Privacy Papers for Policy Makers

2011

The publication of "Privacy Papers for Policy Makers" was supported by AT&T and Microsoft.

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We are delighted to provide you with the second annual compilation entitled "Privacy Papers for Policy Makers," showcasing leading analytical thinking about current and emerging privacy issues.

The works featured and digested in the enclosed were selected by members of the Advisory Board of the Future of Privacy Forum (scholars, privacy advocates and Chief Privacy Officers) based on criteria emphasizing clarity, practicality and overall utility. There is a great deal of important and useful scholarship on privacy today, and choosing the works to be included in "Privacy Papers" was a difficult task but we think our Advisory Board has chosen well, and has put together a diverse and thought-provoking collection. Two of the papers were selected by the chairpersons of the annual Privacy Law Scholars Conference as recipients of the IAPP award for the best papers presented at the 2011 Conference.

We hope this relevant and timely scholarship helps inform and stimulate thinking among policy makers and policy influentials in the US and around the world, with whom we are sharing "Privacy Papers."

One of the goals of the Future of Privacy Forum is to convene thought leaders and to share new ways to think about privacy. We want to thank AT&T and Microsoft for their special support of the "Privacy Papers" project which furthers that goal.

Sincerely yours,

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*Recipients of the IAPP award for best papers at the 2011 Privacy Law Scholars Conference

Out of respect for copyright law and for ease of reference, this compilation is a digest of the papers selected by the Future of Privacy Forum Advisory Board and does not contain the full text. The selected papers in full text are available through the referenced links

Accountability as the Basis for Regulating Privacy: Can Information Security Regulations Inform Privacy Policy?

Mary J. Culnan

Full paper available at: www.futureofprivacy.org/the-privacy-papers/

Executive Summary

The predominate approach to consumer privacy regulation in the US is grounded in two principles: notice and choice. Firms provide notice describing their information practices while choice provides consumers with limited rights to opt out of certain uses of their personal information. Companies that break these promises may be subject to an FTC investigation. This paper argues that this current approach to regulating privacy is not effective and needs to be revisited. The current approach places too much burden on the individual, frequently deals with harm only after the fact, and has failed to motivate organizations to proactively prevent privacy or security incidents resulting from their information processing activities. As an alternative, the paper proposes augmenting the current approach with new regulations based on accountability where firms are delegated responsibility to develop risk management programs for privacy tailored to their individual circumstances.

The paper analyzes the requirements of three information security laws (GLB Safeguards Rule, HIPAA Security Rule and the Massachusetts Standards for the Protection of Personal Information) which require organizations to adopt comprehensive security programs against the elements of accountability and concludes that these laws provide a starting point for designing a new privacy regulatory regime. Based on this analysis, the paper describes what a sample privacy program might look like including the types of evidence that could be maintained to demonstrate compliance. An accountability analysis of three recent FTC enforcement actions illustrates how this approach might work in practice.

While current security laws provide a good starting point, privacy also raises new implementation challenges that will need to be addressed including the absence of standards for "reasonable privacy," identifying the types of records organizations need to maintain to document their compliance with the regulations, and how firms with different contexts should operationalize fair information principles. The paper concludes by reviewing arguments in favor of the more flexible delegation approach to privacy regulation which is based on the assumption that firms have superior information and expertise to develop solutions that will lead to the desired results compared with the traditional "command and control" compliance model.

Author

Mary J. Culnan is the Slade Professor of Management and Information Technology at Bentley University in Waltham, Massachusetts. Her current research is focusing on accountability as a public policy approach to privacy. She authored the 1999 Georgetown Information Privacy Policy Survey which was used by the FTC to make policy recommendations about online privacy to Congress, and co-authored the Future of Privacy Forum's "icon study" related to online behavioral advertising. She has testified before the U.S. Congress, the Massachusetts House and Senate and other government agencies on a range of privacy issues. Currently she serves as a member of the GAO's Executive Committee on Management and Information Technology. She also served as a Commissioner on the President's Commission on Critical Infrastructure Protection. She holds a Ph.D. in information systems from UCLA

Against Notice Skepticism

Ryan Calo

Full paper available at: www.futureofprivacy.org/the-privacy-papers/

Executive Summary

This is a work-in-progress that explores how design might help resuscitate notice in the context of privacy---and possibly elsewhere. The paper describes why notice has failed and even backfired as a regulatory strategy in privacy. In recognition of the potential benefits of notice over government-mandated restrictions on information, the paper identifies errors officials may be making in deploying notice strategies. The first is that privacy policies are the only form of information strategy that could work in privacy. The second is that notice must be textual, verbal, or its symbolic equivalent. Companies are using innovative ways to convey information that do not rely primarily on lengthy documents and the law should encourage these practices. Recent studies in human-computer interaction suggest even more radical and potentially effective forms of consumer communication.

(Draft)

Author

Ryan Calo is the director for privacy and robotics at the Stanford Law School Center for Internet and Society. Prior to joining the law school in 2008, Calo worked as an associate in the Washington, D.C. office of Covington & Burling, LLP and clerked for Judge R. Guy Cole Jr. on the U.S. Court of Appeals for the Sixth Circuit. Calo's work on privacy and robotics has appeared in the Wall Street Journal, the New York Times, and other major news outlets.

The Case For Online Obscurity

Woodrow Hartzog* and Frederic Stutzman**

Full paper available at: www.futureofprivacy.org/the-privacy-papers/

Executive Summary

On the Internet, obscure information has a minimal risk of being discovered or understood by unintended recipients. Empirical research demonstrates that Internet users rely on obscurity perhaps more than anything else to protect their privacy. Users routinely hide information by making it invisible to search engines, using pseudonyms and multiple profiles, and taking advantage of privacy settings.

Yet, online obscurity has been largely ignored by courts and lawmakers. In this article, we argue that obscurity is a critical component of online privacy, but it has not been embraced by courts and lawmakers because it has never been adequately defined or conceptualized. To that end, this article develops the first clear definition of online obscurity.

Empirical Support for Online Obscurity

The choice to disclose online is the product of a complex and highly contextual decision process, where risks are weighed against the potential reward of disclosure. It is normal to expect obscurity in everyday life. When we stroll down the street, we do not expect to be identified by all passers-by; indeed, we expect to be obscure in the eye of these observers. With the rise of peer-produced online content, it is now just as clear that our expectation of obscurity transfers online.

Empirical research demonstrates that individuals exert control over the information disclosed online by limiting the audience of the disclosure, by bounding the meaning of the disclosure, and by adapting the disclosure to a particular website. In social network sites, where the use of anonymity would violate norms and limit benefits attained from site use, individuals strategically develop techniques that effectively produce obscurity in disclosure. Interacting with both rules and norms, obscurity is flexibly – and reflexively – created in sites that we would consider highly identified. Even in remarkable, anonymous contexts such as Facebook, individuals rely on obscurity as an important aspect of managing both identity and privacy.

Contrary to the powerful popular discourse that argues that individuals online have essentially different privacy and notoriety goals, we demonstrate that online obscurity is a crucial aspect of privacy for Internet users. Through obfuscation techniques and other normative practices, it is clear that obscurity is both desired and expected online.

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**Postdoctoral Fellow, H. John Heinz III College, Carnegie Mellon University.

The Specter of Obscurity in Online Privacy Law

Because courts and lawmakers have failed to develop online obscurity as a concept, the law in a number of online privacy disputes remains difficult to square with the expectations of Internet users. For example, if a blogger limits access to her website to those who have a password, are her posts considered public or private? How should courts classify pseudonymous postings that are invisible to search engines but could have been accessed by anyone in possession of the URL? If a website introduces facial recognition technology as a way to search faces in photos, have they broken any promises of privacy to users who previously uploaded photos and may have relied on the fact those photos were not searchable?

Courts have not explicitly embraced the concept of online obscurity, but its existence is hard to ignore in a number of disputes. Judicial support for the analog version of online obscurity – practical obscurity – has laid the foundation for the recognition of online obscurity. Courts already rely upon obfuscation features like passwords, privacy settings, encryption, and code to limit search visibility. However, without a clear conceptualization of online obscurity, courts consistently reach one conclusion – the unfettered ability of any hypothetical individual to find and access information on a website renders that information "public," or ineligible for privacy protection.

Courts also have a problematic tendency to rely upon passwords to define what information is public – that is, the password-protection of information is a critical test of that information's intended and expected publicity. This is another important reason a workable definition of online obscurity is needed.

Lawmakers have also implicitly recognized the value of obscurity, but their failure to embrace obscurity as a concept has resulted in criticism that their laws fail to protect "privacy"—meaning secrets—or that they protect information that is not private at all. If lawmakers were to clarify that they were seeking to protect the obscurity of information, these laws might be perceived and implemented differently. For example, the Drivers Privacy Protection Act prohibits the disclosure of information about any individual obtained by the DMV in a motor vehicle record. Of course, much of the information protected by this statute, such as home address, height, and hair color, is hardly secret, or even private. But the law implicitly protects whatever obscurity the information exists in by restricting access to it.

A Proposed Definition and Framework

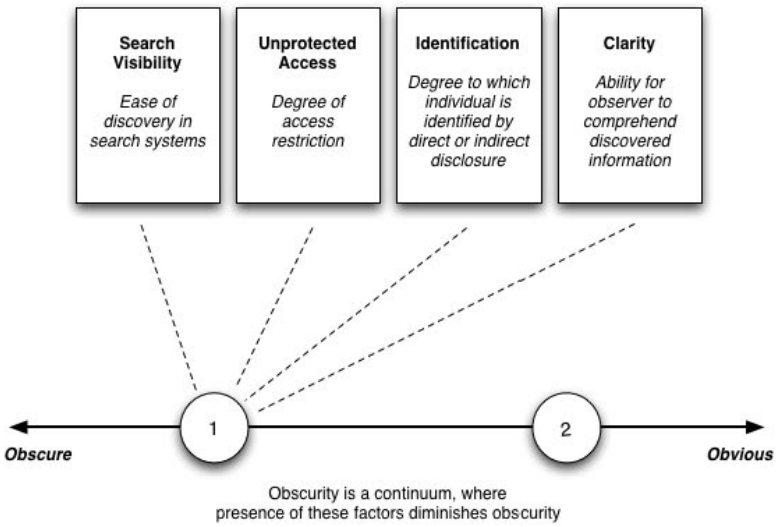
We conceive of online obscurity as a form of everyday obfuscation. Thus, we think the proper metaphor is the key and lock; to understand encountered information (i.e., release the lock), one must possess context (the key or keys) that renders the information un-obscure. This metaphor is likely better suited to online disputes given the judicial reliance on the digital version of the key: the password. In essence, we are simply proposing that there is more than one key that can lock information. Indeed, many kinds of keys and locks, each with varying strengths, exist, and considered cumulatively, fall along a spectrum that will allow courts to make a more nuanced analysis of online information on a scale of obscurity.

To that end, we propose the following definition: Information is obscure online if it exists in a context missing one or more key factors that are essential to discovery or comprehension. We have identified four of these factors as part of a non-exhaustive and flexible list: 1) search visibility 2) unprotected access 3) identification 4) clarity.

The presence of these factors diminishes obscurity, and their absence enhances it. Thus, in determining whether information is obscure online, courts should consider whether any of these factors were present in their determination. Information that is entirely un-obscure is completely obvious, and vice versa. Courts should engage in a case-by-case analysis of the factors, examining each one individually, then as a whole to determine the degree of online obscurity. Figure 1 depicts how this conceptualization would work in two different scenarios:

Figure 1

Factors Determining Online Obscurity



Obscurity is a continuum, where presence of these factors diminishes obscurity

Scenario 1 is a blog that is visible only to invited users and is not searchable by general search engines like Google. It is close to being completely obscure because it is missing two of the most important factors for finding and understanding information: search visibility and unprotected access. Scenario 2 is a Twitter account that uses only a first name and a blurry photo to identify the poster. While this information is more obvious than the information in Scenario 1 because it is freely searchable and accessible, it is still obscure because only certain Internet users would be able to identify the poster of the content or completely comprehend any idiosyncratic posts.

Potential Application of Online Obscurity

This framework could be applied as an analytical tool or as part of an obligation. Obscurity could be relied upon as a continuum to help determine if information is eligible for privacy protections. Obscurity could be used as a protective remedy by courts and lawmakers; instead of forcing websites to remove sensitive information, a compromise could be some form of mandated obscurity. Finally, obscurity could serve as part of an agreement. Internet users bound to a "duty to maintain obscurity" would be allowed to further disclose information, so long as they kept the information generally as obscure as they received it.

The conceptualization and proposed implementations of online obscurity in this article are meant to be introductions, not the final word. Much more research and analysis is required to fully explore how online obscurity might be utilized in the law.

Authors

Woodrow Hartzog is an Assistant Professor at the Cumberland School of Law at Samford University. He is also a Junior Affiliate Scholar at the Center for Internet and Society at Stanford Law School. His research focuses on privacy, human-computer interaction, online communication, and electronic agreements. He holds a Ph.D. in mass communication from the University of North Carolina at Chapel Hill, an LL.M. in intellectual property from the George Washington University Law School and a J.D. from Samford University. He previously worked as an attorney in private practice and at the United States Patent and Trademark Office. He also served as a clerk for the Electronic Privacy Information Center.

Fred Stutzman is a postdoctoral fellow at Carnegie Mellon University, where he works with Alessandro Acquisti. In 2011, he graduated from the University of North Carolina at Chapel Hill, where he was advised by Gary Marchionini. Fred's research focuses on privacy in social computing, where he explores the economics of privacy choice, and designs systems and policies that produce positive privacy outcomes. He is also interested in pro-social outcomes of social media use, particularly social media use during life transition. In addition to his academic work, Fred is the co-founder of ClaimID.com, founder of EPS, Inc. (distributor of the productivity software Freedom and Anti-Social), and consultant to select organizations.

Dispelling the Myths Surrounding De-Identification: Anonymization Remains a Strong Tool for Protecting Privacy

Ann Cavoukian and Khaled El Emam

Full paper available at: www.futureofprivacy.org/the-privacy-papers/

Executive Summary

Recent studies have put into question the value of de-identifying personal information as an essential tool to protect privacy. Repeated claims regarding the ease of re-identification may lead to the mistaken impression that it is futile to de-identify personal information. Furthermore, these assertions may drastically reduce the availability of de-identified information for potentially beneficial secondary purposes, such as much-needed health research.

This paper aims to dispel this myth. The authors illustrate the enormous value of the de-identification of personal information as an essential tool that should be routinely used to minimize risks, particularly in the context of health information. This paper demonstrates the possibility of solving the traditional zero-sum paradigm pitting data quality against privacy. As long as proper de-identification techniques and re-identification risk measurement procedures are used, re-identification remains a relatively difficult task in actual practice. It is thus possible to achieve a high degree of privacy, while at the same time preserving a high level of data quality. Maximizing both privacy and data quality enables a shift from a zero-sum paradigm to a positive-sum paradigm, a key principle of Privacy by Design.

While de-identification of information is not a perfect tool, it continues to be a valuable and effective mechanism for protecting personal information, in conjunction with additional safeguards. The objective of this paper is to shatter the myth that de-identification is not a strong tool to protect privacy - it is. The authors urge organizations that collect, use and disclose personal information to continue to de-identify personal data, in a comprehensive and responsible manner, as part of an overall risk assessment framework.

Authors

Dr. Ann Cavoukian is recognized as one of the leading privacy experts in the world. Noted for her seminal work on Privacy Enhancing Technologies (PETs) in 1995, her concept of *Privacy by Design* seeks to proactively embed privacy into the design specifications of information technology and accountable business practices, thereby achieving the strongest protection possible. In October, 2010, regulators from around the world gathered at the annual assembly of International Data Protection and Privacy Commissioners in Jerusalem, Israel, and unanimously passed a landmark Resolution recognizing *Privacy by Design* as an essential component of fundamental privacy protection. This was followed by the U.S. Federal Trade Commission's inclusion of *Privacy by Design* as one of its three recommended practices for protecting online privacy – a major validation of its significance.

An avowed believer in the role that technology can play in the protection of privacy, Dr. Cavoukian's leadership has seen her office develop a number of tools and procedures to ensure that privacy is strongly protected, not only in Canada, but around the world. She has been involved in numerous international committees focused on privacy, security, technology and business, and endeavours to focus on strengthening consumer confidence and trust in emerging technology applications.

Dr. Cavoukian serves as the Chair of the Identity, Privacy and Security Institute at the University of Toronto, Canada. She is also a member of several Boards including, the European Biometrics Forum, Future of Privacy Forum, RIM Council, and has been conferred as a Distinguished Fellow of the Ponemon Institute. Dr. Cavoukian was honoured with the prestigious *Kristian Beckman Award* in 2011 for her pioneering work on *Privacy by Design* and privacy protection in modern international environments. In the same year, Dr. Cavoukian was also named by *Intelligent Utility* Magazine as one of the Top 11 Movers and Shakers for the Global Smart Grid industry, received the SC Canada Privacy Professional of the Year Award and was honoured by the University of Alberta Information Access and Protection of Privacy Program for her positive contribution to the field of privacy.

Khaled El Emam, PhD, is an Associate Professor at the University of Ottawa, Faculty of Medicine. He is a Canada Research Chair in Electronic Health Information at the University of Ottawa. Previously Khaled was a Senior Research Officer at the National Research Council of Canada, and prior to that he was head of the Quantitative Methods Group at the Fraunhofer Institute in Kaiserslautern, Germany. In 2003 and 2004, he was ranked as the top systems and software engineering scholar worldwide by the Journal of Systems and Software based on his research on measurement and quality evaluation and improvement, and ranked second in 2002 and 2005. He holds a Ph.D. from the Department of Electrical and Electronics, King's College, at the University of London (UK). His lab's web site is: http://www.ehealthinformation.ca/.

The Failure of Online Social Network Privacy Settings

Michelle Madejski, Maritza Johnson and Steven Bellovin

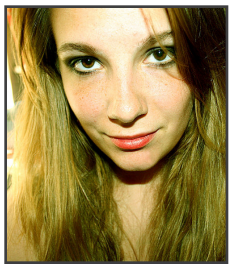
Full paper available at: www.futureofprivacy.org/the-privacy-papers/

Executive Summary

Increasingly, people are sharing sensitive personal information via online social networks (OSN). While such networks do permit users to control what they share with whom, access control policies are notoriously difficult to configure correctly; this raises the question of whether OSN users' privacy settings match their sharing intentions.

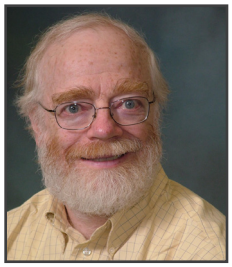
We present the results of an empirical evaluation that measures privacy attitudes and intentions and compares these against the privacy settings on Facebook. Our results indicate a serious mismatch: every one of the 65 participants in our study confirmed that at least one of the identified violations was in fact a sharing violation. In other words, OSN users' privacy settings are incorrect. Furthermore, a majority of the participants report that they cannot or will not fix such errors. We conclude that the current approach to privacy settings is flawed and cannot be fixed; a fundamentally different approach is needed. We present recommendations to ameliorate the current problems, as well as provide suggestions for future research.

Authors



Michelle Madejski graduated from Columbia University in 2010 with an undergraduate degree in Computer Science from the School of Engineering and Applied Science. Her interests include user privacy, web development, and the role of technology in society. Her undergraduate-originated work regarding user privacy in online social networks has received a Best Paper award and has been featured in numerous press including Gawker, MSNBC Today, Chicago Tribune, Huffington Post. Michelle is currently an engineer at Boeing in Seattle and anticipates attending a PhD program in the Fall of 2012.

Maritza Johnson is a Ph.D. candidate in the Department of Computer Science at Columbia University. Her research interests include computer security and human factors. Maritza was a recipient of the AT&T Labs Fellowship. Prior to studying at Columbia, Maritza received a B.A. in Computer Science from the University of San Diego.



Steven M. Bellovin is a professor of computer science at Columbia University, where he does research on networks, security, and especially why the two don't get along. He joined the faculty in 2005 after many years at Bell Labs and AT&T Labs Research, where he was an AT&T Fellow. He received a BA degree from Columbia University, and an MS and PhD in Computer Science from the University of North Carolina at Chapel Hill. While a graduate student, he helped create Netnews; for this, he and the other perpetrators were given the 1995 Usenix Lifetime Achievement Award (The Flame). He is a member of the National Academy of Engineering and is serving on the Computer Science and Telecommunications.

The PII Problem:
Privacy and a New Concept of Personally Identifiable Information

Paul M. Schwartz and Daniel J. Solove

(Forthcoming 86 NYU Law Review – (2010))

Full paper available at: www.futureofprivacy.org/the-privacy-papers/

Executive Summary

Personally identifiable information (PII) is one of the most central concepts in information privacy regulation. The scope of privacy laws typically turns on whether PII is involved. The basic assumption behind the applicable laws is that if PII is not involved, then there can be no privacy harm. At the same time, there is no uniform definition of PII in information privacy law. Moreover, computer science has shown that the very concept of PII can be highly malleable.

To demonstrate the policy implications of the failure of the current definitions of PII, this Article examines current practices of behavioral marketing. In their use of targeted technologies, companies direct offerings to specific consumers based on information collected about their characteristics, preferences, and behavior. Behavioral marketing also has enormous implications for public health due to food marketing to youth. Over the last three decades, the extent of obesity among minors has risen dramatically throughout the U.S. Experts also point to a detrimental effect of the marketing of food products to minors. Yet, the present regulatory regime for information privacy with PII as the cornerstone has proven incapable of an adequate response to behavioral marketing.

This Article proceeds in four steps.

A Typology of PII

First, this Article develops a typology of PII that shows three basic approaches in United States law to defining this term.

- The "tautological" approach defines PII as any information that identifies a person. The Video Privacy Protection Act demonstrates this model. The problem with the tautological approach is that it fails to define PII or explain how it is to be singled out.
- The "non-public" approach defines PII by what it is *not* rather than what it is. The non-public approach says that PII is all that is not aggregate data because such information does not identify a person. The Gramm-Leach Bliley Act epitomizes this approach. The problem with the non-public approach is that it does not map onto whether the information is in fact identifiable.
- The "specific-types" approach lists specific types of data that constitute PII. If the information in question falls into the enumerated group, it then becomes a kind of statutory "per se" PII. The Massachusetts Breach Notification Statute, California's Song-Beverly Credit Card Act, and Children's Online Privacy Protection Act illustrate this model. This approach is flawed because technology can broaden the kinds of information that constitute PII.

A Critique of PII

Second, this Article discusses defects in the existing distinction between PII and non-PII. The line between PII and non-PII is not fixed but depends upon factors including changes in technology and the specific context of data processing. For example, whether or not a search query is PII cannot be determined in the abstract.

The Example of Behavioral Marketing

Third, this Article uses behavioral marketing, with a special emphasis on food marketing to children, as a test case for demonstrating the flaws in the current definitions of PII. Individuals can now be tracked across different websites or digital media. Moreover, online advertising networks follow people around the Web. Advertising networks place tracking files on people's computers, which allow the company to gather information about behavior and preferences.

Marketers today engage in a pinpoint process that focuses on ever-smaller groups of people. Instead of companies selling ads for specific websites, advertisers now seek to buy access to people who fit a certain pattern. Information that is collected is packaged into profiles, which are then sold on stock-market-like exchanges. Yet, in behavioral marketing, companies generally do not track individuals through use of their names. Instead they use software to build personal profiles that exclude this item but that contain a wealth of details about the individual. Typically, the firms associate these personal profiles with a single alphanumerical code placed on an individual's computer.

Thus, behavioral marketing occurs without identifying (in the traditional sense) a specific individual. While advertising networks may not know people's names, identification of individuals is nonetheless possible in many cases. For example, enough pieces of information linked to a single person—even in the absence of a name, Social Security Number, or financial information—will permit identification of the individual. Such identification of seeming non-PII is a genuine possibility. Nonetheless, online companies have attempted to short-circuit the discussion of privacy harms and necessary legal reforms by simply asserting that they do not collect PII.

Policy Proposals

This Article concludes by developing an approach to redefining PII based on the different levels of risk to individuals. In our model of PII 2.0, information refers to (1) an identified, (2) identifiable, or (3) non-identifiable person. The continuum runs from actually being identified to no risk of identification, and our three categories divide up this spectrum and provide three different regimes of regulation.

Information refers to an *identified* person when it singles out a specific individual from others. Put differently, a person has been identified when her identity is ascertained.

In the middle of the risk continuum, information refers to an *identifiable* individual when a specific identification, while possible, is not a significantly probable event. In other words, an individual is identifiable when there is some non-remote possibility of future identification. The risk level is moderate to low. This information should be treated differently than an important sub-category of nominally identifiable information, where a linkage to a specific person has not yet been made, but where such a connection is more likely. When there is a significant risk of identification, the non-identified data should be treated the same as identified data.

At the other end of the risk continuum, *non-identifiable* information carries only a remote risk of identification. Such data cannot be said to be relatable to a person taking account of the means reasonably likely to be used for identification. In certain kinds of data sets, for example, the original sample is so large that other information will not enable the identification of individuals. An example would be high-level information about the population of the U.S., China, and Japan, and their relative access to telecommunications.

In our reconceptualized notion of PII, the key is to think about identification in terms of risk. Our model, PII 2.0, conceives of identifiability as a continuum of risk rather than as a simple dichotomy. A clear way to demonstrate the functioning of this new approach is by considering the applicability of FIPs. When information refers to an *identified* person, all of the FIPs generally should apply.

As for the category of *identifiable*, it is not appropriate to treat such information as fully equivalent to identified. The information does not yet refer to a specific person and may never do so. While some protections are in order because there is a risk of linkage to a specific individual, full notice, access, and correction rights should not be granted to an affected individual simply because identifiable data about her are processed. For one thing, the law's creation of such interests would decrease rather than increase privacy by requiring that all such data be associated with a specific person. This connection would be necessary to allow an individual to exercise her rights of notice, access, and correction. In this fashion, the law would promote a vicious circle that could transform all identifiable data into identified data.

Moreover, limits on information use, data minimization, and restrictions on information disclosure should not be applied across-the-board to identifiable information. Such limits would be disproportionate to risks from data use and also cripple socially productive uses of analytics that did not raise significant risks of harms to individuals. At the same time, some FIPs should apply to identifiable data. The key obligations concern data security, transparency, and data quality.

Thus, one benefit of PII 2.0 is that it tailors FIPs to whether information is identified or identifiable. A further benefit of PII 2.0 is that it creates an incentive for companies to keep information in the least identifiable form. The payoff is that the company, by making information identifiable or non-identifiable, will benefit from FIPs that become easier to meet as it moves along this continuum *away* from identified information.

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