

# Measuring the True Cost of Privacy: A Rebuttal to "Privacy, Consumers, and Costs"

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## **Executive Summary**

The policy debate surrounding privacy is already murky, as there exists little agreement on the scope of the issues, the problems and how to resolve them, and even how privacy is defined. Robert Gellman's latest contribution to this debate, rather than lending clarity to the issues surrounding privacy, largely serves to further muddy the waters. This is unfortunate, because, if one takes the time to sift through the ill-defined terms, overly-simplistic arguments, and unsubstantiated assertions, there are points worthy of further consideration.

This paper seeks to provide its' readers with an analytical sieve to help filter through the contemporary privacy debate. By reviewing Gellman's recent paper "Consumers, Costs, and Privacy," it will be demonstrated that the umbrella approach to privacy -- categorizing distinct policy concerns into a single preoccupation with privacy – while common, represents a step backward.<sup>1</sup> It will also be established that meaningful solutions to privacy problems can only be developed by clearly specifying individual policy and economic drivers. For instance, the two causal variables in Gellman's report are "commercial data sharing" and "concern for privacy" which are used to explain a wide range of outcomes from identity theft to Internet stalking and all consumer behavior.

It will further be argued that the underlying information grid buttressing today's information economy is a heterogeneous network of business practices that are not conducive to "one-size fits all" approaches. Gellman's failure to disaggregate business processes, leads him to assume without proving, that information sharing is part of an old and now discredited business model. If Gellman's assertion were true, this would completely invert our commonsense understanding of the world – that more information is better. Indeed, major tenets of decision-making theory, including those developed by the most recent winners of the Nobel Prize in economics, would be shattered.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Gellman, Robert. "Privacy, Consumers, and Costs: How the Lack of Privacy Costs Consumers and Why Business Studies of Privacy Costs are Biased and Incomplete," Washington, DC. The Digital Media Forum, March, 2002. Funded by a grant from the Ford Foundation.

<sup>&</sup>lt;sup>2</sup> The 2001 Nobel Prize in Economic Sciences was awarded to George A. Ackerlof, A. Michael Spence, and Joseph E. Stiglitz "for their analysis of markets with asymmetric information." Applications of the theories of information economics developed by these three economists have been abundant, ranging from traditional agricultural markets to modern financial markets. The Laureates' contributions form the core of modern information economics. For example, **George Akerlof** demonstrated how a market where sellers have more information than buyers about product quality can contract into an adverse selection of low-quality products. He also pointed out that information problems are commonplace and important. **Joseph Stiglitz** clarified a market adjustment whereby poorly informed agents extract information from the better informed, such as "screening" performed by insurance companies dividing customers into classes by offering a menu of contracts where higher deductibles can be exchanged for significantly lower premiums. In a number of contributions about different markets, Stiglitz has shown that asymmetric information can provide the key to understanding may observed market phenomena, including unemployment and credit rationing. **Michael Spence** identified an important adjustment involving costly actions taken by the better informed to improve their market outcome by credibly transmitting information to the poorly informed.

Specifically, it will be shown that Gellman's application of the business processes that are most conducive to "opt-in," to those that are by nature opt-out, exemplifies the danger of viewing data flows as homogeneous. Gellman inappropriately generalizes from two cases, credit reporting and Yesmail.com, in order to posit that privacy concerns are trumping efficiency concerns. Only by relying on two overly narrow cases is Gellman able to conclude that "opt-in" data restriction is not only better at satisfying non-economic consumer desires (privacy concerns and all other values), but in satisfying their consumption preferences as well.

In sharp contrast to his own assertion, the studies that Gellman criticizes in his own report demonstrate that this is clearly not the case.<sup>3</sup> Many of the benefits from commercial data flows routinely enjoyed by consumers are routinely taken for granted, just as electricity is expected to flow when an appliance is plugged into an electrical socket. Thus, a universal "opt-in" data regime – while potentially satisfying a demand for enhanced personal privacy -would likely result in the reduction or elimination of many economic benefits. This because consumers are largely unaware of the link between data flows and specific benefits, and therefore unlikely to opt in.

His deductive logic, however, is devoid of any attempt to attach relative weights to any of the various concerns he lumps together under the privacy umbrella. Instead of relying on credible social scientific research – including academically rigorous surveys – Gellman asserts the supremacy of privacy as a value.

<sup>&</sup>lt;sup>3</sup> The studies examined in Gellman's analysis are: Turner, Michael. "The Impact of Data Restrictions on Consumer Distance Shopping," (2001); Johnson, Peter A. and Robin Varghese. "The Hidden Costs of Privacy: The Potential Economic Impact of 'Opt -in" Data Privacy Laws in California," (2002); Barron, John M. and Michael Staten. "The Value of Comprehensive Credit Reports: Lessons from the U.S. Experience," (2000); and Hah n, Robert A. "An Assessment of the Costs of Proposed Online Privacy Legislation," (2001). For a more complete sample of a range of studies, see <u>www.understandingpivacy.org</u>

#### Section I Introduction and General Comments

Robert Gellman's critical analysis of several recent cost/benefit data restriction studies represents the most recent contribution to the ongoing discourse on the regulation of information.<sup>4</sup> The primary contribution of the Gellman study is its identification of a significant shortcoming in the first generation of quantitative analyses of various proposed data restriction regimes.<sup>5</sup> The absence of a complete cost/benefit accounting framework, as Gellman correctly points out, weakens the examined studies' findings as they tend to overstate the "net" total cost of implementing an "opt-in" style data restriction regime.<sup>6</sup> This happens because the studies tend to ignore the costs individuals incur when attempting to enhance their personal privacy, as well as the benefits that accrue to those members of society whose personal utility increases with the addition of subsequent layers of data restrictions.<sup>7</sup>

Despite this contribution to the ongoing debate surrounding the regulation of information, the Gellman study suffers from a number of serious weaknesses. **First**, <u>in his presentation of individual decision-making theory</u>, <u>Gellman explains all behavior as a product of an individual's desire for additional privacy in economic relations</u>. This mono-causal approach, while elegant in its parsimony, assumes too much with little support. The limitations of Gellman's claims about individual decision-making and behavior are most evident in his own attempts to calculate the costs borne by society from the absence of an "opt-in" data regime for marketing and advertising.<sup>8</sup> For instance, behavior in all cases examined by

<sup>&</sup>lt;sup>4</sup> Gellman, Robert. 'Privacy, Con sumers, and Costs: How the Lack of Privacy Costs Consumers and Why Business Studies of Privacy Costs are Biased and Incomplete," Washington, DC. The Digital Media Forum, March, 2002. Funded by a grant from the Ford Foundation.

<sup>&</sup>lt;sup>5</sup> The studies examined in Gellman's analysis are: Turner, Michael. "The Impact of Data Restrictions on Consumer Distance Shopping," (2001); Johnson, Peter A. and Robin Varghese. "The Hidden Costs of Privacy: The Potential Economic Impact of 'Opt -in" Data Privacy Laws in California," (2002); Barron, John M. and Michael Staten. "The Value of Comprehensive Credit Reports: Lessons from the U.S. Experience," (2000); and Hahn, Robert A. "An Assessment of the Costs of Proposed Online Privacy Legislation," (2001). For a more complete sample of similar studies, see <u>www.understandingpivacy.org</u>

<sup>&</sup>lt;sup>6</sup> There are two mainstream mechanisms for registering an individual's preference for having either their information shared with other entities for purposes beyond that for which it was originally collected, or for having further information shared with that individual (e.g. promotional materials). To 'opt -in," an individual must provide their affirmative consent (check a box, write a letter, vocal approval) for their information to be shared with other parties, or to be used for subsequent solicitations by the original party. Opting-out, by contrast, requires an individual to take steps (e.g. checking a box) to prevent having their information shared with other parties for commercial purposes.

<sup>&</sup>lt;sup>7</sup> Professor Alan Westin has tracked public attitudes regarding data restrictions and privacy for more than 30 years. During this time, he has witnessed a fairly stable distribution of attitudes about data restrictions among three ideal type segments – (1) privacy fundamentalists comprise 25% of the total population and distrust both government and industry with their personal information; (2) privacy agnostics comprise approximately 60% of the total population and have mixed feelings about various uses of their personal information by both the private and public sectors; and (3) the remaining 15% of the population constitute the privacy indifferent segment and are totally unengaged in the overall privacy discourse.

<sup>&</sup>lt;sup>8</sup> Although Gellman never establishes a position with respect to any particular type of data restriction regime, it can be inferred from his study that the status quo with respect to the use of non-sensitive personal information for commercial purposes (marketing and advertising) is unacceptable. To the extent that the

Gellman – the purchase of a caller ID device, having an unlisted phone number, abandoning a shopping cart online<sup>9</sup> – is explained solely by an exceedingly broad definition of "privacy concerns" encompassing everything from fear of credit card fraud to the desire to be left alone. By lumping this disparate group of concerns into a single concern, Gellman fails to link specific drivers to specific actions. For instance, fear of credit card fraud would lead an individual to restrain a very different set of information than would be the case if their primary concern were a desire to be left alone.

There is little reliable evidence of the specific privacy reasons for why people may, for instance, purchase caller ID devices or de-list phone numbers; that is, we do not know whether caller ID devices are purchased to protect individual's privacy from imposing former friends, stalking ex-spouses or telemarketers. The differences are significant. If the former two are primary reasons for the purchase of caller ID devices, then switches to an opt-in regime will do little to alter these consumer costs. By conflating all privacy needs as a demand for privacy in commercial relations it is possible for Gellman to add the purchase price of all caller ID devices in the United States to the total annual charges of all individuals who have an unlisted and/or unpublished phone number as part of the "net" total cost of <u>not</u> having an "opt-in" data restriction regime. While such "privacy toll" calculations may be advantageous short-term, ultimately, they cannot stand up to rigorous academic scrutiny.

<u>The second major flaw in the Gellman study is its assertion that, as a group, all of the economic studies he critiques fail t o consider newer, more privacy-sensitive business models, and instead focus on "old models of doing business.</u>"<sup>10</sup> This critique is an assertion and is substantiated by only two questionable counter-examples. The first example of a newer, privacy friendly model is, in fact, the decades old model of consumer reporting. The problem with this example is that, while the credit information is subject to an opt-in regime, individuals have no choice regarding participation. The second example cited by Gellman is the "yesmail.com" infomediary model, whereby consumers provide Yesmail.com with contact information and data about their preferences, and in exchange are promised that they will only receive e-mail on subjects that they have consented to receive.

The two most immediate problems with citing this model as an example of where business is headed (or should be headed) are as follows: First, these models have evolved in an online setting, are relatively new and therefore

status quo regime involves industry self-regulation, then, it seems Gellman favors government regulation of information use for commercial purposes. Further, inasmuch as his invective is directed against studies focusing on the costs of opt-in data restrictions or the benefits of the status quo, it can further be inferred that Gellman favors government intervention resembling an opt-in regime in some form.

<sup>&</sup>lt;sup>9</sup> One the face of it, abandoned online shopping carts appear to be a case of pure economic privacy desires, but data is needed to assess what share of abandoned shopping carts stem from privacy concerns and what from simple browsing.

<sup>&</sup>lt;sup>10</sup> Gellman. 'Privacy, Consumers, and Costs."

unproven. Even if the infomediary model succeeds in an online environment – and the jury is still out on that – whether or not it can be transferred to the offline world remains to be seen; Second, analysis of lists of individuals who have "opted-in," contrary to conventional wisdom as espoused by many privacy advocates, is not a richer source of data with higher response rates due to a tight consumer/product fit, but typically contains primarily "shoppers" and not "buyers," and, therefore, yields a lower response rate than the status quo opt-out model.<sup>11</sup>

<u>Gellman's study further suffers as a result of its Internet-centric focus.</u> Despite the fact that the vast majority of the most harmful abuses of personal information occur in the traditional offline world – Gellman cites the Internet as the major culprit of privacy violations and as the shining example of how privacy concerns cost businesses "billions of dollars in lost revenues."<sup>12</sup> Indeed, the most comprehensive empirical study of identity theft to date, conducted by the California Public Interest Research Group (Cal PIRG) in May of 2000, argues that less than 2% of all cases of identity theft examined "could potentially" be linked to transacting or information sharing online.<sup>13</sup>

This finding was further corroborated by a recent study completed by the U.S. General Accounting Office (GAO) that found approximately 3% of identity theft crimes were attributable to online activities.<sup>14</sup> Despite this, Gellman's study is replete with anecdotal evidence – the posting of sensitive information in public user groups, the digitalization of public record data, Internet stalkers, identity thieves, and computer hackers posting thousands of credit card numbers on the Web – designed to scare readers and to convince them that the Internet is a dangerous place.

<u>Finally, the Gellman study could be substantially strengthened by toning</u> <u>down the rhetoric and re-thinking some of its claims</u>. Arguing, as Gellman does, that all "industry" studies are biased and have no credibility because they were generated by industry sources or were funded by industry concerns simply has no merit. Undeniably, there have been some cases of industry studies drawing self-serving conclusions. However, a vast majority of industry studies, which

<sup>&</sup>lt;sup>11</sup> Benner, Janine. 'Nowhere to Turn: Victims Speak out on Identity Theft," California Public Interest Research Group (CALPIRG). May 1, 2000.

<sup>&</sup>lt;sup>12</sup> Gellman cites a study conducted by A.T. Kearney attempting to estimate the total lost sales revenue from virtual shopping carts abandoned online. Interestingly, despite its being an industry study, no attempt is made in the Gellman report to justify the methodology employed in the cited study. Furthermore, and consistent with Gellman's mono-causal approach to the world, the entire phenomenon of abandoning shopping carts is explained by "concerns for privacy" and not other variables such as "changed my mind" or "security concerns." This is allowed, however, given Gellman's extremely broad definition of "privacy concerns" that conflates matters of personal safety (Internet stalking, hackers, phreakers, etc.), other security concerns (transmission of credit card information through online channels) and privacy (desire to be left alone). Gellman, Pg. 16, Section II, A. A.T. Kearney, *Satisfying the Experienced On-Line Shopper* (2000).

<sup>&</sup>lt;sup>13</sup> Benner, Janine. CALPIRG. May 2000.

<sup>&</sup>lt;sup>14</sup> General Accounting Office. 'Identity Theft: Prevalence and Cost Appear to be Growing,' GAO Report to Congressional Requesters, GAO-02-363. March, 2002.

often go unnoticed by the mainstream press, produce valuable and accurate insights used to guide investment and employment decisions by firms as well as policy decisions by government actors. That the studies Gellman critiques emanate from industry sources doesn't allow them to be dismissed. By making this assertion, Gellman attempts to discredit their conclusions through an *ad hominem* attack.

With respect to the magnitude of the cost claims made in Gellman's study, while there are political reasons for making radical claims, the more compelling arguments in his work are jeopardized by other truly audacious assertions. For instance, Gellman goes so far as to suggest that " …hundreds of billions of dollars in companies with business models based on exploiting personal information obtained from Internet users …" were squandered because investors wrongly believed that " …personal data could be exploited without limit."<sup>15</sup> While difficulties with serving banner ads and the rapid decline of online advertising expenditures certainly testifies to a degree of over-confidence in real-time data-driven target marketing, other factors, including the complete absence of back-office and fulfillment capacities, and the inability of many online enterprises to monetize their services, most likely have more to do with the Internet retailing meltdown than do failed designs to "endlessly exploit personal information."

To summarize, Gellman's study contributes to the broader understanding about the costs and benefits of certain types of data flow regimes by highlighting the need for a more complete accounting ledger – one that includes costs borne by consumers seeking to compensate for perceived deficiencies in extant data flow regimes. However, owing to his overly-broad definition of privacy concerns, and his mono-causal explanation of individual decision-making and behavior attributing every outcome to "concerns with privacy," Gellman's conclusions are noticeably overstated and do not rest on solid evidence.

The legitimacy of his study is further undermined by its over-emphasis on the Internet as the root of all privacy problems, as well as the sheer audaciousness of many of his (unsubstantiated) supporting assertions, such as crediting privacy for the dotcom implosion. The use of narrower definition of privacy, a greater appreciation for other explanatory variables beyond "concern for privacy," and the jettisoning of some of the implausible ancillary arguments would make the Gellman study a stronger paper with greater policy value.

Yet, what Gellman's study does point to is the need for further and richer studies of the role of information and the nature and strength of privacy demands. If the economic cost of legislation is one criterion by which policy proposal are to be evaluated, then a careful examination of these costs remain an imperative.

<sup>&</sup>lt;sup>15</sup> Gellman, Pg. 4.

## Section II The Rebuttal: In Defense of Old Models of Doing Business

Gellman opens his critique of a "series of commissioned studies" by asserting that "the studies, and the conclusions drawn from them have serious flaws, poor definitions, and questionable methodology."<sup>16</sup> Right away, however, Gellman intentionally conflates the entire group of studies that were generated separately by unrelated academics with different institutional affiliations so as to maximize the scope of his critique. In this way, if one study from among a group of studies contains serious methodological flaws, then Gellman finds the others guilty by association. This is precisely what he does when harshly (and not entirely unjustly) critiquing one study attempting to measure compliance costs for the information technology industry.<sup>17</sup>

All studies examined in the Gellman study are fated to suffer the sins of a single study merely because the focus on the same general topic. Indeed, Gellman not only finds these studies guilty by association, but he even finds them guilty [of bias] if they are from an association. Ironically, industry studies conducted by major consultancies to the IT sector, such as Forrester Research and A.T. Kearney, when they contain conclusions agreeable to the author's implicit position, are cited without so much as a reference to potential flaws in their conclusions. Indeed, some might argue that the disparity in conclusion among the studies Gellman cites as supporting evidence (wildly different growth estimates for e-commerce and the enormous revenue loss from privacy concerns) may contain a bias attributable to potential conflicts of interest (consultancies generating studies with wildly over-stated projections designed to scare potential corporate clients and generate a demand for their consulting services).

Gellman's critique is centered on three "suggestions" contained in the commissioned studies: : (1) that consumers are irrational and cannot understand their best interest; (2) that unfettered data flows benefit consumers; (3) and that privacy can only be evaluated in terms of monetary costs and benefits. Each of these will be addressed in turn in the context of one of the studies (the ISEC/PLI distance shopping study) that was criticized by Gellman in his analysis.

<sup>&</sup>lt;sup>16</sup> Gellman, 'Section 1. Selected Shortcomings of Business Studies," Pg. 8.

<sup>&</sup>lt;sup>17</sup> In Section II, subsection D, Gellman largely rehashes a scathing critique of Robert Hahn's "An Assessment of the Costs of Online Privacy Legislation" delivered by Professor Peter Swire of the Ohio State University School of Law. Swire's full critique, in a more detailed form than the cursory presentation included in the Gellman study, is available at <u>www.osu.edu/units/law/swire1/hahn.doc</u>

## A. Consumer Irrationality and Their Unidentified Self-Interest

The ISEC/PLI distance shopping study, briefly, attempts to quantify the cost to consumers of apparel purchased via catalogs or the Internet resulting directly from the implementation of a national "opt-in" regime on the sharing of non-sensitive marketing information (name, address, purchase amount, purchase category, etc.) with third parties for commercial purposes (marketing, advertising). It assumed that catalog and online apparel retailers wanted to maintain their existing level of revenues. It further assumed that an opt-in requirement would effectively foreclose the flow of third-party data, as has been evidenced with the enactment of the opt-in requirement on the use of drivers' license and motor vehicle data. Firms engaged in target marketing rely on access to vast pools of non-sensitive third-party data to better understand who their existing customers are, and to identify groups of prospects who share attributes with their best customers.

Without access to rich pools of third-party data, online and catalog apparel retailers would know less about their current and past customers, and, as a result, would not be able to identify prospective customers as precisely. Without the "lift" provided by third-party data, catalogers and online merchants would have to increase their mailings to compensate for the diminished response rate. This would impose an additional 3.5% to 11% cost burden on this group of retailers.<sup>18</sup> It was argued that firms in this segment have a limited ability to pass these additional costs upstream – to shareholders or suppliers – based on the competitiveness of this industry segment. As such, it was concluded that the cost increase resulting from a third-party opt-in data restriction would be entirely passed along to consumers.

To the extent that consumer decision-making was addressed in this study, it was examined it in the context of the decision to purchase higher priced apparel or not. While calculating exact cross-price elasticity figures was outside the scope of the study, the ISEC/PLI study did estimate relative price-elasticities for segments of the consumer population based on existing analyses examining consumer purchase behavior online and offline.<sup>19</sup> Based on the findings of two independent consumer surveys coupled with retail environmental analyses, it concluded that economically-disadvantaged inner-city residents and rural consumers had a relatively price inelastic demand for apparel purchased from catalogs or over the Internet. This, stemming largely from the fact that these

<sup>&</sup>lt;sup>18</sup> The study employed the mean when projecting the estimated total cost to the industry. However, inasmuch as the range is contingent upon volume discount for printing and shipping, very large firms and very small firms that together comprise the bulk of revenues in this sector, are likely to be impacted more toward the 11% end of the cost continuum. This is so because large firms have exploited volume discounts, and small firms will not be bumped into a high enough level to enjoy additional discounts.

<sup>&</sup>lt;sup>19</sup> *The Business Case for Pursuing Retail Opportunities in the Inner City.* The Boston Consulting Group in partnership with The Initiative for a Competitive Inner City, June, 1998; *The Inner City Shopper: A Strategic Perspective.* A special report by PricewaterhouseCoopers and the Initiative for a Competitive Inner City, January, 1999.

markets tend to be grossly underserved by traditional brick-and-mortar apparel retailers, and those that are in the segment typically sell lower quality products at inflated prices. Thus, consumers in these markets rely on catalogs as their primary means for purchasing apparel at a rate as high as 75% above the national average.<sup>20</sup> Continued consumption with escalating unit prices, then, is not irrational when faced with the existence of no suitable alternatives.

For Gellman to infer that the type of consumer behavior posited in the ISEC/PLI study is irrational is simply wrong. For him to infer that the study "suggests" consumers don't understand their own best interests is silly. In fact, nowhere in the text does the ISEC/PLI study take a position on any particular data restriction, nor does it prescribe a policy as being in the best interests of the general population. Given the absence of any quantitative work outside the financial services sector at the time the study was conducted (2000 - 2001), its' stated objective was to create a benchmark for purposes of debate in an entirely unrelated industry segment. It is important to note that at the time, the national privacy discourse was entirely devoid of any quantitative discussion concerning the cost of various proposed data restriction regimes. The ISEC/Privacy Leadership Initiative study, then, represents the first generation of research in this vein. While the analysis could be more refined, this does not obviate the fact that there are real costs associated with broad "opt-in" legislation that cannot be swept aside as easily as Gellman would have done. In fact, even Gellman has recognized that "... the cost of privacy is a legitimate issue."<sup>21</sup>

## **B.** Consumers Benefit from Unrestricted Information Flows

Regarding Gellman's second inferred "suggestion" from the group of "commissioned studies," -- that consumers benefit from the 'unrestricted' flow of information – is the central thrust of the ISEC/PLI distance shopping study. With that said, however, a caveat is necessary. To cast the American information system as relatively unregulated, as Gellman has, would be entirely inaccurate.<sup>22</sup> A massive body of law already regulates the flow of all kinds of data in the United States, especially sensitive financial, medical and children's data that citizens care the most about.<sup>23</sup> This substantial regulatory framework is supplemented by significant attempts at industry self-regulation, most of which is binding,

<sup>&</sup>lt;sup>20</sup> Ibid.

<sup>&</sup>lt;sup>21</sup> Gellman. Section I, Pg. 8.

<sup>&</sup>lt;sup>22</sup> In the Section titled 'Costs to Businesses of Not Protecting Privacy," Gellman begins by arguing 'The *absence* of privacy rules imposes expenses on businesses that many industry-sponsored studies ignore when calculating the costs of privacy." Gellman, Pg. 4. This theme is repeated throughout the study. Given the frequency with which Gellman repeats this perspective of the U.S. data regime, one can easily infer that Gellman views the U.S as relatively lax with respect to privacy.

<sup>&</sup>lt;sup>23</sup> See Sandra Bauman. 'Privacy Concerns Related To Distance Shopping," *Wirthlin Worldwide* in May 2001 on behalf of The Direct Marketing Association. These findings were presented to the House Subcommittee on Commerce, Trade, and Consumer Protectino that same month. See www.wirthlinworldwide.com.

particularly when it is embodied in a firm's privacy notice. In fact, the Electronic Privacy Information Center (EPIC) makes a fair amount of money by simply collecting and binding the body of U.S. federal and select international privacy laws that comprise the national information regime. Excluded from the EPIC compendium is the substantial body of supplementary state laws, which, if included, would result in a multi-volume product thousands of pages in length.

It could plausibly be inferred from the ISEC/PLI study on data restrictions and apparel retailing that the likely costs of imposing an "opt-in" requirement on the use of third-party data for commercial purposes will exceed the likely benefits that may accrue to some U.S. citizens. This is very different from saying that data flows should never be restricted because they always benefit consumers.<sup>24</sup> That is patently false, and to infer it from the ISEC/PLI study reflects flawed logic as it could only be derived through a complex web of non sequiturs.

## C. Costs & Benefits of Privacy Can Only Be Monetized

Gellman's third and final inferred "suggestion" -- that the costs and benefits of data restrictions can only be measured in monetary terms -- is somewhat more puzzling than are the previous two. To begin with, several of the studies address a range of benefits – monetary and non-monetary - stemming from the responsible use of non-sensitive personal information for commercial purposes. Cynthia Glassman identifies saved person hours resulting from a more efficient data sharing scheme, the ISEC/PLI distance shopping study examines the twin benefits of convenience and greater product choice (not to mention product reliability, better customer service, and higher product quality as other non-monetary benefits).<sup>25</sup> The Johnson and Varghese study even examine employment and housing affordability issues relating to the implementation of an "opt-in" requirement on the commercial use of third-party data.<sup>26</sup>

A restrictive privacy regime may be found to be very expensive but will be implemented nonetheless. Such would be the case in a society that places greater value on privacy than many other values – material and non-material alike. But it does remain the case that material costs are one dimension of privacy-efficiency trade-offs, and as such must be examined.

<sup>&</sup>lt;sup>24</sup> Gellman. Executive Summary, Pg. 3.

<sup>&</sup>lt;sup>25</sup> "Customer Benefits of Information Integration by Financial Services Companies." Cynthia Glassman, Ernst & Young LLPF for The Financial Services Roundtable. According to the study, the ability of the Roundtable member companies to appropriately use information produces annual savings of \$195 per year for an average customer household, or \$17 billion per year. It also saves an average customer household four hours per year, or 320 million hours per year. Time savings and convenience are examples of nonmonetary benefits attributable to the responsible use of third-party data.

<sup>&</sup>lt;sup>26</sup> Johnson and Varghese. "The Hidden Costs of Privacy," (2002).

Strictly for analytical purposes, there are very valid reasons to attempt to monetize the potential costs and benefits from various proposed data restriction regimes. Measuring variables in a common unit allows for diachronic and synchronic comparative analysis (comparisons across time and across borders). Thus, it becomes possible to compare how much certain groups of consumers (the elderly in Florida) may be affected by a change in how information is regulated with other groups (senior citizens in Brussels). This is, in fact, what the Staten and Barron paper was attempting to do in the context of credit scoring in Australia and the U.S. under two radically different data regimes.<sup>27</sup>

The larger problem remains attempting to quantify the benefits resulting from different data regimes. Clearly, these benefits wouldn't be distributed evenly across all members of society. The privacy fundamentalists and privacy indifferent in Alan Westin's taxonomy are unlikely to derive many benefits at all, if any, from even the most restrictive privacy regime.<sup>28</sup> Furthermore, as discussed above, many consumers enjoy benefits from data flows without knowledge of the benefit/data flow link. The first step, then, is to determine precisely who will benefit from additional privacy restrictions in the context of marketing and advertising. Assuming it is possible to generate some crude approximation based on refined segmentation analysis, ascertaining how much each individual will benefit is an impossible task, as it is based on an intangible variable known as "utility."

Interpersonal comparisons of relative gains to utility from each additional unit of privacy enhancement (measuring how much more I enjoy additional privacy legislation versus my neighbor) is impossible, and can only be roughly estimated through a proxy measure – such as a monetary unit. Thus, while I may not be sure in utiles how much I gain from a national "opt-in" data restriction for marketers, I do know that it is far less than \$1 million per year, and is likely far less than \$100 per annum as well. As such, if I am likely to incur costs in excess of that amount – based on the best available information – I would be unlikely to favor such a regime if I were thinking rationally. Privacy is, of course, a highly subjective and emotional topic about which there is little agreement. My neighbor's threshold for privacy may be significantly higher than mine and she would, as a result, likely tolerate a much larger financial burden to enhance her sense of privacy.

While no quantitative studies have been conducted measuring the benefits of additional privacy regulations, anecdotal evidence suggests that most members of the "privacy agnostic" cohort don't place a high monetary value on additional regulations on non-sensitive personal information.<sup>29</sup> For instance,

<sup>&</sup>lt;sup>27</sup> Barron and Staten. 'The Value of Comprehensive Credit Reporting,' (2000).

<sup>&</sup>lt;sup>28</sup> Westin, Alan. 'Intrusions: Privacy tradeoffs in a free society." Pgs. 8 -19. *Public Perspective*. November/December 2000.

<sup>&</sup>lt;sup>29</sup> Privacy agnostic (the majority of consumers; those who follow privacy issues and act on them to varying degrees), privacy indifferent (about 10% of the population; those who are uninterested or unconcerned

whereas only a small fraction of respondents to a recent survey conducted by Wirthlin Worldwide indicated that they had been asked to divulge sensitive information, in all cases, a majority of those who were asked actually shared that information. The same study also found that, with the sole exception of social security number, a significant majority of consumers believed that sharing non-sensitive personal information was *necessary* for a broad range of transactions, and they were *comfortable* sharing that information as well.<sup>30</sup> Further, there is a well-established pattern providing consumers an incentive to share their information using such mechanisms as product rebates, point of purchase discounts, and even the prospect of coupons for unspecified products.

This practice is best captured in the now oft-heard quip that "...85% of all Americans would opt-out of having their information shared, ... but of those, 85% would sell their D.N.A. sequence for a free Big Mac." If this were true, then a rational economist could infer that nearly 70% of all Americans value their sensitive genetic coding at a monetary value below \$2.00. Since this is clearly not the case (one hopes), there is a great opportunity to do additional research in the area of quantifying the benefits from various forms of information regulations. However, to criticize a study that explicitly states *"This paper focuses on costs associated with legislation that would severely limit or prohibit the use and disclosure of data flows"* strikes me as unreasonable and unfair.<sup>31</sup> This is particularly so when a claim is made by the author of the study in question that *"In the debate surrounding information sharing, it is important to weigh carefully the benefits that would come from increasing the privacy of consumer information against the extra costs that consumers would have to pay if companies could no longer use that information to understand what products appeal to consumers."<sup>32</sup>* 

## D. Response to Gellman's Specific Critique of ISEC/PLI Study

Gellman's main critique of the ISEC/PLI distance shopping study is that the study assumes that the catalog industry will remain relatively unchanged in the future, and that established business methods will continue to be the most effective in the future. Gellman continues his critique by asserting: (1) that no careful consideration is given to alternative ways of finding customers; (2) insufficient attention is paid to Internet-driven changes to the [catalog apparel retail] market; and (3) no consideration is given to the *fact* that consumers may change the way they shop.<sup>33</sup> Each of these pointed criticisms will be addressed in turn below.

about privacy issues and do not act on them), and privacy fundamentalists (about 25% of the population; those who trust neither business nor industry, harbor deep privacy concerns and take steps to address those concerns) are terms developed and used by Professor Alan Westin. See Westin, et. al.

<sup>&</sup>lt;sup>30</sup> Bauman, Sandra. 'Privacy Concerns Related to Distance Shopping." *Wirthlin Worldwide*. July 2000 (Qualitative); May 2001 (Quantitative).

<sup>&</sup>lt;sup>31</sup> Turner, Pg. 13.

<sup>&</sup>lt;sup>32</sup> Op. Cit.

<sup>&</sup>lt;sup>33</sup> Gellman. Section I, Subsection B, Pg. 10.

# 1. Absence of Alternative Marketing Models

Gellman asserts that "...if privacy were suitably protected or were not affected by new methods of finding customers, catalog merchants might attract more business from privacy conscious consumers who would buy without having their data collected, compiled, or sold."<sup>34</sup> This assertion is value-laden (assumes privacy in marketing and advertising is currently unsuitably protected), and assumes that privacy conscious consumers constitute a large market for apparel retailers. Whether or not individual privacy is suitably protected with respect to the commercial use of personal information is an open debate, with no clear consensus on either side (assuming there are only two sides). However, if a firm has stated a privacy policy, then it is enforceable by the FTC and they have exercised their enforcement power. Further, if more efficient alternative models for direct marketing and advertising are developed, then firms in a competitive industry have a strong incentive to deploy them.

Gellman alludes to Yesmail.com as the likely future course for direct marketing, including catalog and Internet apparel retailing. While the market may ultimately evolve along this path, there is little evidence currently to suggest that this outcome is a foregone conclusion. Permission marketing and the use of infomediaries has not demonstrated enough success to force a paradigm shift in direct marketing and advertising. In fact, many infomediaries and permission-based online retailers were victims of the dotcom implosion (certainly not because they weren't privacy sensitive). It is likely that Godin, Hagel and Singer were the biggest beneficiaries of that particular movement, as the royalties they collected from their books on permission marketing and infomediaries likely exceeds the total revenues from all infomediaries, past and present.<sup>35</sup>

# 2. Underemphasizes Impact of Internet on Direct Marketing

Internet retailing, despite its remarkable growth rate, remains an incidental component of the larger retail sector. It is estimated that online sales comprise approximately 2% of total retail sales in the U.S.<sup>36</sup> Given the overall size of consumer retailing in the U.S., approximately \$3.4 trillion in 2000, the Internet retail segment is not altogether insignificant.<sup>37</sup> With that said, assuming, as Gellman does in his own study, the Internet is revolutionizing the way goods and services are sold and the way consumers interact with retailers is unfounded.

<sup>&</sup>lt;sup>34</sup> Gellman. Pg. 10.

<sup>&</sup>lt;sup>35</sup> Godin, Seth and Don Peppers. *Permission Marketing: Turning Strangers into Friends, and Friends into Customers.* (1999); Hagel, John III and Marc Singer. *Net Worth: Shaping Markets When Customers Make the Rules.* Harvard Business School Press, Boston. 1999.

<sup>&</sup>lt;sup>36</sup> The DMA Statistical Factbook 2001.

<sup>&</sup>lt;sup>37</sup> The DMA Statistical Factbook 2001

Gellman attributes \$18 billion in lost Internet retail sales in the U.S. alone to privacy concerns, as well as another \$8 to \$10 billion to lost productivity costs as a result of hundreds of millions of interconnected consumers downloading billions of pieces of unsolicited commercial e-mail (also know as "Spam"). This cost calculation, it seems, is based on a uniform wage rate for every Internet user on the planet and the further assumption that the opportunity cost for time spent downloading spam is always a more productive function. In other words, Gellman assumes school buses aren't being driven, buildings aren't being constructed, and surgery is not being conducted worldwide as a result of the global spam glut. This assumption also precludes a scenario in which an Internet user would actually "multi-task" and engage in a productive activity while waiting for their email to download, or that they were downloading their e-mail during their own leisure time, which would result in a much lower productivity loss if that were the case. Even if he adjusted his calculation by 10% to allow for wage differentials or multi-tasking, it would yield a savings of nearly \$300 million. As a result of his unrealistic *ceteris paribus* assumption, Gellman's "privacy toll" is substantially overstated.

Gellman's solution to this problem, not surprisingly, is the Internet. Interestingly, the problem and the solution are one and the same. The new capabilities of the Internet provide traditional marketers with new tools and a new forum for interacting with their customers. These new technologies make possible permission marketing, as evidenced by the success of yesmail.com (and its alleged 5% to 20% response rates). Of course technological innovations are only positive if they are not abused, as Gellman warns they may be with respect to surveillance technologies such as face recognition and other biometric identification devices. Gellman concludes his endorsement for permission marketing by acknowledging that although old business models are inappropriate, and the future clearly can be seen in permission marketing, it is not the purpose of his study to suggest how to restructure the marketing industry.<sup>38</sup>

It is fair to say that some form of permission marketing may prove to be an efficient model for market making on some media in some circumstances. There are many contingencies involved (such as the nature of the product, the target consumer, etc.) and the model is still relatively young; meaning that the ability to assert transferability of the model across all media and further assert that this model will succeed is extremely limited.

With respect to the ISEC/PLI study, Gellman falsely portrays the relative lack of analysis of Internet marketing models as an attempt to ignore market dynamics for the sake of preserving the status quo. And though Gellman cites a full paragraph from the ISEC/PLI study as evidence that alternative methods of marketing are arising, he ignores the context and fails to recognize that not just a

<sup>&</sup>lt;sup>38</sup> Gellman, Section II, Subsection B, Pg. 17.

single paragraph are devoted to interactive marketing, but an entire section of the paper focuses on the topic.<sup>39</sup> Contained in that section is a discussion of an emerging marketing model – multi-channel marketing. This model is unfortunately an old business model that has been enhanced with an additional channel – the Internet.

One of the primary lessons from the dotcom meltdown was that single channel marketing (a la pure play e-tailers) appears to be, so far, a failed model, and that the most successful business-to-consumer approach involves offering a consumer a choice of media for interacting with a company. Offering such a choice also permits different consumers to make different uses of information obtained from the various media. For instance, I may read about a particular pair of leather dress shoes in a catalog, check for the nearest authorized retailer online, call them for their hours of operation and directions, and, after trying a pair on at their retail store, return home and comparatively shop online, and ultimately order the shoes over the phone from another retailer with a competing Web site. Which medium was responsible for generating the sale? Single channel marketing, the model advocated by Gellman, clearly would not permit this type of nuanced customer interaction.

Given that we do not live in a single channel world, an opt-in data restriction for offline purposes would have repercussions online as well. As discussed in the ISEC/PLI distance shopping study, the vast majority of the most successful online apparel retailers are traditional catalogers – not pure-play entities such as Boo.com. There is really no mystery to this development. Catalog retailing and Internet retailing, far from being substitutes as Gellman would have you believe, are in fact highly complementary marketing channels. In a recent survey of online retailers, it was found that the use of catalogs and direct mail pieces were the two most effective means of driving consumer traffic to a company's Web site.<sup>40</sup> Successful online retailers explained this as a by-product of the shelf-life of a catalog, and the fact that people just like them. To the extent, then, that the synergies among the various marketing channels were discussed at length in the study, one is left to wonder whether Gellman short-shrifts this analysis because he disagrees with the conclusions.

<sup>&</sup>lt;sup>39</sup> See Turner, Pgs. 38 – 45.

<sup>&</sup>lt;sup>40</sup> DMA Catalog and Interactive 2000.

# 3. Changing Consumption Habits

According to annual studies released by The Direct Marketing Association (The DMA), approximately 60% of all Americans purchase a product using a catalog, and nearly 45% of all U.S. citizens buy at least one item each year using the telephone.<sup>41</sup> Further, although no data is available on this, it seems safe to say, with the exception of the shut-in and the hermetic, nearly 100% of all Americans purchased an item from a retail store in the past year. Internet sales, by contrast, are currently one-twelfth the level of catalog sales and are expected to achieve two-thirds the volume of catalog sales by 2004.<sup>42</sup> Again, online sales accounted for only 2% of total retail sales (store and non-store) in the U.S. during 2000. While displaying impressive growth rates, online retailing is still a long way from becoming the engine driving the broader retail sector.

Given this, it seems hard to argue that the Internet has, or will any time soon revolutionize the way consumers shop. More likely, it seems, is that shopping habits will evolve gradually over time to reflect consumer preference for each of the various shopping media. If consumer preferences shift from traditional media – such as catalogs, the telephone, and retail stores – to newer media including the Internet and wireless handheld devices, then the balance within a retailer's marketing portfolio will shift to reflect this change in consumer preference. It is not in the interest of any firm to ignore the preferences of its customers. In this case, the market will bring about a paradigm shift much more efficiently than would the government.

# Section III Conclusion: Toward a Comprehensive Framework

Gellman's critique of the disparate group of studies has yielded a valuable contribution in that it forces consideration of a range of additional "costs" that were not factored in to the first generation of quantitative privacy research. And though some of the types of costs identified by Gellman are certainly plausible, they are poorly calculated and are based on a series of questionable assumptions. Further, if Gellman's costs are even slightly inflated or exaggerated, this will have a major impact on the national "privacy toll" given its supposedly enormous size. Moreover, plausibility is not equivalent to demonstrated proof. While the studies Gellman critiques go to great lengths to substantiate their cost estimations with field research, survey data, and expert interviews, Gellman's own cost calculus does not include even the most basic of economic models.

<sup>&</sup>lt;sup>41</sup> DMA Statistical Factbook 2001, New York, The Direct Marketing Association, (2002).

<sup>&</sup>lt;sup>42</sup> Quoting the e-Marketer, Inc. in *The DMA Statistical Factbook 2001*.

What can we, then, take away from the Gellman report? Gellman has highlighted the need for a second, and even third generation of research on the costs and benefits of data flows under specific types of regulatory regimes. Because the range of potential costs identified in the first generation of research is so broad – in the California study by Johnson and Varghese the order of magnitude is ten-fold – additional refinements of costs estimates, including the variables addressed by Gellman, becomes necessary for sound policy making.

Gellman also indirectly raises the question of measuring the benefits of additional privacy measures, such as those asserted to accrue to society in general with the enactment of an opt-in type data restriction. Here, however, the benefits are more asserted than demonstrated. It is left, then, to future researchers to measure and assess these benefits to balance an objective and scientific cost/benefit analysis of various data restriction regimes.

Further, it is also necessary to specify the conditions under which certain policy options (e.g. an opt-in regime for the commercial use of personal information) has a desirable effect. For instance, a more restrictive data regime may be less costly to firms in the European Union or Japan because those geographic entities have more concentrated industry structures. As such, massive amounts of data are internalized and firms are less dependent upon external or third-party data. Indeed, it may be found through subsequent comparative analysis that a correlation exists between industry concentration and data regime type, whereby less restrictive regimes are more conducive to open and competitive markets than are more restrictive data regimes. In any event, there is certainly a need for additional cross-national analysis, and indeed for second generation of quantitative privacy research.

As was discussed in the beginning of this paper, the 2001 Nobel prizes were awarded to three economists who revolutionized our understanding of the role of information in the workings of a market economy. Each demonstrated, among other things, the role of information flows and the role of information asymmetries in market failure. Their work shows the matter to be very complex – some sectors can fine tune products so as to elicit information about, e.g., risk from consumers, while others cannot. This new generation of information economics has only recently begun to move from theoretical to sustained empirical studies.

Ironically, policy makers are increasingly deciding to back restrictions on information flows as research is revealing its importance for the economy. While policy cannot wait forever, the plausible costs of privacy legislation do warrant that we wait a little longer, spend time to uncover what these costs may be, and engage in an informed democratic debate as to whether these costs are worth it. As demonstrated by the initial attempts to quantify the benefits of data flows in advanced economies, the stakes involved are tremendous. What is needed are not further rounds of back-and-forth accusations or false promises of simple solutions, but rather additional research sensitive to the complex nature of data flows, and their implications for privacy and security. This research must build upon the first generation of quantitative data restriction analysis that has emerged over the past few years, learning from past mistakes and seizing new opportunities to advance the public understanding of the issues.

Such research also must be open to constructive criticism, and should include – to Gellman's credit – a more complete accounting system for estimating the costs and benefits of various potential data regimes. The use of the analytic approach laid out in this paper – one that disaggregates specific economic and policy drivers to establish clear cause-effect relationships, and unbundles the heterogeneous web of business practices that rely upon un underlying network of data flows – makes it possible to generate research that genuinely enhances the general understanding of data flows, privacy, and security.

Taking the Gellman paper too much to heart, however, carries with it very real dangers to the national economy. Namely, the costly retooling of the nation's entire information infrastructure, a process that will certainly be disruptive to firms and consumers alike.

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