

Social Informatics

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Abstract: *Social informatics is an multidisciplinary field drawing on theories and methods from sociology, computer science, information science, business, and social sciences. It studies the interaction between people and technologies at an institutional and societal level. It provides an approach for studying information and communication technology. This paper serves as a brief introduction to social informatics.*

Key words: *social informatics, socio informatics, information and communication technologies.*

1. INTRODUCTION

Digital computers have become part of the fabric of our work and social lives. They have extended human and organizational capabilities. They also evoked fears of becoming substitutes for human labor leading to unemployment. Many studies were carried out on the contemporary roles of computerization in shaping work and organizational structures. Also, social research was carried out on the use and impacts of computer systems. Social informatics is a new name for this body of knowledge.

Social informatics (SI) refers to the systematic study of social aspects of computerization and the ways that the social organization of information technologies is influenced by social forces and social practices. Social informatics may also be regarded as teaching social issues of computing and socio-technical interactions to computer science students. It is an interdisciplinary study that covers different disciplines such as social sciences, computer science, information science, informatics, the sociology of technology, and management information systems.

Social informatics is not a singular theory; it is rather an analytic perspective and set of principles. It is a perspective in the same way as are human-computer interaction and family studies [1]. SI research diverges from traditional models for measuring the social impacts of technology.

2. PERSPECTIVES OF SI

Informatics is basically the study of information. It has been adopted to describe the application of information technology to various fields such as health informatic, social work informatics, law informatics, library informatics, scientific informatics, bioinformatics, etc. Social informatics has recently emerged as another potential discipline related to informatics [2]. Social informatics emerged in six different locations during the 1980s and 1990s: Norway, Slovenia, Japan, Soviet Union, UK and US. In the US, the foundation of social informatics was laid by Rob Kling in 1996 with his colleagues and students from Indiana University.

Social informatics is a rigorous trans-disciplinary study that incorporates a social theory into the study of the technology. The basis of social informatics is that information and communication technologies (ICT) are inherently sociotechnical, situated, and socially shaped. The seven key of social informatics concepts [3] are:

- The context of ICT use directly affects their meanings and roles;
- ICT are not value neutral: their use creates winners and losers;
- ICT use leads to multiple, and often paradoxical effects;
- ICT use has ethical aspects;
- ICT are configurable;
- ICT follow trajectories; and
- Co-evolution of ICT system design/development/use.

3. APPLICATIONS

The social informatics have been applied to some issues that are of particular concern to designers of digital libraries. It is also applied in creating an environment for intrinsically motivated learning. The students have an opportunity to get involved in the field of social informatics and make an impact [4]. Social informatics constitutes the core of Facebook's business and

is its most valuable asset. Applications are regarded as processes and Facebook social informatics as resources similar to an operating system [5].

4. CHALLENGES

Social informatics is characterized by problems. Social informatics researcher faces specific challenges in different stages of data generation, data repository implementation, data curation, data use, and data reproducibility [6]. While the development creates more interesting problems in social informatics, it also increases the complexity. A major challenge is a lack of a coherent theory of human/system complementarity for complex task. Since humans are diverse, human-centered designing tends to be tailored, rather than mass produced or "one size fits all." The fragmentation, lack of common framework, and coverage of an extremely wide range of areas could prevent social informatics from establishing itself as a discipline. There is a danger that SI will not establish itself as an academic discipline.

5. CONCLUSION

Social informatics is a multi-disciplinary perspective which focuses on the social consequences of the design, implementation, and use of information and communication technologies (ICTs). It represents a specific approach to addressing the relationship between ICT and contemporary society.

Social informatics has developed differently in Europe, the USA, and Russia due to the state of computer technology in those places and different societal culture. It is still in its infancy. With the rise of the Internet the concept of SI is rapidly expanding. More information on social informatics can be found in the books in [7,8] and the magazine exclusively devoted to it: *Social Informatics Magazine*.

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