Privacy and Policy Issues with the Growth of Online Retail

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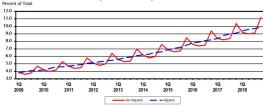
Objectives

- Examine online retailers' privacy policies, specifically its attributes, perceived risks, and the social attitudes towards it
- 2. Provide policy suggestions due to the social attitude

Motivation & Background

There is an increasing magnitude of online shopping (Fig. 1) in which consumers input a lot of private information (birthdate, credit card information, address). The security of this information and how it is used or handled is important. Companies can also alter consumers' purchasing behaviour via the data they collect about individual customers, which has raised ethical concerns.

Estimated Quarterly U.S. Retail E-commerce Sales as a Percent of Total Quarterly Retail Sales 1^{st} Quarter $2009 - 4^{th}$ Quarter 2018



The Quarterly Retail E-Commerce sales estimate for the first quarter of 2019 is scheduled for release on May 17, 2019 at 10:00 A.M.

Figure 1: Quarterly US retail e-commerce sales as a percent of total quarterly retail sales from 2009 to 2018^[1]

Sources

[1] U.S. Census Bureau. (2019, March 19). *Quarterly Retail E-Commerce Sales 4th Quarter 2018* (Report No. CB19-15). Washington, DC: U.S. Government Printing Office.
[2] Cranor, L. F., & McDonald, A. M. (2008). The Cost of Reading Privacy Policies. *A Journal of Law and Policy for the Information Society.*[3] Muneer, A., S, R., & Z, F. (2018). Data Privacy Issues and Possible Solutions in E-commerce. *Journal of Accounting & Marketing,07*(03). doi:10.4172/2168-9601.1000294

Current Actions & Attitudes

Consumer Anticipated Risk

Privacy policies use vague language that reserve broad rights to collect, use, and share consumer data. They are hard to read, read infrequently, and do not support rational decision making (Table 1). The lack of control over secondary use of information reflects consumers' perceived ability to control how their information is used for other purposes after their retail transaction.

Table 1: Annual time estimates for reading and skimming online privacy policies^[2]

Estimate	Individual time to read	Individual time to skim	National time to read	National time to skim
Lower bound	181 hours / year	81 hours / year	39.9 billion hours / year	17.9 billion hours / year
Point Estimate	244 hours / year	154 hours / year	53.8 billion hours / year	33.9 billion hours / year
Upper bound	304 hours / year	293 hours / year	67.1 billion hours / year	64.8 billion hours / year

Data Breaches via Cyberattacks

Despite the implementation of privacy policies, companies continue to suffer from data breaches due to cyberattacks, and with an increased magnitude. The increase of breaches in 2012-2014 especially led to an increase of 74 million records exposed (Fig. 2).

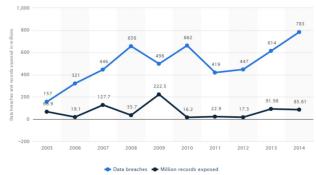


Figure 2: Annual number of data breaches and exposed records in the United States from 2005 to 2014 (in millions)^[3]

Policy Recommendations

Education for Consumers

Education on the risks associated with online retail and having online security awareness will help combat some of the risk and perceptions of the issue. The following topics are especially necessary:

- Topics
 - Password security
 - Site authentication
 - User rights
- Sources of education and public exposure
 - Schools
 - Professional companies
 - PSA's
 - General public outreach

Policy Pressure on Companies

More pressure needs to be put on companies through the agency and policies to ensure the safety and security of customers. This can be done via:

- Consumer protection & empowerment via R&D
- Implement policies and laws → hold companies liable regarding security of consumer financial data
- Set greater legal precedent
- Establish consumer protection authorities → take action against attacks and abuse of consumer data

Potential Software Solutions

- P3F
- Visualizations for policies