# Marketing Dataveillance and Digital Privacy: Using Theories of Justice to Understand Consumers' Online Privacy Concerns

LAURENCE ASHWORTH, School of Business, Queen's University

CLINTON FREE, School of Business, Queen's University

### **Contact details:**

LAURENCE ASHWORTH, Queen's School of Business, Goodes Hall, Queen's University, Kingston ON, K7L 3N6 CANADA Tel: 613-533-3206, Fax: 613-533-6589, E-mail: lashworth@business.queensu.ca

CLINTON FREE, Queen's School of Business, Goodes Hall, Queen's University, Kingston ON, K7L 3N6 CANADA Tel: 613-533-3225, Fax: 613-533-6589, E-mail: cfree@business.queensu.ca

Abstract

Technology used in online marketing has advanced to a state where collection, enhancement and

aggregation of information are instantaneous. This proliferation of customer information

focused technology brings with it a host of issues surrounding customer privacy. This article

makes two key contributions to the debate concerning digital privacy. First, we use theories of

justice to help understand the way consumers conceive of, and react to, privacy concerns.

Specifically, it is argued that an important component of consumers' privacy concerns relates to

fairness judgments, which in turn comprises two primary components that correspond to

distributive and procedural justice. Second, we make a number of prescriptions, aimed at both

firms and regulators, based on the notion that consumers respond to perceived privacy violations

in much the same way they would respond to an unfair exchange.

**KEYWORDS:** Digital privacy; Online behavioural marketing; Justice Theory; Fairness

2

#### 1 Introduction



- AT&T's reputed first ever "You Will" Internet banner advertisement in 1994

Not even the self-assured designers of the first-ever banner advertisement could have foreseen the way in which rapid advances in information technology over the past two decades have dramatically reduced the cost of gathering and analysing consumer information. Although initial forecasts of business to consumer (B2C) internet trade have proven largely over-inflated, the growth in online consumer sales in recent years has been striking. The widespread acceptance of the Internet as a platform for commerce has made it possible for organisations to gather a wide range of consumer information including browsing patterns, items purchased, profitability, dates and times of activities and keystroke behaviour. Drawing on the richness of this data, over the past decade online behavioural marketing, which uses browsing behaviour as a predictor of receptiveness to certain ad messages, has burgeoned. Concomitant with this growth has been an escalation in privacy concerns relating to the collection and use of information gathered online (so-called online "dataveillance") (Caudill and Murphy, 2000; Miller and Weckert, 2000).

The marketing industry has long been a cause célèbre of privacy advocates. Certainly, tracking consumer spending patterns, movements and preferences are not new marketing phenomena. However, in the online environment, privacy issues are fundamentally different in terms of the scope and nature. The technologies of e-commerce allow companies to access consumers in ways that do not involve the sorts of physical transactions that have been seen as paradigmatic of definitions of traditional privacy and property. Palmer (2005) argues that the

underlying privacy issues relating to online activity transcend traditional "questions of product" to invoke "questions of technique", that is, questions involving the means by which a "business interacts with its consumers or potential consumers rather than on the nature of the product or service itself or the message put out about that product." Online marketers have the ability to access information about consumers in a way that consumers can neither avoid nor detect.

Cookies, spyware, adware and online forms can covertly capture a broader, richer set of data at a lower cost than is possible under more traditional forms of customer surveillance such as point-of-sale information. Indeed, in a recent survey, 80% of respondents were found to have some form of spyware on their computer (though 95% of respondents claimed that they had not granted permission for installation) (AOL and NCSA, 2004).

Privacy has consistently been identified as a chief concern of Internet users throughout the past decade (see Petrison and Wang, 1993; Palmer, 2005). Regulators and governments have implemented a wide range of responses in an attempt to balance the interests of various online stakeholders. Table 1 provides an overview of the state of current regulation approaches throughout the world. Regulatory responses are anchored by two positions: either governments should proactively protect consumer rights or online users should be granted the right to manage their own privacy in concert with corporate self-regulation (see, Bennett (2004) for a review). In broad terms, the argument for direct government legislation is that it increases consumer confidence and therefore increases commerce. Those supporting self regulation counter that legislative regulations interfere with the workings and integrity of the free market and that the less formal processes of self-regulation make it more flexible and therefore less likely to stifle innovation or excessively limit consumer choice. In broad terms, these positions are underpinned by two contrasting assumptions about consumer behaviour; either consumers have

an unalienable right to privacy that requires blanket protection or they are rational calculators capable of acting in their own interests with minimal protection.

INSERT TABLE 1 HERE

The purpose of this paper is to provide a more robust, psychologically informed understanding of consumer conceptualizations of privacy concerns. It is argued that a more comprehensive understanding of the way consumer's understand, and react to, privacy concerns will facilitate a more informed and balanced debate about digital privacy. This paper is structured in six main sections. The next section briefly overviews the emerging literature dealing with privacy issues in the online environment and introduces some of the psychological components of privacy concerns. Drawing on established psychological theories of justice, we then develop a model to help understand the way in which consumers conceive digital privacy concerns and react to various forms of online dataveillance. Section 4 develops the implications of various components of justice theory and puts forward a set of propositions to attend to consumer perceptions and likely online behavioural responses. Placing primacy on consumer empowerment rather than corporate restraint, we argue that appropriate privacy policies have the potential to provide a basis for competitive advantage and that major online players, such as Microsoft, Yahoo and Google, have a crucial role to play in responding to consumer privacy concerns. Finally, we suggest a number of fruitful avenues for future research and conclude the paper.

### 2 Background

In recent years, three broad streams of research have begun to examine some of the ethical and legal issues relating to online marketing, and e-commerce more broadly. In the first,

an eclectic mix of ethical lenses have been applied to the issue including utilitarianism, egoism, moral relativism, duty-based theories and social contract theory (Miller and Weckert, 2000; Sarathy and Robertson, 2003; Caudill and Murphy, 2000). A separate stream of research has focused largely on examining how various individual and organizational level variables influence organisational attitudes and actions towards privacy. For example, researchers such as Sarathy and Robertson (2003) have examined how managerial attributes and organizational contextual factors such as ownership, information intensity, age and e-commerce experience influence managers' preferences regarding privacy procedures. At the other end of the spectrum, researchers have sought to determine the way in which personal characteristics such as gender, race and Internet experience are associated with privacy concerns among consumers (Milne, Rohm and Bahl, 2004; Chen and Rea, 2004). For example, Chen and Rea (2004) find a direct relationship between demographic variables (gender and racial grouping) and privacy control techniques. Finally, in a third and perhaps most mature stream of inquiry, legal scholars have described and debated the merits of various forms of cyber regulation (see, for example, Kotzer, 2003; Bentivoglio, Cortez and Kirk, 2003).

In spite of this recent surge in research interest, consumers have been largely ignored by policy makers and researchers alike. For example, consumers' attitudes and opinions with respect to privacy concerns have been mostly unheard during the FTC's considerations and testimonies. In FTC hearings between 1995 and 2000, the only consumer voice presented was through the results of broad-based consumer telephone polls, which reported responses to a single generic question: How concerned are you about privacy online? (Sheehan and Hoy, 2000). This single question provides no insight into what online activities consumers are actually concerned about or why these activities should trouble them. Moreover, studies of privacy

adopting economic epistemology have tended to view individuals as rational economic agents who can make informed decisions regarding the protection or divulgence of personal information (Acquisti and Grossklags, 2005; Taylor, 2004). While this assumption may be analytically useful, it precludes the possibility that consumers' privacy concerns reflect something other than the results of an analysis of the costs and benefits of disclosing information online. Recent research has started to examine some of the factors that underlie consumers' privacy concerns. However, the majority of this work has attempted to identify underlying components of the construct rather than provide a theoretical framework that explains why those particular components should exist.

### 2.1 The Psychological Components of Privacy: What do Consumers Care About?

Current research suggests that one of the primary concerns relating to privacy is the lack of control consumers have over their personal information (Nowak and Phelps, 1995). Sheehan and Hoy (2000) argue that control consists of two dimensions: awareness of information collection and information usage. Awareness of information collection refers simply to whether or not consumers are aware that marketers are collecting information about them. This dimension of control is often discussed in relation to permission and disclosure (e.g. Cespedes and Smith, 1993; Nowak and Phelps, 1995). When online agents ask permission to collect information or disclose that they will be collecting information consumers become aware that information about them is being or will be collected. Research has shown that privacy concerns tend to be reduced when permission is obtained (Nowak and Phelps, 1995) and heightened when consumers discover information was collected without their awareness (Cespedes and Smith, 1993). This aspect of privacy concerns relate closely to what Palmer (2005) calls "questions of technique" – without permission or disclosure (neither of which are routinely practiced)

information can be collected in a way that consumers can neither avoid or detect. The second dimension of control, information usage, refers to how marketers use the information they collect. Privacy tends to be more of a concern when marketers use the information for purposes beyond the initial transaction (Foxman and Kilcoyne, 1993) or sell the information to third parties (Nowak and Phelps, 1992). Sheehan and Hoy (2000) introduced a number of additional factors that were also shown to relate to privacy concerns. These factors included the sensitivity of the information collected, the familiarity with the online entity, and whether or not consumers were compensated for the information they provided.

Hence, existing research on the dimensions of privacy has identified a number of factors that appear to underlie privacy concerns and highlighted the multi-dimensional nature of privacy as a construct. However, this literature does not provide a theoretical framework that explains why these components per se should be important to consumers. While awareness, permission and other identified dimensions of privacy do seem to be relevant to consumers' privacy concerns, it would appear that consumers are employing some other criteria when making judgments related to their privacy. Specifically, we suggest that consumers' privacy concerns actually entail an evaluation of information collection within the framework of exchange.

### **3 Information Collection as Exchange**

Marketing interactions generally have been described under the framework of exchange (Bagozzi, 1975), and we argue that the collection and dissemination of information online can also be viewed in this fashion. That is, consumers perceive the information that is collected about themselves to be an input into an exchange with the online agent. In return, they expect to receive outcomes such as online services, goods, monetary compensation, or something else of

value. Figure 1 illustrates a number of the common forms of exchange involving information about consumers that exist online.

INSERT FIGURE 1 HERE

The diagram illustrates that, from the consumers' perspective, the online exchange is facilitated by means of internet facing software, such as a web browser, which interacts with the firm's information collection mechanism, such as their website, or software that is made available for downloading. Through these media, marketers collect consumer information in return for certain benefits. The information collected constitutes both one of the consumer's inputs to the exchange and an outcome for the marketer. Consumers may provide additional inputs, for example, by being exposed to persuasive communications. Again, this would constitute a positive outcome for the marketer, at least as perceived by the consumer. In return for such inputs, consumers can receive a variety of positive outcomes, including access to a particular website, the benefits offered by downloaded software and monetary compensation. In other instances, consumers may receive no positive outcome or even a negative outcome, such as when they receive spam or provide information that they believe could be used to defraud them.

It should be noted that there are a number of assumptions and implications inherent to this framework. First, conceptualizing privacy concerns as an exchange involving information collection and provision necessarily implies that consumers will only harbour privacy concerns to the extent they believe that information about them is collected online. Unlike ethical and legal examinations of privacy where the invisibility of information collection is a major point of contention, consumers should only be concerned about their online privacy to the extent they believe information is being or could be collected. Second, for consumers to consider

information about themselves an input to the exchange implies they perceive themselves to have ownership of that information. A number of researchers have suggested that individuals are likely to feel entitled to information about themselves (Trurow, 2004). Finally, the exchange framework supposes that consumers perceive information about themselves to be of some value to the online agent, and therefore, a positive outcome of the exchange for the marketer. To the extent that different kinds of information are perceived as more or less valuable to the marketer, consumers' assessment of the exchange and therefore their privacy concerns are likely to be affected.

One of the consequences of framing information collection as an exchange is that it suggests consumers' privacy concerns are likely to relate to two distinct facets of the exchange. The first is the possibility of negative outcomes resulting from the exchange. That is, privacy concerns are in part likely to reflect the possibility that by engaging in an exchange involving information with an online agent, the information may be used in a manner that is harmful to the consumer. The second, related judgment is one of fairness. Fairness is an important psychological evaluation associated with exchange (Adams, 1965) and we argue that one of the reasons consumers are concerned about online exchanges involving information is that they are often perceived to be unfair. This article is concerned with the fairness component of consumer's privacy concerns.

We argue that fairness judgments encompass many of the different aspects of consumers' privacy concerns that have been voiced in the literature. For instance, compensation and information sensitivity (Sheehan and Hoy, 2001) can both be viewed as assessments of the value of consumer outcomes (compensation) and inputs (the type of information collected) within the exchange. That is, both compensation and information sensitivity are important to privacy

concerns because they are components of the basic fairness judgment. We proceed by providing an overview of fairness, as studied under the rubric of justice theory in social psychology, organizational behaviour, and marketing. Based on this literature, we argue that privacy consists of two basic concerns: a concern for one's material outcome (distributive fairness) and a concern that one is treated as a respected and valued individual (procedural fairness). We show that the psychological components of privacy that have been discussed in the literature fit well into the framework of exchange and justice. Finally, we attempt to demonstrate that this conceptualization of privacy can provide important insights to firms and policy makers alike.

### 4 Using Theories of Justice to Understand Consumers' Online Privacy Concerns

The notions of justice and fairness are multi-dimensional and multifarious constructs that have been studied across a wide variety of disciplines including ethics, economics, sociology, and psychology. Given that our focus relates to individuals' psychological evaluations and reactions to perceived injustices, we focus on the organizational and social psychological literature. Within these areas, justice has received much attention in recent years. However, opinion still differs regarding the dimensionality of the construct. There appears to be agreement that justice is comprised of at least two components, namely, distributive and procedural justice (Colquitt et al., 2001). However, some researchers have argued for a single underlying dimension (e.g. Cropanzano and Ambrose, 2001), while others have argued for a host of other components, including interactional, interpersonal, and informational justice (e.g. Bies and Moag, 1986; Greenberg, 1993). This disagreement appears to stem from whether one adopts a structural or psychological perspective of justice.

Traditionally, the different components of justice have been predicated on structural differences in the context in which justice is studied. Up until Thibaut and Walker's (1975)

seminal work on procedural justice, justice was primarily considered to relate to the distribution of outcomes. Thibaut and Walker, however, recognized that in dispute resolution procedures perceptions of justice were also a function of the way in which the procedure was conducted. Specifically, they noted that disputants' sense of justice was heightened by their ability to actively present their arguments or, in their language, be afforded "voice". Early researchers on procedural justice assumed that voice was ultimately important because of its potential to impact outcomes. In other words, both distributive and procedural justice were assumed to invoke the same psychological process. Thus, the two dimensions of justice reflected the two-component structure of dispute resolution procedures, but were ultimately driven by one underlying psychological mechanism.

Later researchers recognized that perceptions of justice may be related to more than just concerns about the final outcome. Specifically, Lind and Tyler (1988) argued that procedures also convey the extent to which individuals are respected and valued members of an organization, which they called the relational or group-value model of procedural justice. There is now widespread agreement that respect is integral to procedural justice (Miller 2001) because procedures are particularly apt at conveying respect relative to outcomes (Vermunt et al. 2001). It has been further recognized that respect can be conveyed directly via the interpersonal communication of procedures (rather than *implied* by particular procedures). Bies and Moag (1986) argued that this should be considered a distinct component of justice, which they labeled interactional justice. Others have argued that interactional justice itself consists of two components: informational and interpersonal justice (Colquitt 2001; Greenberg 1993).

Informational justice refers to the fact that part of the importance of interactional justice stems from explanations of the procedures used to determine outcomes. Interpersonal justice captures

the respect conveyed during the social interaction and is therefore comparable to the original definition of interactional justice.

Thus, in the psychological literature, arguments have been made that justice consists of anywhere between one underlying dimension (Cropanzano and Ambrose, 2001) and up to four (Greenberg, 1993). Despite such differences, it would appear that individuals harbor two underlying concerns when it comes to justice judgments – a concern that one is treated with respect and a concern for one's material outcome. We next discuss each of these psychological processes in relation to the distributive/procedural dichotomy.

### 4.1 Distributive Justice

Distributive justice relates to the fairness of the allocation of outcomes. Individuals are assumed to base their judgment on a number of possible criteria, including merit, need, rights and duties (Deutsch, 1985). For example, equity theorists (Adams, 1965) suggest that individuals make relative judgments about the ratio of their inputs and outcomes in an exchange. A fair allocation would therefore require each individual's outcomes to be in proportion to the inputs they have contributed. In a marketing context, transaction utility theory (Thaler, 1985) suggests that consumers engage in a similar comparison process to determine the fairness of a price. Consumers compare the price they are offered or have paid to some reference price for the good. Prices that are greater than the reference price are considered unfair, while prices that are equal to or less than the reference price are considered fair. While there are a number of different theories of distributive justice, they are fundamentally comparative in nature — individuals are assumed to compare their outcome to some referent standard. Outcomes that are considered inferior to the referent standard will lead to perceptions of distributive injustice.

### 4.2 Procedural Justice

In contrast, procedural justice refers to the fairness of the rules or policies that are used to allocate outcomes (Leventhal, 1980; Thibaut and Walker, 1975). This facet of justice has been most extensively studied in an organizational context. Research has demonstrated that the fairness of procedures can be more important than outcomes when it comes to predicting a number of important organizational variables. For example, Folger and Konovsky (1989) have demonstrated that the procedures used to determine pay raises were of similar importance to the actual raise when it came to satisfaction, and more important when it came to organizational commitment and trust in the employees' supervisor. One of the reasons that procedures are believed to be an important component of justice is because they are particularly apt at conveying respect and value. This theme is known as the group value model of procedural justice (Tyler and Lind, 1992). According to this perspective, a procedure should be considered fair to the extent that it communicates to relevant individuals that they are valued and respected members of the organization.

In short, the research on justice suggests that there are at least two broad psychological processes that underlie justice judgments. The first relates to whether or not an individual receives an appropriate outcome based on some relevant criteria (distributive justice). The second relates to whether or not an individual is treated in a manner that communicates they are respected and valued (procedural justice).

### 4.3 Privacy Concerns and Distributive Justice

In the context of online privacy, consumers are likely to have concerns that relate to both procedural and distributive facets of justice. Judgments of distributive justice reflect consumers' evaluations of the fairness of the allocation of outcomes. Such judgments are comparative in

nature and entail an assessment of both consumers' and firms' outcomes and inputs (Walster, Berscheid, and Walster, 1973). This is consistent with the notion that information collection is part of a multifaceted exchange between consumers and firms. Within the exchange, both parties receive a variety of outcomes and contribute a variety of inputs. For example, drawing on the online exchange model in Figure 1, a typical exchange might consist of the provision of personal information (which would constitute the consumers' input and one element of the firm's outcome) in exchange for access to a Web page or software (which would constitute one element of the consumer's outcome and part of the firm's input). There are, of course, other outcomes and inputs. For example, the consumer may also believe they are more likely to receive unsolicited emails, which would represent a negative outcome for the consumer and, potentially, a positive outcome for the firm. The exchange relationship and examples of relevant outcomes and inputs are shown in Figure 2.

## INSERT FIGURE 2 HERE

According to equity theory (Adams, 1965), perceptions of distributive justice are the result of a comparison between a) the consumer's outcomes relative to what they contributed to the exchange in the form of inputs, and b) the firm's outcomes relative to their inputs. A distributively fair solution requires that consumers' outcomes and inputs be in the same proportion as the firm's or, that  $\frac{Outcome_{Consumer}}{Input_{Consumer}} = \frac{Outcome_{Firm}}{Input_{Firm}}$ . From the consumer's perspective, this means that the rewards for providing personal information should be commensurate with the perceived value of the information to the firm relative to the costs incurred by the firm to obtain that information. This framework could help explain why consumers find it unacceptable for marketers to sell their personal information, regardless of the intended use (Nowak and Phelps,

1992). The sale of the information represents an additional positive outcome for the firm that they are not entitled to without a corresponding increase in consumers' outcomes (or decrease in their inputs). In fact, it could even represent an additional negative outcome for consumers if they believe they will be subject to more spam or increased risk of fraudulent activities. Cast either way, such perceptions are likely to create or exacerbate perceptions of inequity.

It should be noted that judgments of distributive justice do not preclude the likely possibility that consumers will conduct an independent assessment of their outcome. This, we would argue, is also an important facet of privacy concerns – outcome favorability. Outcome favorability refers to whether one receives a positive rather than a negative result (Kulik and Ambrose, 1992). Research on justice has generally conflated outcome favorability and outcome fairness, based on the argument that there is little distinction between these two constructs (e.g. Brockner and Weisenfeld, 1996). It is not clear, however, that favorable outcomes are necessarily fair or that unfavorable outcomes are necessarily unfair. Although consumers do tend to be more concerned with the fairness of unfavorable outcomes (Deutsch, 1985), even favorable outcomes can be perceived negatively when they are considered unfair – a finding originally termed relative deprivation (Homans, 1961). Consistent with this, Adams (1965) also predicted that individuals would be likely to have a higher tolerance for advantageous inequity (unfairness in one's favor) than disadvantageous inequity. In the context of online exchange then, this suggests that consumers will judge both the fairness of their outcome, a judgment that is likely to involve both consumers' and firms' outcomes and inputs, and the value of their own outcome, a judgment based purely on the merits of what it was they received.

There is further evidence that consumers' assessment of their outcome is likely to be strongly influenced by negative components of the outcome (e.g. the possibility of recurring spam or identity theft after an online exchange of information). Although some components of consumers' outcomes are likely to be positive (e.g. access to software or the content of a website), losses tend to loom larger than gains (Kahneman and Tversky, 1979), meaning that consumers may be focused on the negative elements of their outcome. Moreover, negative outcomes tend to be probabilistic (e.g. the *probability* of having one's identity stolen or of receiving spam), and probability judgments are subject to certain biases (Kahneman and Tversky, 1979), such as confirmation bias and the over-weighing of low probabilities, that are likely to exacerbate the effect of negative outcomes. As such, the outcome component of consumers' privacy concerns should be strongly, and perhaps disproportionately in rational terms, influenced by the possibility of negative consequences.

### 4.4 Privacy Concerns and Procedural Justice

Research on procedural justice indicates that the extent to which individuals are treated in a respectful manner is a second important determinant of justice perceptions. The work of Miller (2001) suggests that one way in which individuals make such judgments is by comparing their treatment to normative standards of respectful behaviour. Such standards are known as prescriptive norms (Cialdini and Trost, 1998) and can vary considerably according to the social situation. In the context of online privacy it seems likely that there are a number of standards that would indicate consumers are respected and valued. Violations of these standards are predicted to lead to perceptions of procedural injustice, which will create the impression that the firm has acted unfairly in the exchange.

It is likely that a number of normative standards exist that are relevant to the collection of personal information online. For instance, consumers may hold a norm of *openness*, which would dictate that information collectors should provide consumers with a clear and

unambiguous description of all information that is collected as well as the intended uses of that information. Consistent with this, internet users have indicated they would be more willing to provide information to the extent that firms provide an explanation of how that information will be used (Trurow, 2004). Moreover, there is survey evidence that consumers are distrustful of legalistic disclosure documents (OECD, 2003) because they do not provide a straighforward description of firms' information collection policies.

There may also exist a norm of *information access*, which would dictate that information collectors should allow consumers ready access to the information collected and furthermore, provide consumers with the ability to change or delete that information. Allowing consumers to view, update, change or delete information about themselves communicates that the consumer is sufficiently respected and valued that they should be afforded complete control of the information. It is possible that consumers hold the belief that they have a fundamental right to their personal information, in which case, adhering to a norm of information access may not convey respect per se. However, violation of the norm would most likely communicate disrespect.

Another norm that consumers may hold is a norm of *permission*. This would require that information collectors ask for consent before they collect even the most innocuous information. In certain instances, it may seem trivial to ask for permission for data that is freely available and unlikely to be considered sensitive. However, doing so communicates that the consumer's preferences are respected and, by extension, that the consumer is valued. This is a message that can be conveyed even when the nature of the data does not warrant obtaining permission. Finally, it should be noted that there is probably a broad norm of *honesty* operating in all these instances which would dictate that information collectors should be truthful and avoid deception.

This list of normative standards is not intended to be exhaustive, however, it is designed to represent the principal kinds of normative expectations that consumers might have of online information collectors. These normative standards are reflected in a variety of guidelines articulated by a number of different regulatory bodies. For example, in 1998 the FTC established five principles that encompass the normative standards outlined in the previous paragraph. They include (i) provision of notice/awareness of information collection, (ii) obtaining consent and providing consumers with a choice, (iii) providing access to the information collected and participation rights, (iv) integrity/security, and (v) the necessity of mechanisms for enforcing the guidelines and providing redress in case of violations. The OECD proposed similar guiding standards in 1980 (OECD, 2003), including limits to the collection of data; that data should be accurate and relevant; that thee purpose should be specified; limits on the use of the data; safeguards for the security of the data; openness of information regarding the data collected and the data controller; individual rights to view and change data; and finally, that data controllers should be accountable to the aforementioned standards. Such guidelines readily map onto (and in some instances might exceed) the kinds of normative standards that consumers might hold information collectors to.

In most situations, a violation of one of other of these normative standards is likely to affect consumers' perceptions of the outcomes and inputs of the exchange as well. For example, a violation of the norm of permission might lead consumers' to infer that they are more likely to be defrauded or spammed. However, it is specifically argued that the violation exerts an independent influence on perceptions of justice, regardless of whether there are any tangible consequences. To illustrate, consider a hypothetical situation where a consumer is assured, by virtue of their technical expertise, that disclosure of their personal information will lead to no

harmful consequences. Now imagine that a company attempted to collect information without obtaining their permission beforehand. Will this be considered an injustice? According to the justice framework developed in the current paper, it will – because the firm violated an important interpersonal standard, which will lower perceptions of procedural justice.

The conventional understanding of privacy concerns in marketing is that they consist of two dimensions: awareness and usage of the data outside of the original context (Nowak and Phelps, 1995). It has been suggested that privacy concerns may also entail an assessment of information sensitivity, trust and familiarity with the information collector, and compensation (Sheehan and Hoy, 2000). According to the justice perspective developed in the current paper, two factors underlie such assessments: distributive and procedural justice. Information sensitivity, data usage and compensation are all relevant to judgments of distributive justice. The sensitivity of the information is important because the potential consequences associated with the collection of sensitive information are more severe than the consequences associated with less sensitive information. Information usage also factors into the equity equation by raising the firms' outcomes and lowering the consumers' outcomes. Compensation constitutes one element of consumers' outcomes and one element of firms' inputs. In contrast, awareness is most likely a procedural concern and comprises of norms of permission and notice as discussed previously. Trust is likely to act as a moderator variable that influences both types of justice judgments. In terms of distributive justice, trust may alter the inferences consumers make about outcomes and inputs when they have incomplete information. Moreover, trust may well moderate perceptions of the severity of a normative violation – entities that are trusted might be held to higher standards of normative adherence, meaning that a violation by a trusted firm would convey more disrespect than a violation by an unfamiliar firm.

In summary, it is proposed that the conventional understanding of the dimensions of privacy can be explained by the more parsimonious framework of justice theory. The justice framework suggests that consumers may attend to two separable and distinct components. On the one hand, they are likely to evaluate the fairness of the distribution of outcomes, which includes the tangible consequences of the information collection to both themselves and the beneficiaries of the information. On the other hand, they are likely to evaluate the fairness of the manner in which they were treated, by comparing their treatment to normative standards of respectful treatment. Both judgments are comparative in nature. However, judgments of distributive justice involve a relative comparison, whilst judgments of procedural justice involve a comparison to an absolute standard.

### 5 Discussion

The justice framework underlines the importance of consumer responses to the procedures and outcomes of incursions on consumer privacy. The first part of this section draws a set of implications that are relevant to organisational policy making in the online context. These propositions provide a platform for a focused discussion of two further prescriptions. The first is that firms should consider privacy policy a strategic resource to be proactively managed. The second is that procedural advances that effectively empower consumers are particularly welcome.

### 5.1 Implications of a Justice Framework for Policy

The primary implication of this framework is that one of the ways in which consumers' privacy concerns will manifest themselves is in a fairness judgment that is derived from both consumers' and firms' outcomes and the manner in which personal information is collected online. This framework raises a number of questions and points that have been overlooked in

other analyses of online privacy issues. Firstly, the emphasis of this framework is on consumer evaluations of privacy rather than on the public policy or legal issues that surround online privacy concerns. The implication is that firms and online information collectors need to be aware of consumers' evaluations – both in terms of outcomes and procedures - of their online business practices, as this is likely to be a source of negative consumer behaviour, including boycotts, negative word of mouth (including dissatisfaction voiced through weblogs, discussion boards, chat rooms and dedicated websites), complaining, and even attempts to punish firms that are perceived to have acted unfairly. Conversely, online practices that are considered fair may well build trust and encourage consumers to engage in more online transactions. For example, compensation works as an automatic announcement to users that information is being collected, which, research finds, eliminates some consumer privacy concerns up front (Milne and Gordon 1993). Thus, firms cannot simply view online information collection as something to be conducted within the bounds of existing legislation. Instead, they need to consider consumers' reactions to their online policies if they are to maintain and build profitable customer relationships.

The fairness framework expounded in the current paper also highlights a number of variables that consumers are likely to attend to. For instance, when it comes to judgments of distributive justice, equity theory predicts that consumers will consider their outcomes and inputs and their perceptions of the firms' outcomes and inputs. These are subjective judgments and in the absence of veracious information consumers will most likely rely on their own attitudes and beliefs to form a judgment. This opens the door for potentially biased judgments. For example, when it comes to judging their own outcomes, consumers may overestimate the negative consequences associated with the collection of personal information (for example, the number of

spam emails). They may also overestimate the benefits to the information collector of the information that is collected. Misjudgments such as these will only exacerbate consumers' perceptions of distributive injustice. The implication is that firms will be better off providing consumers with concrete, detailed information relating to both the likely consequences for consumers as well as the benefits to the firm of the information collection. Such openness should reduce the possibility that consumers will form biased judgments and, moreover, will likely have implications for consumers' perceptions of procedural justice as well.

The current analysis suggests that perceptions of procedural justice reflect the extent to which prescriptive norms of openness, information access, permission and honesty are observed in the collection of information online. In many situations the violation of prescriptive norms is likely to coincide with perceived consequences. For example, failing to disclose the use of information collected online not only represents a violation of an openness norm, but may also exacerbate consumers' perceptions of the negative consequences that could stem from the information collected. Indeed, consumers' privacy concerns are likely to increase as they become aware that marketers have somehow obtained information about them without their awareness or permission (Cespedes and Smith 1993). Similarly, unsolicited e-marketing approaches compromise norms surrounding permission. To this end, research from the direct mail marketing literature (Rogers, 1996) suggests that people are more likely to look at mail sent by businesses they know and with whom they have done business.

Although the effect of the normative violation and the belief that negative consequences will ensue are confounded, they do represent different judgments according to the justice framework. In particular, we argue that a normative violation alone, even when consumers perceive the information collection to be distributively just, will inspire perceptions of

procedural injustice which will lead to negative behaviours and attitudes similar to those we would expect in response to a distributive injustice. Thus, firms cannot just consider the tangible outcomes associated with the collection of personal information when it comes to predicting consumers' reactions, they also need to consider whether their procedures are violating a potentially broad array of prescriptive norms. As consumers become more IT savvy, it may be the case that consumer apprehensions of justice will become more exacting. A recent experimental economics study concluded that there are two major motivating forces that drive consumers to seek sanctions (Falk, Fehr and Fischbacher, 2005). The first is where the consumer feels that the fairness principle has been violated (although the nature of fairness was not elaborated). The second is spite. This finding corroborates a survey on privacy by The Pew Research Center, which found that users were in a "punishing mood" (2000).

### 5.2 Privacy Protection as a Strategic Asset

Over the past few years, the norms governing personal data interactions between consumers and websites have changed. There is an increasing sensitivity regarding the commercial collection and use of data; for many, the social meaning has changed from a morally-neutral to a morally-charged status. Hetcher (2001) presents an actor network analysis of the way in which interested actors, such as privacy activists, the Federal Trade Commission and creators of new privacy software solutions, have deliberately and skilfully supported an entitlement to privacy. As consumers increasingly perceive an entitlement, there is a corresponding tendency for them to feel moral outrage at websites that fail to respect data privacy. The justice framework provide a rigorous device to consider privacy concerns from the consumer's perspective and suggests that relative outcomes (in terms of relative inputs and outputs) and the observation or violation of norms in privacy procedures are paramount.

Consumers who feel that they are disrespected may seek to punish websites by taking their business elsewhere, reciprocating the disrespect by providing the website with false personal information, or sanctioning the website through negative online and offline gossip.

For websites at the margin, it may now make sense to switch to more respectful practices. Recent survey results suggest that it is likely that concerns relating to privacy are at least partly responsible for consumers' unwillingness to transact over the internet. In a survey of 214 online shoppers, Ranganathan and Ganapathy (2002) found that concerns about privacy had the single greatest effect on the purchase intent of online consumers. The lobbying savvy of organizations like the Electronic Privacy Information Center, the coercive power possessed by the FTC in the US and the potency of privacy software solution providers are powerful shapers of public norms regarding online privacy and appear destined to gain further momentum. Moreover, consumers are becoming increasingly familiar with internet technologies and the details of the collection and aggregation of the personal information that is collected. As consumers become more knowledgeable, not only do they have the tools to evaluate the fairness of the information collection, they also have the tools to discriminate against the perceived offenders. Thus, the costs associated with information collection are likely to go well beyond the costs of simply collecting information.

When viewed in this way, firms need to recognize that the collection of information online can neither be treated as a low-cost method of market research nor as a fundamental right to information that is easily obtainable by virtue of current technology. There is no question that the information available over the internet is potentially an extremely valuable resource for marketers. However, the value of that information must include some consideration of consumers' reaction to the collection of personal information. The justice framework suggests

that firms should explicitly stress both the categories of information that they will be collecting and the way in which the information will be utilised.<sup>2</sup> Moreover, firms should be especially careful to observe the prescriptive norms that are likely to govern the collection of personal information over the internet. Moving forward, business interests rather than legal or quasi-legal rules will demand that firm's respect consumers' privacy concerns.

### 5.3 Consumer Empowerment and Digital Libertarianism

Problems beset both top-down and self-regulatory solutions. We suggest that a greater focus should be afforded to empowering consumers in concert with continued reliance on the market mechanism. At present, the average consumer typically relies on a combination of thirdparty information protection software, assurances from a number of different privacy seals, government regulation, disclosure statements and finally firms' integrity to control the personal information that is collected online. Even in combination, these measures appear to be deficient in important respects. Instead consumers need to be empowered with the information to make an informed decision and the technological ability to control the flow of information from their computer. The first element of this empowerment requires that consumers be told in the simplest possible terms whether and what information will be collected. Standard disclosure statements typically consist of a copious quantity of complex legal jargon that neither inform nor reassure consumers that their privacy will be protected. Consistent with this, the European Union's committee of data privacy commissioners (the "Article 29 Working Party") has adopted a plan to create corporate privacy notices that are easy for consumers to understand and compare to notices of other companies.

The second element of empowering consumers involves providing them with the means to control the flow of information from their computers. Although there is a variety of third-

party software solutions available, they are costly and differ in the range of information protection features that they offer. Moreover, consumers have proven slow to adopt new initiatives without the backing of large, powerful governmental or private organizations. While increased awareness and technical proficiency amongst users may dissipate this inertia, it remains the case that consumers are more likely to place their trust in solutions provided by credible third parties to protect them rather than expend the time and expend the energy to make choices suitable to their best interest. Accordingly, private players with high levels of trust such as Microsoft, Yahoo and Google potentially play a more important role in the privacy puzzle than any individual, government body or authority.

A system that has been set up around this notion is the Platform for Privacy Preferences or P3P. It is backed up by the Online Privacy Alliance, a consortium of almost 50 American organizations including the US White House, Microsoft, America Online and organizations like the Center for Democracy and Technology. P3P uses a protocol developed by World Wide Web Consortium's (W3C) called Platform for Internet Content Selection (PICS). In its conception, PICS was designed to carry labels that would describe its content to users. Under the PICS protocol, the website owner would state the privacy level of the site. As a result, most browsers, including the dominant Internet Explorer, now feature a number of privacy protection features.

However, results to date have proven largely disappointing. Controls presented are frequently buried within the many features of the software; and high levels of "security" often interfere with the functionality of many websites (not because they are attempting to extort information, but because they use many of the design features that can be used to do so). Either browsers need to better distinguish sensitive information from information that is used simply to navigate through a series of web pages, or standards need to be introduced that separate

navigation information from personal information. While a detailed technical solution is beyond the scope of this paper, it is proposed that regulatory attempts that focus on empowering consumers with the ability to control what information leaves their computer, for example through their web browser, are preferable to those attempting to limit marketers' information collection activities online.

### **6 Future Research**

Theories of justice from psychology provide a useful and robust framework for further research in the area, however a number of empirical questions remain unanswered. Specifically, further research into three specific questions is welcome.

Firstly, while this article sets out a theoretical framework for investigating privacy issues, it requires empirical validation. The justice framework would provide a strong theoretical foundation for experimental and survey work in the area of digital privacy.

Secondly, methods of measuring both the costs and benefits of online behavioural marketing remain elusive. Future research considering performance measures capturing the financial benefits, as well as costs of online behavioural marketing is welcome. Typical measures such as click-through rates, average frequency of exposures, frequency to conversion ratio, ad exposure time (rich media), interaction rate (rich media) and web page eye tracking ultimately fail to capture either the bottom line impact of additional sales, nor revenue lost through consumer disenfranchisement.

Finally, the variety and functions of advertising intermediaries lying between marketers and consumers are currently shrouded in mystery. Further empirical research describing and analysing the relationships between various intermediary players would significantly enhance understanding and refine the privacy debate.

### 7 Conclusion

A range of radically new marketing models are emerging which bring a host of privacy issues sharply into focus. The framework of the current paper suggests that online privacy should be viewed as an exchange of consumers' personal information for online benefits (and annoyances). This means that one of the ways in which consumers are likely to evaluate an exchange of this sort is according to the principles of justice. Based on the organizational and social psychological literature, we have identified two classes of privacy concerns that consumers are likely to have: concerns relating to distributive justice and those relating to procedural justice. The former entail a judgment of the fairness of the distribution of consumers' and firms' outcomes relative to their inputs. The latter entails a judgment as to whether firms' actions violated important prescriptive norms. A justice framework suggests that consumers will also attend to the firm's outcomes (and both of their inputs) as well as the manner in which the information was collected. Justice theory predicts that these concerns will exert an independent influence on consumers' judgments of fairness, meaning that even fair payment for personal information can still lead to perceptions of unfairness if it is collected in a manner that violates a prescriptive norm (and vice versa). In turn, perceptions of unfairness are likely to lead to a variety of negative behaviours that firms' cannot afford to ignore.

Smith (1994) demonstrates how "drifting and reacting" is a common response of major North American companies to the privacy issue. That is, unless the organization is thrust into the public limelight in front-page articles or frenzied discussion on privacy newsgroups on the Internet, there is often little incentive to make privacy a priority. However, the present work suggests that firms need to be proactive in developing their privacy policies. Not only are consumers becoming increasingly aware of online privacy breaches they are also better equipped

to prevent privacy intrusions and retaliate against firms that are perceived to have acted inappropriately.

### 8 Bibliography

- Acquisti, A. and J. Grossklags: 2005, "Privacy and Rationality in Individual Decision Making", *IEEE Security & Privacy* **3**(1), 24-30.
- Adams, J.S.: 1965, "Inequity in Social Exchange", in L. Berkowitz (ed.), *Advances in Experimental Social Psychology*, Volume 2 (Academic Press, New York), pp. 267-299.
- America Online and National Cyber Security Alliance: 2004, "AOL/NCSA Safety Study", at <a href="http://www.staysafeonline.info/news/safety">http://www.staysafeonline.info/news/safety</a> study v04.pdf.
- Bagozzi, R.: 1975, "Marketing as Exchange", Journal of Marketing 39(4), 32 39.
- Bennett, C.J.: 2004, "Privacy Self-Regulation in a Global Economy: A Race to the Top, the

  Bottom or Somewhere Else?" in K. Webb (ed.), *Voluntary Codes: Private Governance, the Public Interest and Innovation* (Carleton University, Ottawa), pp. 210-226.
- Bentivoglio, J., Cortez, N. and S. Kirk: 2003, "Global Privacy Law Update", *The Computer and Internet Lawyer* **20**(6), 1-6.
- Bies, R. J. and J.S. Moag: 1986, "Interactional Justice: Communication Criteria of Fairness", inR. J. Lewicki, B. H. Sheppard and M. Bazerman (eds.), *Research on Negotiation inOrganizations*, Volume 1 (JAI Press, Greenwich, CT), pp. 43-55.
- Brockner, J., and B. Wiesenfeld: 1996, "An Integrative Framework for Explaining Reactions to Decisions: Interactive Effects of Outcomes and Procedures", *Psychological Bulletin* **120**(2), 189–208.
- Caudill, E.M. and P.E. Murphy: 2000, "Consumer Online Privacy: Legal and Ethical Issues", *Journal of Public Policy and Marketing* **19**(1), 7-19.
- Cespedes, F.V. and J.H. Smith: 1993, "Database Marketing: New Rules for Policy and Practice", Sloan Management Review 34(4), 7-23.

- Chen, K. and A.I. Rea: 2004, "Protecting Personal Information Online: A Survey of User Privacy Concerns and Control Techniques", *Journal of Computer Information Systems* **44**(4), 85-92.
- Cialdini, R. and M. Trost: 1998, "Social Influence: Social Norms, Conformity and Compliance", in D. Gilbert, S. Fiske, and G. Lindzey (eds.), *The Handbook of Social Psychology*, Volume 2, 4th edition (Oxford University Press, New York), pp. 151-192
- Clarke, R.: 1989, "Information, Technology, and Dataveillance", *Communications of ACM* 31(5), 498-512.
- Colquitt, J., D. Conlon, M. Wesson, C. Porter and K. Yee Ng: 2001, "Justice at the Millenium: A Meta-Analytic Review of 25 Years of Organizational Justice Research", *Journal of Applied Psychology* **86**(3), 425-445.
- Cropanzano, R. and M. Ambrose: 2001, "Procedural and Distributive Justice Are More Similar than You Think: A Monistic Perspective and a Research Agenda", in J. Greenberg and R. Cropanzano (eds.), *Advances in Organizational Justice* (Stanford University Press, Stanford, CA), pp. 119 151.
- Deutsch, M.: 1985, *Distributive Justice* (Yale University Press, New York).
- Falk, A., E. Fehr and U. Fischbacher: 2005, "Driving Forces Behind Informal Sanctions", *Econometrica* **73**(6), 2017-2030.
- Folger, R. and M. Konovsky: 1989, "Effects of Procedural and Distributive Justice on Reactions to Pay Raise Decisions", *Academy of Management Journal* **32**(1), 115-130.
- Foxman, E. and P. Kilcoyne: 1993, "Information Technology, Marketing Practice, and Consumer Privacy: Ethical Issues", *Journal of Public Policy & Marketing* **12**(1), 106-19.

- Greenberg, J.: 1993, "The Social Side of Fairness: Interpersonal and Informational Classes of Organizational Justice," in R. Cropanzano (ed.) *Justice in the Workplace: Approaching Fairness in Human Resource Management* (Lawrence Erlbaum Associates, Hillsdale, NJ), pp. 79-103.
- Hetcher, S.: 2001, "Norm Proselytizers Create a Privacy Entitlement in Cyberspace", *Berkeley Technology Law Journal* **16**, 877-935.
- Homans, G.C.: 1961, *Social Behavior: Its Elementary Forms* (Routledge and Kegan Paul, London).
- Kahneman, D. and A. Tversky: 1979, "Prospect Theory: An Analysis of Decision under Risk", *Econometrica* **47**(2), 263-291.
- Kotzer, J.A.: 2003, "The Great Cookie Caper: Internet Privacy and Target Marketing at Home and Abroad", *St Thomas Law Review* **15**, 727-756.
- Kulik, C., E. Lind, M. Ambrose and R. MacCoun: 1996, "Understanding gender differences in distributive and procedural justice", *Social Justice Research* **9**, 351–369.
- Leventhal, G.S.: 1980, "What Should Be Done with Equity Theory? New Approaches to the Study of Fairness in Social Relationships", in M. Greenberg and R. Willis (eds.) *Social Exchange: Advances in Theory and Research* (Plenum, New York), pp. 27-55.
- Lind, E. and T. Tyler: 1988, *The Social Psychology of Procedural Justice* (Plenum, New York).
- Miller, D.T.: 2001, "Disrespect and the Experience of Injustice", *Annual Review of Psychology* **52**, 527-553.
- Miller, S. and J. Weckert: 2000, "Privacy, the Workplace, and the Internet", *Journal of Business Ethics* **28**(3), 255-265.

- Milne, G.R., and M.E. Gordon: 1993, "Direct Mail Privacy-Efficiency Trade-offs Within an Implied Social Contract", *Journal of Public Policy and Marketing* **12**(2), 206-215.
- Milne, G.R., A.J. Rohm and S. Bahl: 2004, "Consumers' Protection of Online Privacy and Identity", *Journal of Consumer Affairs*, **38**(2), 217-232.
- Nowak, G.J. and J. Phelps: 1992, "Understanding Privacy Concerns: An Assessment of Consumers' Information Related Knowledge and Beliefs", *Journal of Direct Marketing* **6**(4), 28-39.
- OECD: 2003, "Privacy Online: OECD Guidance on Policy and Practice", at <a href="http://www1.oecd.org/publications/e-book/9303051E.PDF">http://www1.oecd.org/publications/e-book/9303051E.PDF</a>.
- Palmer, D.: 2005, "Pop-Ups, Cookies, and Spam: Toward a Deeper Analysis of the Ethical Significance of Internet Marketing Practices", *Journal of Business Ethics* **58**(1), 271-280.
- Petrison, L.A. and P. Wang: 1993, "Exploring the Dimensions of Consumer Privacy: An Analysis of Coverage in British and American Media", *Journal of Direct Marketing* **9**(4), 19-37.
- Pew Research Center: 2000, "Trust and Privacy Online: Why Americans Want to Rewrite the Rules", at <a href="http://www.pewinternet.org/reports/toc.asp?Report=19">http://www.pewinternet.org/reports/toc.asp?Report=19</a>.
- Ranganathan, C. and S. Ganapathy: 2002, "Key Dimensions of Business-to-Consumer Websites", *Information & Management* **39**(6), 457-465.
- Rogers, J.L.: 1996, "Mail Advertising and Consumer Behaviour", *Psychology and Marketing* **13**(2), 211-233.
- Sarathy, R. and C. Robertson: 2003, "Strategic and Ethical Considerations in Managing Digital Privacy", *Journal of Business Ethics* **46**(2), 111-126.

- Sheehan, K. and M. Hoy: 2000, "Dimensions of Privacy Concern among Online Consumers", *Journal of Public Policy and Marketing* **19**(1), 62-73.
- Smith, H.J.: 1994, *Managing Privacy: Information Technology and Corporate America* (University of North Carolina Press, Chapel Hill, NC).
- Taylor, C.R.: 2004, "Consumer Privacy and the Market for Customer Information", *The Rand Journal of Economics* **35**(4), 631 -650.
- Thaler, R.: 1985, "Mental Accounting and Consumer Choice", Marketing Science 4(3), 199-214.
- Thibaut, J.W. and L. Walker: 1975, *Procedural Justice: A Psychological Perspective* (Lawrence Erlbaum Associates, Hillsdale, NJ).
- Trurow, J.: 2004, *Americans and Online Privacy: The System is Broken*, A Report from the Annenberg Public Policy Center of the University of Pennsylvania.
- Tyler, T.R. and Lind, E.A.: 1992, "A Relational Model of Authority in Groups", in M.P. Zanna (ed.), *Advances in Experimental Social Psychology*, Volume 25 (Academic Press, San Diego, CA), pp. 115-191.
- Vermunt, R., D. van Knippenberg, B. van Knippenberg and E. Blaauw: 2001, "Self-Esteem and Outcome Fairness: Differential Importance of Procedural and Outcome Considerations", *Journal of Applied Psychology* **86**(4), 621 628.
- Walster, E., E. Berscheid and W. Walster: 1973, "New Directions in Equity Research", *Journal of Personality and Social Psychology* **25**(2), 151-176.

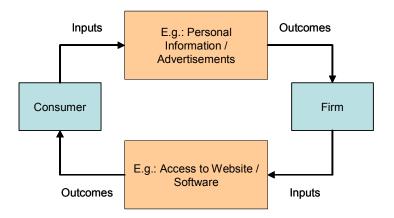
 Table 1: An Overview of Regulatory Approaches across the Globe

Legislative Responses		
Approach	Description	Exemplar
The "US Approach"	Privacy conceived primarily as a commodity controlled through the free-market with protection focused on narrow categories of sensitive data, such as data held by financial institutions and data relating to children	Children's Online Privacy Protection Act (1998)
The "EU Approach"	All member states of the European Union are required to protect the "fundamental right" to privacy of individuals and restrict the transferring of data to countries that do not ensure an equal level of protection.	Directive 95/46/EC of the European Parliament (1995) on the protection of individuals with regard to the processing of personal data and on the free movement of such data
Self-Regulatory/Market-Based Responses		
Approach	Description	Exemplar
Privacy Standards	A set of mandatory criteria and/or voluntary guidelines designed to promote privacy best practices across industrial sectors, nations or regions.	OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data
Privacy Codes of Practice	Rules and procedures designed to govern information collection within specific organizations or groups	Sun Microsystems Privacy Policy (www.sun.com/privacy/)
Third Party Entity Certification and Privacy Seals	Independent third party entities issuing licenses and proprietary privacy seals with respect to privacy practices.	Truste, BBBOnline and the Online Privacy Alliance
Technological Solutions	Privacy-enhancing technologies allow consumers direct control of the information on their computer. They include cookie managers, ad-blockers, encryption software, and clean-up tools.	Zero Knowledge Systems Pop-Up & Ad Blocker System
The Market Mechanism	A number of websites now make it possible for a willing consumer to trade some aspect of privacy as part of the transaction for goods or service.	The Central Texas Mortgage Corporation (CTMC) offers entry into online contests and sweepstakes in return for personally identifiable information
Consumer Activism	A policy of taking direct action in online and offline environments to achieve desired enhancements in privacy policy	The American Civil Liberties Union's "Take Back Your Data Campaign"

MARKETER-CONSUMER **EXCHANGE** EXCHANGE INTERACTION • Information provision Exposure to persuasive Corporate Website Visit Information collection PULL ADVERTISING • Product information PUSH ADVERTISING •Information collection • Marketing exposure Browsing utility Intermediaries: Web 3rd Party Website Visit Internet designers, Advertising facing software [Browser / Information provision
 Exposure to persuasive Agencies, Software Developers, Financial payment Consumer Marketer communication Program] Publishers and Affiliates Information collection
 Marketing exposure Software use utility Downloaded Software Product information Direct E-mails/Spam Exposure to persuasive communication

Figure 1: An Exchange Model of Online Marketing

Figure 2: Consumers' and Firms' Inputs and Outcomes of Exchange



### 9 Endnotes

<sup>&</sup>lt;sup>1</sup> The phrase "dataveillance" was first used by Roger Clarke (1989) to describe the collection and storage of personal data enabled by computerization.

<sup>&</sup>lt;sup>2</sup> Consumers appear to be less concerned about the collection and usage of information regarding their product purchases and media habits and more concerned about the collection and usage of medical records, social security numbers, and financial information (Nowak and Phelps 1992).