

Chapter 7

Privacy, Security, and Identity Theft Protection: Advances and Trends

Guillermo A. Francia III
Jacksonville State University, USA

Frances Shannon Hutchinson
ITEL Laboratories, USA

Xavier Paris Francia
Jacksonville State University, USA

ABSTRACT

The proliferation of the Internet has intensified the privacy protection and identity theft crises. A December 2013 report by the U.S. Department of Justice indicates that 16.6 million persons were victims of identity theft with direct and indirect losses amounting to almost \$24.7 billion in 2012 (Harrell & Langton, 2013). These startling and apparently persistent statistics have prompted the United States and other foreign governments to initiate strategic plans and to enact several regulations in order to curb the crisis. This chapter surveys recently enacted national and international laws pertaining to identity theft and privacy issues. Further, it discusses the interplay between privacy and security, the various incentives and deterrence for privacy protection, and the prospects for the simulation of the social and behavioral aspects of privacy using the agent-based modeling.

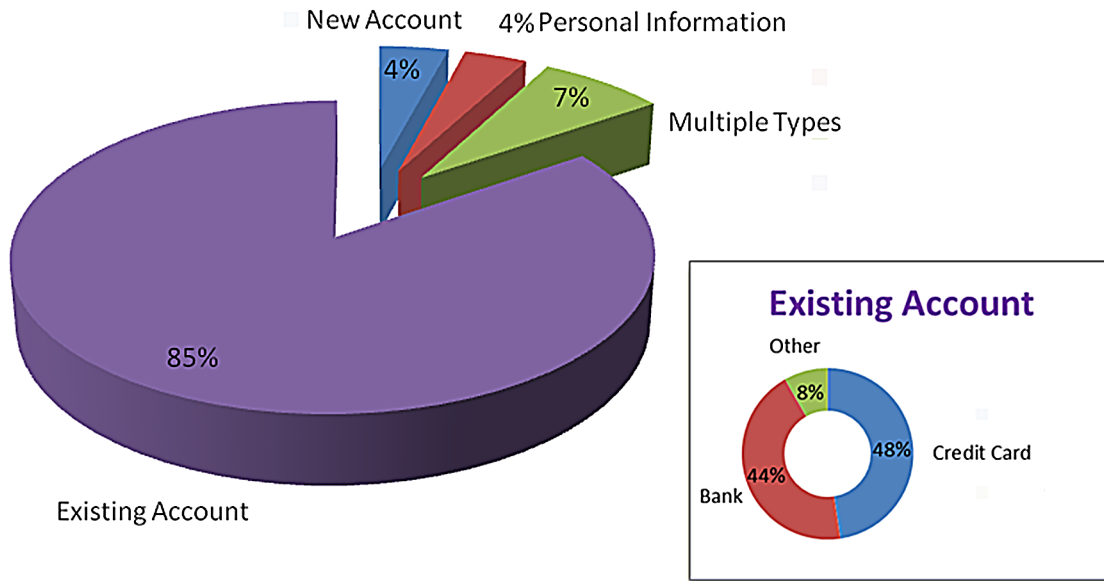
INTRODUCTION

As an extension of an earlier work (Francia & Hutchinson, 2012) on regulations and compliance pertaining to identity theft prevention, detection, and response policies, we describe recently enacted national and international laws

pertaining to identity theft. We also expound on the relationship between privacy and security, the various incentives and deterrence for privacy protection, and possible research extensions that include the social and behavioral study on privacy protection through agent-based modeling and simulation.

DOI: 10.4018/978-1-4666-7381-6.ch007

Figure 1. Types of identity theft



BACKGROUND

Identity theft is a threat that has confounded society since the biblical times. The ubiquity of the Internet and the convenience of electronic transactions have exacerbated the threat and made it even much easier to execute. A most recent report by the Department of Justice indicates staggering losses amounting to almost \$25 billion incurred due to almost 17 million cases of identity theft losses (Harrell & Langton, 2013). Snapshots of

several alarming statistics, which are gathered from the same source and are pertinent to identity theft, are shown in Figure 1 and Table 1. Figure 1 depicts the allocation of ID thefts by type. The inner chart further breaks the existing account slice into three categories: credit card, bank account, and other account.

Table 1 shows the actions taken by individuals to reduce their risk of identity theft. Note the alarming percentage of people using an ID theft protection service.

Table 1. Actions taken to reduce the risk of ID theft

Action Taken	Percentage
Checked credit report	37.9
Changed passwords on financial accounts	28.6
Purchased identity theft insurance/credit monitoring service	5.3
Shredded/destroyed documents with personal information	67.4
Checked bank or credit statements	74.8
Used identity theft security program on computer	16.6
Purchased identity theft protection	3.5

(Harrell & Langton, 2013).

9 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/privacy-security-and-identity-theft-protection/123530

Related Content

Rootkits and What we Know: Assessing US and Korean Knowledge and Perceptions

Kirk P. Arnett, Mark B. Schmidt, Allen C. Johnston, Jongki Kim and Hajin Hwang (2007). *International Journal of Information Security and Privacy* (pp. 75-86).

www.irma-international.org/article/rootkits-know-assessing-korean-knowledge/2472

Fair Electronic Exchange Based on Fingerprint Biometrics

Harkeerat Bedi and Li Yang (2009). *International Journal of Information Security and Privacy* (pp. 76-106).

www.irma-international.org/article/fair-electronic-exchange-based-fingerprint/37584

Artificial Intelligence in the Context of Digital Marketing

Suraj Juddoo (2023). *Confronting Security and Privacy Challenges in Digital Marketing* (pp. 119-139).

www.irma-international.org/chapter/artificial-intelligence-in-the-context-of-digital-marketing/326394

Intrusion Detection and Information Security Audits

Terry T. Kidd and Robert K. Hiltbrand (2007). *Encyclopedia of Information Ethics and Security* (pp. 411-417).

www.irma-international.org/chapter/intrusion-detection-information-security-audits/13504

Privacy Preserving Fuzzy Association Rule Mining in Data Clusters Using Particle Swarm Optimization

Sathiyapriya Krishnamoorthy, G. Sudha Sadasivam, M. Rajalakshmi, K. Kowsalyaa and M. Dhivya (2021). *Research Anthology on Privatizing and Securing Data* (pp. 1096-1116).

www.irma-international.org/chapter/privacy-preserving-fuzzy-association-rule-mining-in-data-clusters-using-particle-swarm-optimization/280218