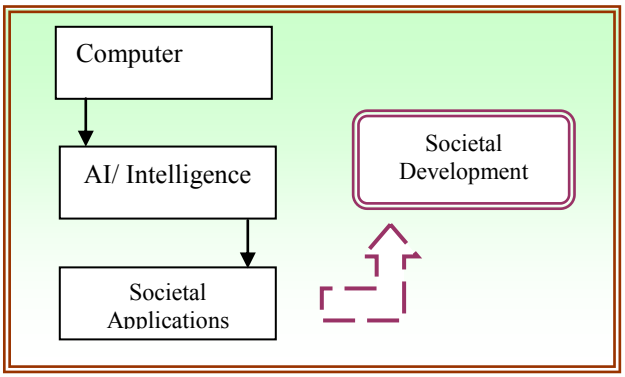

Fig 1. The Basics of Social Computing

This social computing is closely related with social software Engineering, Commonly Informatics/ computing. As social computing helps in Information delivery and prepares some one in full digitally literate; thus it indirectly removes Digital Divide or Information Divide. The better Information access and transparent among the common people with administrator or authorities also help in better economic condition. Countries like India [or other developing countries] need the complete utilization of social computing for full sustainable development.

OBJECTIVE

Following are some reasons for which this study is carried out:-

- To learn about social computing;
- To show the interaction and intersection between society, computing and behavioral aspects;
- To learn about the tools and technologies behind this;
- To know about potential uses and possible areas of social computing for community development;
- To find out current issues and challenges related to social computing;
- To know or suggest possible measure for healthy computing literacy and development and so on.

Social Computing: Basics

'Computing'- 'by the people and for the people' in narrower sense may be called as social computing or human computing. But in broader sense, social computing refers as design and development of computing and allied required technology for the society and on their requirement, social computing actually higher or broader interdisciplinary filled than that of community computing. Social computing practically lies on computing, technology, information and of course people or larger community or society. Social computing is considered as most value added tool or weapon for societal development. Better connection among the community or society, removing information divide, technological divide and sustainable development are the main key objective of a good social computing systems.

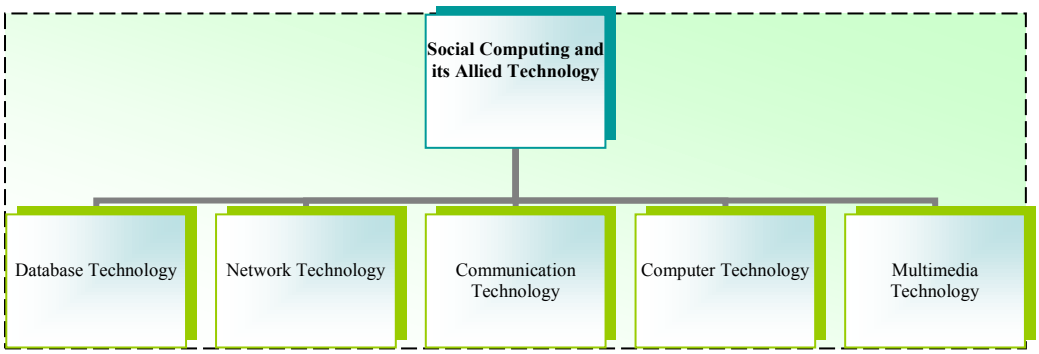

Fig 2. Diagram shows the basics technology which builds / helps in Social / Community Computing

Social Computing: Tool and Technologies

As like other applied computing social computing also depend on some tools and technologies. First of all a better computer technology is required with healthy software and hardware system. Secondly, networking technology for better interaction or connection with the user [i.e. people or community or society] of societal computing or between service provider for resource sharing, technology sharing; is pre requisite.

Database technology [DT] is required for storing and retrieving data, information and allied facet. Though, apart Database technology [DT], indirectly data warehouse and data mining are also valuable for better data management and information retrieval systems. Communication Technology [CT] is powered by satellite and VSAT Technology is also important for a healthy sophisticated Information Network. Ultimately CT is essential for better communication in between the stakeholder of social computing.

Multimedia Technology and Systems is also a modern day's requirement for good social computing. Basically for Multimedia representation facet showing, cinema, democracy, user studies and user education about community informatics and community information center, multimedia technology is essential.

Virtually apart from these, today many authorities, countries are also employed as cloud computing and green computing for better virtualized green information infrastructure.

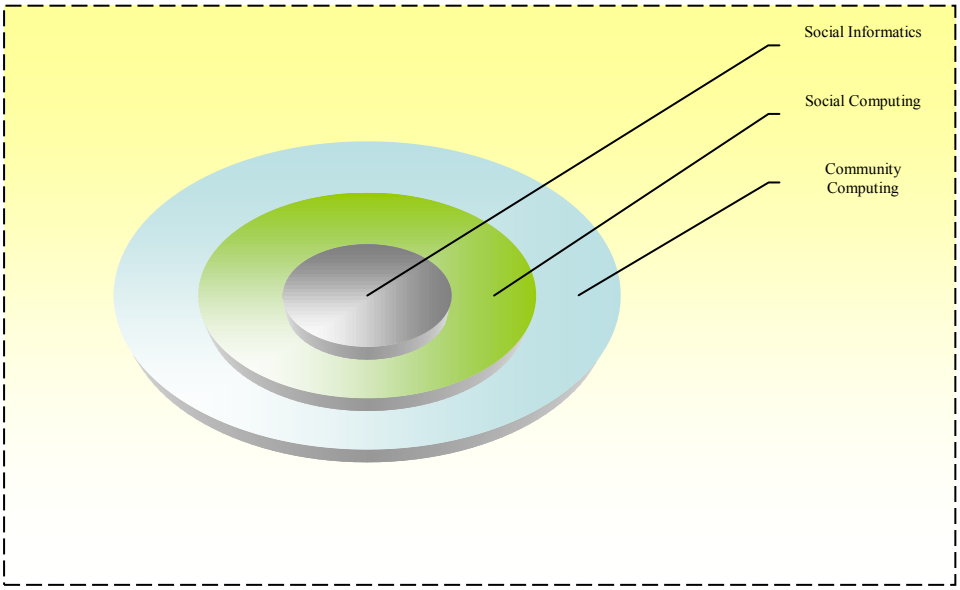

Fig 3. Representing the dimension of Social Computing and its higher and lower area

Social Computing, India and Development

Not only India, but also other developing countries need to depend on social computing for healthy computing and information infrastructure. As information is treated as prime mover of the society and cause for economic, societal, educational, political development thus, social computing is a wonderful tool or mechanism for better information transfer cycle

[ITC]. Social computing is practically responsible for increasing computer literacy and vice versa information literacy.

Still in India and other developing countries are facing problems and issues of digital dive and information divide. Ultimately, social computing no doubt a brilliant agent for removing these divide and responsible for making digital world; powered by social computing. The disparities between 'have and have not' in terms of information, digital gadget utilization and even formal and informal education many ways depend on social computing. Thus a sophisticated policy dedicated to social computing and obviously community informatics can bridge information society and parallel may upgrade as knowledge economy.

Courses- Bachelor Level	Courses- Masters Level
BCA [Social computing]	MCA [Social computing]
BSc-IT [Social computing]	MSc-IT [Social computing]
BTech-CSE [Social computing]	MTech-CSE [Social computing]
BSc-Information Science [Social computing]	MSc-Information Science [Social computing]

Fig 4. Possible courses of Social Computing with Computing programme

It is important to note that apart from developing countries the developed countries should need to maintain social computing practice for continuous up gradation and development. Value added services like community information services, multimedia service centers, e commerce, e bill payment, e learning really create an opportunity for an economy backed by information. Virtually, globalization and maintaining international standards are also possible by the social computing.

SOCIAL COMPUTING, ITS FULFILLMENT AND REQUIREMENT

Social computing; its complete fulfillment depends on so many criteria and available opportunities. It is mandatory to avail these criteria for a healthy social computing practice and in directly a computer literate and informative digital world. Be it developed or developing country, the following parameter should be available or arranged:-

- Enough awareness among the community people or society; regarding the benefit and service available;
- Healthy interaction between people-information and technology is also essential to maintain;
- Proper, recent tools, technologies and device are required to use to offer complete, value added and contemporary services;
- For user friendliness, usability engineering based interface and tools are essential to use;
- Human computer interaction is also an important condition; thus human interface design should be up to date and based on standard information architecture principles;

- Adequate fund and financial root should be there for a healthy all round service providing societal computing;
- Societal computing, societal informatics, community informatics should interact each other for a good result; be it information or technology;
- Proper planning, forecasting and time by time up gradation of systems are urgent criteria for a better social computing practice;
- Adequate awareness scheme, training programme, workshop are essential to launch by service provider, government agencies and of course by NGO's for better information transfer building.

Challenges and Obstacle Of Social Computing In India

India and other developing countries need to handle so many challenges and also required to overcome these as much as possible for a dedicated social computing and information practice. Now let us know some challenges as far as India is concerned:-

- Most of the common masses are not aware about social computing and its service provider like online customer care, e banking, e learning, community information center, e commerce, tele conferencing and other e services. Thus many of us not able to avail the power of information and technology;

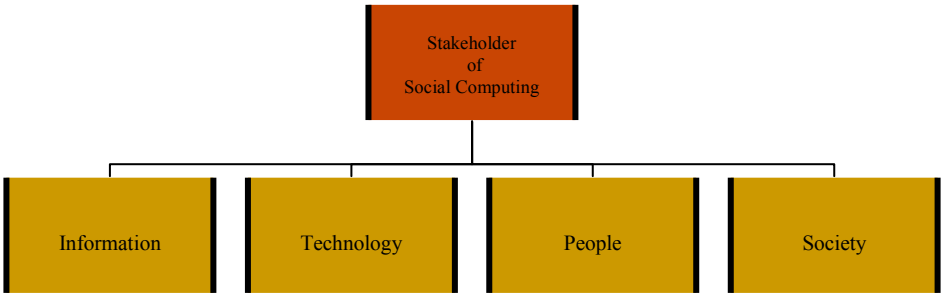

Fig 5. The common stakeholder of Social Computing

- Adequate planning, designing of healthy community based computing still absent in India. Still most of the common Indian are availing manual services; due to bad infrastructure;
- Design and development of completed system and intelligent system still a challenging issue in India. The reason are for this includes- lack of proper skilled manpower [or social computing], semi techno critic and so on;
- Available fund and financial constraint are also similar challenging issue;
- Hesitation among the community people; really an urgent problem and need to create by counseling and awareness by the professionals who know better cognitive and psychological studies and principles;
- Awareness among the government authorities, agencies and department about SWOT pf community informatics/social computing should be provided.

SUGGESTION

- NGO's and other social organization needs to take programme on social computing and social information; regarding its benefit and service providers and way to avail the services;
- For building sophisticated skilled professionals universities may start social computing/ social informatics as an academic programme or as an specialization like MCA[Community Informatics/ Social Computing], MSc-IT [Community Computing/ Social Computing/ Community Informatics];
- Planning commission should prepare a draft policy for healthy computing;
- National Knowledge Commission recommendation need to introduce and simultaneously new service should be introduced for complete up to date Social Computing practice.

CONCLUSION

Knowledge economy, development, globalization, virtualization, eco friendliness; these terms really directly and indirectly are connected with healthy social computing practice. Interaction in between people, service provider is very much urgent for a dedicated social computing systems where one common mass can get information, use of computer, use of interaction, communication [by telephone, e mail, conferencing] are possible. Social Computing should be introduce as a big agenda for healthy E Governance and E-Administration and also able in removing digital divide and information divide.

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