

Chapter 15

Role of Privacy and Trust in Mobile Business Social Networks

István Mezgár

Hungarian Academy of Sciences, Hungary & Budapest University of Technology and Economics, Hungary

Sonja Grabner-Kräuter

Klagenfurt University, Austria

ABSTRACT

New information and communication technologies and their integration extend the possibilities for people for high level collaboration independently where they are on the globe. Various groups of people can come together according to their private or business interest forming a virtual community (VC) through online social networks. Beside the positive effects of this technical breakthrough there are dangerous sides of using these high level networked systems; the personal data of the individuals can be used by other persons especially when the individual doesn't take care of them. So, privacy has now an increasingly important role in social networked environments. As trust is the base of the society there is close connection between trust and privacy. The goal of this paper is to present the role and relationships between trust and privacy in mobile (business) social networks, and to introduce the possible types of privacy threats and countermeasures in case of online social networks. A short summary on future trends in mobile social networks is also presented.

INTRODUCTION

There was always a strong need among people to share information and knowledge. This need of information exchange initiates the communication using different media both in private and

professional life. The new technologies widen the world for individuals to reach other human beings independently where they are on the globe. Various groups of people can come together according to their private or business interest forming a virtual community through social networks.

A social network (SN) is a social structure made of individuals (or organizations) that can

DOI: 10.4018/978-1-61350-168-9.ch015

be called as “nodes”, and the links that are the different types of relationships/interdependency, established between nodes. In fact, a social network is based on two parameters: nodes and links. The nodes define the content of the relationships (links) according to their theme/interest/attendance (e.g. trade financial, friends, kinship, dislike, trade, sexual relations, disease transmission (epidemiology)). An important attribute of a link is the type of information exchange/communication technology (e.g. using mobile equipment). Today social networks use web-based services, so the type of communication can modify the behaviour of nodes, the communication habits of SN users.

In the generation and operation of these communities cooperation and collaboration have a significant role. On the other side these new communication technologies deeply modify traditional forms of social connections, communication and cultural habits as well. These modifications can be observed in particular in hierarchies, social rules, norms, conventions, familiarity and reputation.

A very important element of human contacts is trust. In a networked society, trust is the atmosphere, the medium in which actors are moving (Castelfranchi and Yao-Hua Tan, 2001). Trust can bridge cultural, geographical and organizational distances of members. Trust is the base of cooperation, the accepted behaviour of the human being in the society. As the rate of cooperation is increasing in all fields of life, the importance of trust is evolving even faster. In this new communication environment new methods and techniques of trust building have to be developed, as the conventional rules of face-to-face approach cannot be applied. According to different experiments the level of trust is highly influenced by the way/mode/medium of communication and by the duration of contact (Mezgar, 2005). Himmelman developed a hierarchy of partnerships (Himmelman, 1997) based on the amount of trust, time, and risk needed to establish and maintain the partnership. In Himmelman’s framework, networking, coordinating,

cooperating, and collaborating mean different concepts and are built on each other.

Privacy is another important element of using networks. Privacy is the right of an individual to be secure from unauthorized access, disclosure and being able to control information about oneself that is contained in different documents/files, databases or Web-pages. The degree/rate of privacy usually correlates with trust – the stronger privacy is, the higher is the level of trust.

Online Social Networks (OSNs) show an extremely quick expansion today. According to Wikipedia (Wikipedia, 2011 Sept.) the number of members of some OSNs are the following (in millions); Facebook – 640, MySpace - 100, Tagged - 100, Twitter - 175, LinkedIn - 120, XING – 8. The rate of connecting to OSNs by mobile (smart) phones is about 20% of the members and the role of privacy is increasing as well (this is shown by providers’ announcements on developments in their privacy rules and software abilities).

Chapter one gives a short overview on online social networks (OSNs) including business social networks (BSNs), the application trends of mobile technology both in social networks (mobile social networks - MSNs), and in business social networks (mobile business social networks - MBSNs). In the second Chapter the role of trust and privacy in the mobile business social networks is discussed and an overview is presented on privacy threats and countermeasures in OSNs. The third chapter summarizes the future trends and research directions in development of mobile business social networks.

ONLINE (BUSINESS) SOCIAL NETWORKS

Communication Technologies and Devices for Online Social Networks

Before the Web, virtual communities existed on bulletin board services (BBS). In general, there

25 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/role-privacy-trust-mobile-business/60316

Related Content

Multimedia Documents Adaptation Based on Semantic Multi-Partite Social Context-Aware Networks

Alti Adel, Roose Philippe and Laborie Sébastien (2017). *International Journal of Virtual Communities and Social Networking* (pp. 44-59).

www.irma-international.org/article/multimedia-documents-adaptation-based-on-semantic-multi-partite-social-context-aware-networks/206578

Social Networking: A Retrospective into the Trust Formation and Threats

Vladlena Benson (2015). *Implications of Social Media Use in Personal and Professional Settings* (pp. 118-130).

www.irma-international.org/chapter/social-networking/123285

Tag Cloud Reorganization: Finding Groups of Related Tags on Delicious

Alberto Pérez García-Plaza, Arkaitz Zubiaga, Víctor Fresno and Raquel Martínez (2013). *Social Media Mining and Social Network Analysis: Emerging Research* (pp. 140-155).

www.irma-international.org/chapter/tag-cloud-reorganization/73249

Crowdfunding: A Platform Fostering Open Innovation

Damjan Obal (2012). *Handbook of Research on Business Social Networking: Organizational, Managerial, and Technological Dimensions* (pp. 786-804).

www.irma-international.org/chapter/crowdfunding-platform-fostering-open-innovation/60342

Virtual Communities and Social Networking in Franchising

Ye-Sho Chen (2018). *International Journal of Virtual Communities and Social Networking* (pp. 33-44).

www.irma-international.org/article/virtual-communities-and-social-networking-in-franchising/235459