

Protecting Personal Data: The Economic Impact of Regulating the Internet

by David Descôteaux and Berin Szoka



With the explosive growth of the Internet and Canadians' expanding use of it, questions about privacy protection are increasingly taking centre stage in public debates. For example, following recent revelations according to which an American security agency obtained private data from big telephone and Internet companies, Canada's Privacy Commissioner Jennifer Stoddart expressed her concern about the scope of information collected by the American government.¹

These concerns are justified—after all, the government is the organization that has the greatest access to our personal information. It is essential, though, to distinguish between the protection we might hope for from the organs of government and the regulations that apply to private companies with which we transact freely for products and services of our choosing. Even if protecting personal information is an issue in both cases, the dynamic is not the same. It is the latter subject that concerns us in this *Economic Note*.

The Economic Benefits of the Internet

In order properly to measure the costs and benefits involved, the discussion surrounding the protection of personal information on the Internet must include all of the consequences of regulation. This is especially important insofar as the development of the Internet provides us with substantial economic benefits.

As we know, usage of the Internet and its innovations allows companies—especially SMEs and start-ups—to grow and to conquer international markets with relatively limited resources.²

Internet-related economic activity makes up a larger and larger share of the market. In 2011, it accounted for 3.4% of the GDP of 13 countries studied by the McKinsey Global Institute, including Canada, and for 11% of GDP growth over the previous five years.³

Consumers also benefit from the Internet and related economic activity. McKinsey estimated that the average household received a value of 456 euros from Internet services each year. As for the costs (for the services themselves, as well as those related to the potential abuse of personal information or to intrusive advertisements), they amounted to 152 euros, leaving a net value of 304 euros.⁴ The Conference Board of Canada applied McKinsey's estimates to the Canadian situation and calculated that the net value of Internet use in this country was \$415 per household, or \$5.5 billion in total.⁵

Costs and Benefits of Regulation

The loss of private information—especially in the case of identity or credit card theft—is costly, in addition to undermining the confidence required for the conduct of business. Losses due



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Table 1
Net annual value of Internet use

Per household in 23 countries
Value: 456 euros
Costs: 152 euros
Net value: 304 euros
Per Canadian household
Net value: \$415

Sources : McKinsey & Company, *Consumers Driving the Digital Uptake*, September 2010, p. 15; Conference Board of Canada, *Exploring the Iceberg: The Economic Impact of Privacy Policy, Laws and Regulations on Commercial Activity*, February 2012, p. 23.

to this kind of fraud and to the time required to correct such situations have been estimated at over \$500 million a year in Canada. A single case of data theft (like the theft of a customer's personal information) can entail costs in excess of US\$200 for an American company.⁶ When an entire data bank containing information on thousands of customers is hacked, the potential financial losses are therefore enormous.

A climate of confidence benefits everyone, companies and consumers alike, and is a necessary condition for the continued growth of this industry. A well-defined regulatory framework can help keep personal information properly protected.

But while regulation can have certain benefits, it also has costs. Companies must devote financial and human resources to making sure they comply with all the laws and regulations imposed by governments, to the detriment of their other activities. According to the Canadian Federation of Independent Business, these compliance costs amount to \$5,942 per employee, per year, for Canadian companies with fewer than 5 employees.⁷

These administrative costs can result in more expensive goods and services, or less diversity for consumers. Regulation also has an impact on investment and innovation. Businesses have to use resources that cannot then be used for other purposes, like investing in new equipment or exploring new markets. Inefficient or excessive regulation therefore not only undermines productivity within a given company, but also discourages entrepreneurs from growing their businesses.⁸

More precisely, the Conference Board estimates that the administrative costs of current regulations regarding privacy protection add up to \$3.8 billion a year for Canadian companies. By 2030, without taking into account any additional costs that would result from a heavier regulatory burden, this will have the effect of reducing cumulative nominal investment in Canada by \$18.8 billion.

These costs will be spread among the various economic sectors, but will more severely impact the retail sales and financial services sectors. This reduction in the amount of capital available for investment will have a negative effect on productivity in the economy, resulting in a lower GDP in 2030 as well as reduced profits for businesses and lower incomes for households and governments.⁹

In 2011, Internet-related economic activity accounted for 3.4% of the GDP of 13 countries studied.

In order to minimize this negative impact, legislators cannot rely solely on good intentions, but must also take into account the impact of regulation on the dynamism of the Internet and on the economy as a whole. Today, the use of personal data in various ways is an essential aspect of business management, and limiting this usage would have consequences. The case of advertising provides a good illustration of the need to weigh such tradeoffs.

Advertising: The Heart of the Internet Business Model

The business model of many companies that offer online services—like newspapers, email services and social networks—consists in offering those services free of charge and relying on advertising revenue. Cookies, web beacons and other files can be used to collect and store data on users who visit their websites. These data can then serve to create profiles in order to provide targeted advertising that coincides with users' interests.¹⁰ While such practices can seem problematic in terms of privacy protection, they allow businesses to be more efficient.

Internet advertising is a growing source of revenue for these companies. In February 2008, a study showed that 56 of the 100 most visited websites in the world featured advertising. These 56 sites represented 86% of all web pages visited. Twenty-six of them, accounting for 77% of

all pages seen, likely earned most of their income by selling advertising space.¹¹

In Europe, where harsher regulations were applied to protect the privacy of consumers on the Internet, limits were imposed on the ability of advertisers to collect data for the purpose of offering targeted advertising.¹² According to researchers from the University of Toronto and MIT, these regulations have reduced the effectiveness of advertisements by an average of 65%. As a consequence, an advertiser who wants to achieve the same result as before in terms of the purchase intentions of Internet users must purchase 2.85 times as many advertisements.¹³ Consumers could thus be exposed to more advertisements, which would be less effective, making it more difficult for an advertiser who is trying to reach a certain target audience.

The European legislation has led to a reduction in venture capital investment of around \$249 million in nearly nine years.

The researchers also note that if such regulations were applied in the United States, American advertisers would have to spend nearly \$15 billion more than they currently do in order to achieve the same effectiveness in terms of purchase intentions.¹⁴

The fact that European legislation regulates the electronic collection and use of personal data more strictly than elsewhere in the world has also led to a reduction in venture capital investment in European online advertising companies of around \$249 million in nearly nine years.¹⁵

In Favour of an Entrepreneurial, Economic Perspective

Regulating the Internet in order to protect privacy answers a legitimate need, that of protecting Internet users. However, any new regulation can modify the economic ecosystem to which it is applied. Concerns arising from potential privacy threats must therefore be weighed against the potential for innovation and growth, current and future jobs, and the benefits consumers enjoy thanks to the dynamism of the Internet.

Table 2
Current regulations
Protecting Personal Data on the Internet

Administrative costs per year:

\$3.8
billion

Effect on cumulative nominal investment in Canada by 2030:

-\$18.8
billion

Source: Conference Board of Canada, *Exploring the Iceberg: The Economic Impact of Privacy Policy, Laws and Regulations on Commercial Activity*, February 2012, p. 31.

While legislators must be sure to take into account the economic consequences of a heavier regulatory burden, entrepreneurs are already hard at work. At the moment, several Internet companies are competing to win the confidence of Internet users by developing and offering them tools to protect their data. We are also witnessing the birth of numerous companies specializing in privacy protection on the Internet.¹⁶

A recent report by a House of Commons committee in Ottawa recognized “the need to strike a balance between social media companies’ desire to innovate and experiment with new products and services, and the appropriate level of protection for Canadians’ personal information,” as expressed by numerous witnesses who appeared before the committee.¹⁷

The report does not recommend that the government impose any new rules, but rather that it take steps to improve compliance with existing regulations. It suggests, for example, that the Privacy Commissioner establish guidelines to help businesses comply with Canada’s existing privacy laws, among other things to ensure that the terms of use binding an Internet user and a business offering an online service be written in language that is “clear and accessible.”¹⁸

Conclusion

A poll commissioned by the Office of the Privacy Commissioner of Canada earlier this year revealed that 71% of Canadians believe that the protection of personal information is one of the most important challenges the country will face over the next ten years.¹⁹

Concerns arising from potential privacy threats must be weighed against the benefits consumers enjoy thanks to the dynamism of the Internet.

In the discussions on this subject that will inevitably take place, we should make sure to take into account the less visible effects of regulation, especially its economic impacts, in order to strike a balance between the legitimate need to protect privacy and the maintenance of a climate that is favourable to investment, innovation and job creation in this industry that is so crucial for our future.

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