Smart Defaults: From Hidden Persuaders to Adaptive Helpers
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by
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Abstract

Defaults have been shown to have such powerful and unrecognized effects on consumer behavior that in some settings they may be considered ‘hidden persuaders’. While much attention has been paid to the beneficial consequences of defaults, we discuss how, in certain circumstances, defaults can be chosen to disadvantage consumers. This paper looks at defaults from the perspective of consumer welfare, consumer autonomy, and marketing ethics. It identifies three theoretical causes of default effects—implied endorsement, cognitive biases, and effort—to guide thought on the issues posed for consumer autonomy and welfare. We propose the concept of “smart defaults” and “adaptive defaults” as welfare-enhancing alternatives, in addition to other remedies, and conclude with implications for marketers, consumers, policymakers and researchers.
“…many of us are being influenced and manipulated—far more than we realize—in the patterns of our everyday lives. Large scale efforts are being made, often with impressive success, to channel our unthinking habits, our purchasing decisions, and our thought processes by the use of insights gleaned from psychiatry and the social sciences.”


Vance Packard’s 1957 book, *The Hidden Persuaders*, dealt a major blow to the image of marketing. It was widely seen as thinly researched and overly speculative—its most memorable allegation, that movie-goers drank more Coke when the name of the brand was subliminally spliced within the movie, turned out simply to be fraudulent. Yet the book sold millions of copies and the term “hidden persuaders” entered the language as almost synonymous with marketing. The central claim of the book, as implied by the title, is that marketers can change consumer behavior without consumer awareness. This represented a major challenge to the twin ideals of *caveat emptor* and *consumer sovereignty*: How can a buyer beware when the causes of their behavior are unknown to them, and how can consumers rule marketplaces if they are subject to manipulation without awareness?

While many of Packard’s claims proved baseless in the fifties, half a century later, we may have good reason to be concerned about hidden persuaders. Consumer research of recent years has identified psychological and environmental manipulations, which can be exploited to gain considerable influence over unaware consumers (Fitzsimons et al. 2002). For example, Wansink and Van Ittersum’s (2003) work on area perceptions and consumption volumes could be used by marketers of liquid detergent to encourage over-pouring by providing short, wide containers rather than tall, slender ones. However, as the authors acknowledge, there are unknown boundary conditions in relation to drink consumption, let alone the detergent context, as well as evidence to suggest that the over-pouring bias is not found in all adults. In this paper we focus not on a domain-specific task, but on an issue of question framing that can impact consumer choice in any domain: the setting of defaults.
What are defaults? Brown and Krishna (2004: 529) characterize a default as “the choice alternative a consumer receives if he/she does not explicitly specify otherwise”, and various other authors view them similarly (Johnson, Bellman and Lohse, 2002; Camerer et al. 2003; Sunstein and Thaler 2003). Default effects are both powerful and law-like. They have been demonstrated in specific marketing contexts as both hurting or helping consumers. When a budget airline recently set a default to add travel insurance to the shopping cart of every customer ordering a ticket on its website, it seemed quite possible that this could cause a hurried, inattentive traveler to purchase insurance without intent (Johnson and Goldstein 2006). Defaults that promote consumer welfare include those that automatically enroll employees into pension plans (though the question remains of where to set the default level of contribution; Madrian & Shea 2001).

Because they can be manipulated to favor either party, defaults raise major ethical and public-policy issues and are consequential for consumer welfare and consumer autonomy. We examine these issues in this paper, first reviewing defaults’ surprisingly strong effects on consumer behavior and examining three theoretical explanations for their power. We introduce the concept of consumer autonomy as an ethical, welfare-relevant consideration in setting defaults and consider the ethics of defaults in light of these three theoretical accounts. We suggest how defaults can be used to enhance consumer welfare by suggesting remedies to their potential misuse, the idea of “smart defaults” and “adaptive defaults” being promising candidates. We close with a discussion of why firms may wish to adopt consumer welfare-maximizing strategies for long-term success.

**DEFAULTS MAKE A DIFFERENCE**

Suppose a customer has two options when completing a purchase: enrolling in a “rewards” program (and receiving promotional offers by mail) or not. In such situations it is common to speak of “opt in” and “opt out” policies. In the opt-in system, the default is not to
automatically enroll new customers: no person is enrolled unless they actively request it. In the opt-out system, every new customer is enrolled by default and stays enrolled unless they take active steps to quit.

Defaults are surprisingly powerful in a number of consequential domains, including matters of life or death. Johnson and Goldstein (2003) found that in European countries with opt-in membership in organ donor pools, often less than a quarter of the population opted in. However, in opt-out systems, typically over 99 percent of the population did not opt-out, leading to enormous differences in donor pools between otherwise similar countries. Studies show that default enrollment in 401(k) retirement plans can lead to 95% participation within a few months of employment, compared to about 60% participation without the default (Beshears et al. 2006). Defaults can also sell insurance. In the early 1990s in New Jersey and Pennsylvania, a sweeping change in legislation required every driver to choose between two alternatives: i) a high-cost insurance policy that provides the right to sue or ii) a low-cost insurance policy which lacks this right. Defaults exerted tremendous influence in this choice. As it turns out, New Jersey chose the inexpensive policy as the default and Pennsylvania chose the more expensive one. As a result 21% of New Jerseyans purchased the right to sue, compared to 70% of people on the opposite side of the river in Pennsylvania (Johnson et al 1993). It is estimated that $140 million more auto insurance is purchased annually in Pennsylvania because of the default.

Beyond two-alternative choice, defaults exhibit strong (or even stronger) effects in the presence of several or thousands of alternatives. Cronqvist and Thaler (2004) document how under privatization of social security, Swedish citizens were sent a catalog of mutual funds and given instructions on how to invest for their own retirement. Of the 456 possible funds, a full third of participants ended up with their entire investment in the default fund, despite an extensive educational campaign encouraging them to make active decisions. Park, Jun and
MacInnis (2000) found that consumers chose a car with a more expensive set of features if the default was a fully loaded car from which they could remove features versus a basic car to which they could add features for more money. Similar results were found for treadmills and personal computers. This scenario illustrates the scope and power of defaults beyond fixed and captive consumers: consumers buying a car can compare across offerings from competing car manufacturers (e.g., manufacturer A with the fully loaded default versus B with the base model default) or even across categories (e.g., computers versus cars, with different default offerings).

In some cases, defaults are so well hidden that people may not be aware they even have a choice. Since many people do not change default settings on software (Mackay 1991) the search engine defaulted to by a Web browser, can influence how a person searches the Internet for years. Since operating systems have default browsers, which have default home pages, many computer users might not be aware that alternative browsers and search engines exist. Though changing them is trivial for many of us, these software defaults have enormous economic impact. It has been argued that AOL’s four billion dollar purchase of Netscape was motivated less by its software and more by its enormously popular home page, which was preserved as the default by some 40% of Netscape users (Kesan and Shah 2006). Software defaults are increasingly legally contested. Since search engines like Google and MSN make billions of dollars by placing ads among search results, the dispute over default search engines has found its way to the US Department of Justice, the US Federal Trade Commission, and the European Commission (Johnson and Goldstein, 2006).

WHY DO DEFAULTS WORK?

We identify three mechanisms thought to drive default effects and in the next sections discuss their implications for marketing ethics and consumer welfare.
Implied endorsement. One view of defaults is that the public perceives them as implied endorsements by those who select them. In the case of policy defaults, such as for organ donor status or pension plan membership, McKenzie, Liersch, and Finkelstein (2006) have forwarded the view that people interpret the default as the recommended course of action set out by policymakers. Thaler and Sunstein (2003) propose that the default selected by policymakers might be interpreted as an indication of what the majority chooses, and that following a simple heuristic of imitation could lead to its widespread adoption (Henrich et al. 2001). In a marketplace context, Brown and Krishna (2004) posit that defaults set by marketers may be perceived as suggestions, and in the case of suspicious vendors, as manipulation attempts. Their experiments find that default effects are diminished or even backfire when consumers become sufficiently skeptical. The view of defaults as endorsements does not portray the selection of defaults as arising from cognitive limitations; on the contrary, it suggests that agents react to defaults with a kind of developed social intelligence or “marketplace metacognition” (Wright 2002). To the extent this occurs, malign defaults might backfire, producing reactance.

Cognitive bias. Several different labels have been proposed for the cognitive biases proposed to explain default effects. Many of these imply, in part at least, loss aversion as a root cause. For instance, comparisons have been drawn between the default effect and the status quo bias (Ritov and Baron 1990; Samuelson and Zeckhauser 1988), and the endowment effect (Park et al. 2000), all of which have been explained in terms of loss aversion (Thaler, Kahneman and Knetsch 1992). Thaler et al. (1992) state that the endowment effect and the status quo bias (which they explicitly liken to default effects, p. 69) “are a manifestation of an asymmetry of value that Kahneman and Tversky (1984) call loss aversion” (p. 63). The gist of this explanation is that people may feel as if they possess the default option and giving up that possession would be perceived as a loss, which under loss
aversion would matter more than the equivalent gain achieved by changing states. This account predicts that people would feel the same way if they were endowed with the opposite default and as such presents itself as a human fallibility. We do not concern ourselves with the debate “on the reality of cognitive illusions” (Gigerenzer, 1996; Kahneman and Tversky, 1996). Rather, we ask what the ethical implications are under the assumption that default effects are attributable to cognitive illusions over which consumers have little awareness or conscious control.

Effort. Some of the difference in expressed preferences is surely due to effort (Samuelson and Zeckhauser 1988). Many people living under opt-out policies for organ donation, for instance, might not bother to opt out because of the effort involved in acquiring and mailing a change-of-consent form (Johnson and Goldstein 2003). However, effort is not the whole story. In experiments where choosing to keep or abandon the default requires the same number of mouse clicks, Johnson and Goldstein still found differences in organ donor pool enrollment that resembled those found in the real world (42% for opt in and 82% for opt out). Similarly, other scholars have argued that rational calculations of the efforts of switching compared to the gains of switching cannot explain the range of default effects observed (Thaler and Sunstein 2003; Samuelson and Zeckhauser 1988). We do not wish to brush aside effort-based explanations: simply because effort cannot explain all default effects, it does not mean that it does not explain many of them. We retain effort on our list of explanations, and later consider the consumer welfare implications for situations in which it is assumed to be the cause.

MARKETING ETHICS & DEFAULTS

Questions about marketing ethics were commonplace well before Packard (1960). As Farmer (1967: 1) observed: “For the past 6,000 years the field of marketing has been thought of as made up of fast-buck artists… Too many of us have been ‘taken’ by the tout or con-
man; and all of us at times have been prodded into buying all sorts of ‘things’ we really did not need, and which we found later on we did not even want.”

The classic reply to such criticisms is *caveat emptor* (buyer beware) subject to the marketer operating within the law; plus an assertion of market discipline, recognizing that most companies rely on repeat purchase and favorable word-of-mouth (Smith 1995). This reply can be criticized on many grounds. However, it is clearly inadequate if the consumer response to the marketer is the result not of illegal and deceptive practices, but through “hidden persuaders”, a manipulation of which the consumer is unaware. *Caveat emptor* is presumed to rely upon consumers having some capacity to discern marketer influence strategies.

The ethical challenges of marketing have prompted efforts to provide normative guidance to marketers, often drawing on theories of moral philosophy. Two especially prevalent approaches have been: 1) theories based on consequences, such as utilitarianism; and, 2) nonconsequentialist theories that are typically duty-based (Dunfee, Smith and Ross 1999). Ethical evaluations of marketing practices often rely, if only implicitly, on a consequentialist analysis. Thus one criterion used to ethically evaluate the use of a default might be the overall goodness of the consequences. Our discussion of default effects indicates that they can have major good and bad consequences (e.g., automatic pension plan enrollment; adding overpriced warranties to all orders) and they may be ethically evaluated accordingly.

From a nonconsequentialist perspective, various marketing ethicists have identified a duty of marketers not to mislead consumers (e.g., Laczniak and Murphy 1993) and the American Marketing Association Statement of Ethics identifies honesty and openness as basic values required of marketers.¹ The implied endorsement theory of defaults suggests

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they may mislead consumers (e.g., the default is incorrectly assumed to indicate what the majority chooses); though equally, some consumers (e.g., the “market savvy”) will be skeptical of marketer persuasion attempts and alert to their use of self-serving defaults rather than misled (Brown and Krishna 2004). Defaults also can be at odds with the consumer’s right to choice, one of the four basic rights identified in a landmark speech by President Kennedy in 1962 (Lampman and Douthitt 1997). Smith (1995), in reference to social contract theory, proposed a marketer duty to ensure that consumers are capable of exercising informed choice. All three theories of defaults suggest they can be inconsistent with consumers exercising choice and thus fail Smith’s (1995) “consumer sovereignty test” (under which, marketers ascertain whether consumers have sufficient capability, information and choice). More fundamentally, a nonconsequentialist perspective highlights a need to examine the implications of defaults for consumer autonomy.

A Consequentialist Perspective: Maximizing Consumer Welfare

One possible resolution of the quandary presented by defaults would be to pick the default that would maximize consumer welfare. In other words, firms might pick the default option that would be in the consumer’s best interest. However appealing, there are at least two problems with this approach.

The first is that the firm and the consumer’s interests are not necessarily aligned. Firms, seeking to increase profit may set a default inconsistent with consumer welfare maximization, which might benefit some consumers though the majority is dissatisfied and possibly harmed, and welfare, on average, is reduced.

The second is that what is best for consumers depends upon the consumer: An outcome that maximizes consumer welfare overall may be suboptimal for some consumers in a context where there is heterogeneity in preferences. Thus, a marketer may set a default consistent with consumer welfare maximization, but some minority of consumers will be
dissatisfied and possibly harmed. For example, the default for auto purchasers in the US is to have an air bag installed in all new vehicles. While this has clearly produced a net savings in lives, it has endangered small-framed women and children. The welfare producing benefits have mostly accrued to large-framed men and some have speculated that those who are more likely to be in accidents—those who are inebriated—are particular beneficiaries. Thus, while welfare is improved on average, there are identifiable winners and losers, and questions of responsibility.

The potential outcomes for any individual consumer and for consumer welfare overall are shown in Figure 1: Default Outcomes for Consumers. We are assuming here that default settings do have consequences for consumer welfare, but recognize that in many circumstances it may be unaffected (though consumer autonomy may be violated nonetheless). In all four cells it is possible for marketer profitability to be affected by the default setting, though it might not be affected at all. Marketers can be assumed, absent mistakes, to set defaults that maximize their profitability. Where consumer welfare is affected, we might assert that marketers should set defaults consistent with consumer welfare maximization. This is relatively unproblematic where their profitability is unaffected. It is more difficult to assert where it lowers profit.

To take a simple example, assume that a credit card provider benefits from its customers belonging to its mailing list, which it sells to other vendors. Membership on the list offers the benefit of receiving attractive targeted promotions, but comes at the cost of unwanted mail. We assume customers are of two kinds: a solace-loving majority (who do not like to be contacted) and a promotion-loving minority (who like to find out about special offers). The vendors can set the default so that no customer is subscribed unless they request
to be—this would be the consumer welfare maximizing default (Cells 1 and 3 in Figure 1). 
Alternatively, the vendor can create a system in which everyone is subscribed unless they take an active step not to be. This would be the consumer welfare minimizing default (Cells 2 and 4)—and the likely profit-maximizing option.

In cell 1, if the individual wishes to receive promotions and does not get them by default, he or she is somewhat inconvenienced by having to take an active step to receive them, while a majority of consumers are satisfied. In cell 2, the promotion-loving customer is satisfied, but a majority of consumers will be dissatisfied with the unwanted mail. In cell 3, the individual solace-loving consumer is satisfied, along with a majority of other consumers. Finally, in cell 4, the individual and majority of solace-lovers are dissatisfied. As our discussion of the figure makes plain, due to heterogeneity of preferences, it is often the case that no default setting will please every individual, the majority, and the firm. Thus even if the firm, regardless of its profitability, were to pick the default that would maximize consumer welfare, this can remain ethically problematic, at least with “captive” consumers. Moreover, as we show in the next section, even if defaults enhanced consumer welfare for all consumers, they would remain ethically problematic because of their implications for consumer autonomy.

A Nonconsequentialist Perspective: Consumer Autonomy

The potential consequences of enhanced or diminished consumer welfare arising from the use of defaults are clearly important. However, both benevolent and harmful manipulations also raise questions of autonomy. First, we introduce the idea of consumer autonomy and consider how it might be violated through defaults. We then discuss paternalism and the problems with a form of libertarian paternalism that has been advanced to justify benign manipulation of consumers using defaults.
The term autonomy comes from the Greek words “autos” (self) and “nomos” (rule or law) and, when applied to persons, refers to their decisions and actions being their own. As Dworkin (1988) observed, it is a moral, political and social ideal. Autonomous persons are self-determining but it is much more than this, as Dworkin’s (1988: 20) seminal analysis observes:

… autonomy is conceived of as a second-order capacity of persons to reflect critically upon their first-order preferences, desires, wishes, and so forth and the capacity to accept or attempt to change these in light of higher-order preferences and values. By exercising such a capacity, persons define their nature, give meaning and coherence to their lives, and take responsibility for the kind of person they are.

Dworkin uses the classic story of Odysseus—tied to his ship’s mast so that he can resist the calls of the sirens—to explain the second-order reflection inherent in his conception of autonomy. Autonomy means that we can have a preference about our preferences (in light of how we wish to live our lives). For this reason, it is possible for autonomy to be maintained in the face of interference that infringes on the voluntary character of one’s actions (or even coercion). As Dworkin (1988: 14) writes, “not every interference with the voluntary character of one’s actions interferes with a person’s ability to choose his mode of life.” Thus some loss of liberty still may be consistent with Dworkin’s conception of autonomy. Consider, for example, life-saving medical treatment rendered without patient consent in emergency situations (Dworkin 1988: 116).

Consumer autonomy has to do with our self-determination as consumers. It too reflects preferences about preferences and is not simply about our most immediate needs and wants. Thus, it can be conceived as accommodating consumers who would wish to always have as much choice as possible and those who might prefer to have their consumer choices curbed (e.g., because of anti-materialistic values). Defaults may challenge consumer autonomy.
In the case of manipulation through defaults, the consumer cedes some independence of choice to the marketer and consumer autonomy is diminished (even where consumers might have a preference for the convenience and ease of decision-making provided by defaults over an active choice alternative). This is clear where consumers do not frame the default as a choice (e.g., the costs of opting out are seen as prohibitively high) or are deceived as to the possibility of choice (e.g., default web browsers). However, is autonomy always maintained where choice is recognized by consumers? We take up this question when we look further at the possible causes of default effects but first discuss autonomy in relation to paternalistic uses of defaults.

**Paternalism in Setting Defaults**

Paternalism involves a violation of autonomy. It is the “interference with a person’s liberty of action justified by reasons referring exclusively to the welfare, good, happiness, needs, interests, or values of the person being coerced” (Dworkin 1972). Classic illustrations of paternalistic interventions by the state include laws requiring seat-belt use in cars or helmets of motorcycle riders. Dworkin (1988: 123) explained: “There must be a usurpation of decision making, either by preventing people from doing what they have decided or by interfering with the way in which they arrive at their decisions.”

Defaults potentially interfere with how consumers arrive at decisions. This could be a violation of consumer autonomy that is intended to serve the marketer’s interest and not the consumer’s. However, instead, it may be “for their own good.” Defaults can be used with paternalistic intent. A clear example is setting defaults for automatic pension plan enrollment.

Sunstein and Thaler (2003: 1161) have argued strongly in favor of a form of paternalism, urging that default rules “should be chosen with the explicit goal of improving
the welfare of the people affected by them.” Their rationale (2003: 1162) is that “in some cases individuals make inferior decisions in terms of their own welfare—decisions that they would change if they had complete information, unlimited cognitive abilities, and no lack of self-control.” Moreover, given their belief in constructed preferences, they suggest that in many situations there is no alternative to a kind of paternalism. Somebody must set the default. This “weak paternalism” is still impossible to avoid even where planners avoid defaults and require active choices, because some people would choose not to choose or simply because of the selected “starting points”.

Sunstein and Thaler (2003: 1162) advocate “libertarian paternalism,” under which, they suggest, paternalistic policies that are “self-consciously attempting to move people” would be acceptable from a libertarian perspective if choices are not blocked off and impose only “trivial costs on those who seek to depart from the planner’s preferred option.” Thus, in setting defaults, marketers potentially could have a “libertarian benevolence” in mind whereby default rules are “enlisted in the interest of vulnerable parties” (2003: 1162). It remains libertarian because the design makes it easy to take the non-default option.

Libertarian paternalism still entails a violation of autonomy. Sunstein and Thaler (2003: 1167, fn. 22) acknowledge this concern up to a point, though they assert that it is “fanatical” in settings such as obesity “to treat autonomy… as a kind of trump not to be overridden on consequentialist grounds.” Sunstein and Thaler claim respect for autonomy in saying that “autonomy is adequately accommodated by the libertarian aspect of libertarian paternalism.” However, they are not primarily advocates of the effort-based or implied endorsement theories of default effects, which more readily accommodate their proposed libertarian paternalism. It is inconsistent (if not ingenuous) of Sunstein and Thaler to

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2 Dworkin (1988) recognized that this definition is too restrictive and elaborated on how, for example, paternalism extends to paternalistic acts that do not involve interference with liberty. It is sufficient for our purposes, however.
simultaneously claim respect for autonomy and maintain that human judgment is profoundly biased:

People fail to make forecasts that are consistent with Bayes's rule, use heuristics that lead them to make systematic blunders, exhibit preference reversals (that is that prefer A to B and B to A), suffer from problems of self-control and make different choices depending on the framing of the problem. (Sunstein and Thaler, 2003: 1168).

Consumers meeting this characterization would not be as “free to choose” as Sunstein and Thaler would have it (2003: 1161) because of the very biases that they say need to be acknowledged. If the bias of loss aversion underlies the preference for default options (as argued by Thaler, Kahneman and Knetsch, 1992), then using defaults as instruments of policy inevitably compromises autonomy. In a real sense, the freedom to choose provided by libertarian paternalism is an illusion, at least to those who are unaware of the effects of defaults.

**AUTONOMY, OUTCOMES & THE THEORIES OF DEFAULTS**

One response to the dilemma of defaults might be to place a premium on consumer autonomy and require active choices wherever possible. However, defaults can provide greater efficiency in consumer decision-making and can assist consumers in making good decisions. Thus, under certain circumstances, defaults can be consumer welfare enhancing. In some sense, defaults are also inescapable, if one views the choices made by producers about product attributes as all potentially consumer choices. Default effects are certainly more prevalent as consumer choice has expanded; contrast Ford’s Model T (“any color so long as it’s black”) with the multiplicity of choices provided to computer customers today on Dell’s website (“create your own system”). As has been demonstrated by work on reason-based choice (Shafir, Simonson and Tversky, 1993) adding options increases the tendency to remain with the status-quo default. Most, important, perhaps, is that the expansion significantly increases the effort involved in making a decision, even if decision-makers use adaptive strategies (Payne, Bettman, and Johnson, 1993).
To shed further light on marketer obligations we need to more fully explore autonomy and default outcomes relative to the theories of defaults. While consequences of default settings are largely contingent upon the context, the different theories certainly point to different possible marketer obligations relative to consumer autonomy. To illustrate, let us consider a case in which the following holds: 1) the firm has chosen a default that minimizes overall consumer welfare; 2) one consumer in question has preferences aligned with the consumer majority; 3) this consumer is aware of having a choice to depart from the default. To build upon the mailing list example, this situation corresponds to Cell 4 in Figure 1, the worst case scenario. How do the different theories underlying default effects speak to marketer obligations in this case?

*Implied endorsement.* Under caveat emptor or the consumer sovereignty test, consumers should be assumed to know how to deal with endorsements and negative outcomes of endorsements may be minimal. Societal treatment of endorsements aligns with this view (e.g., regulation in many countries ensures that consumers know when something is an endorsement but gives no guidance on how to weigh an endorsement). Demonstrations of marketplace metacognition, in which consumers discount what they assume to be biased information, supports the view that endorsements are benign (Brown and Krishna, 2004; Wright 2002). There might also be less concern about diminished autonomy here because the choice is apparent and the effect of the endorsement is conscious. However, any unwarranted endorsement, implied or not, can hamper autonomy through deception. Even where deception is absent (i.e., there is no intent to mislead), consumers might still mistakenly assume the default is a proxy for what the majority choose and be misled. From a consequentialist perspective, if at a later time a consumer realizes he acted on an unwarranted endorsement, he would be disadvantaged by the transaction costs involved in switching.
Cognitive bias. If default effects stem from loss aversion, there may be diminished autonomy even when consumers perceive a choice, because they are not aware of the bias created by the default. Here we have a ‘hidden persuader’ of the type that troubled Packard and this is problematic from both caveat emptor and consumer sovereignty perspectives as well as because of diminished autonomy. If cognitive bias underlies default effects, then there is a troublesome tradeoff between increases in social welfare (that defaults can bring) and decreases in autonomy (that result inevitably from defaults). Cognitive bias is usually measured against a normative standard, such as the correct answer to a logical problem, and has led to debates as to whether minds are equipped to reason normatively. However, in recent research on constructed preferences, the focus is not on normative answers, but on differences in preferences between groups. When such differences exist, they can be explained by psychological processes, but also by the idea that people do not have well-formed preferences in many domains. If we take the view that preferences are truly constructed, defaults cannot logically violate preferences, even though autonomy is violated when consumers are unconsciously guided towards default alternatives.

Effort. If default effects are due to effort, caveat emptor might be preserved but consumer autonomy is hampered because choice is not free. From a consequentialist view, a state of affairs where the greatest number needs to exert effort to select their preferred option is not ideal and would be ethically problematic under certain circumstances (cells 2 and 4 of Figure 1). However, as with cognitive bias, the effort-saving aspect of defaults can provide a significant justification for potential losses of consumer autonomy. A consumer not presented with defaults may preserve autonomy, but may end up both overwhelmed and making worse decisions.
REMEDIES TO ENHANCE CONSUMER WELFARE

One obvious conclusion from a welfare perspective is that ignoring defaults can be a mistake for both firms and consumers. Welfare may be reduced where defaults are set without regard to the consequences for choice, referred to as “inept neglect” by Sunstein and Thaler (2003: 1202). Consider the example of a large manufacturer who allowed consumers to configure their order using a web site. The manufacturer had, inadvertently, set the default alternative to the least expensive option for every choice. Not only did this fail to maximize profits for the firm, it also destroyed consumer welfare: When making choices in the absence of a default, customers systematically chose more expensive options. Thus the wrong default left both the marketer and the customer worse off. A better choice of default would generate a pareto improvement in welfare to both parties. Arguably, in this case, an overweighting of consumer autonomy resulted in losses to both parties.

Ultimately, while autonomy is an important value, it requires that consumers (1) are aware of the effects of marketplace characteristics such as defaults, and (2) know how to overcome their effect by spending an appropriate amount of effort. If both of these conditions exist, then the threat posed to autonomy by defaults is less of a concern. However, if they do not exist consumers, policy-makers and firms may wish to examine other alternatives.

Having looked at defaults effects in consumer choice, their likely causes, and the problems they present for consumer autonomy and welfare, we present here some remedies, and propose two new ones: “smart defaults” and “adaptive defaults”.

Benign Defaults

Consistent with Sunstein and Thaler (2003), we feel that the truly problematic cases are those in which defaults are chosen in a way that does not maximize consumer welfare. A certain number of people will be dissatisfied under most any default. However, if the
default is set to the preference most people would make when faced with making an active choice, the greatest number benefit. However, implementing such policies is not as simple as it seems.

Consider the case of organ donation (Johnson and Goldstein, 1993). Governments consider organ donation welfare maximizing, and polls in the United States show that most people approve of organ donation. However, only a minority of Americans have joined organ donor pools, and only a minority agree to be donors in forced-choice situations such as at motor vehicle registration agencies. Should stated preferences (polls) or revealed preferences (forced-choice questions about joining donor pools) be used to determine what is welfare maximizing? A useful tool in such cases is to see what people who are forced to make a choice without a default will choose.

Policy makers and marketers also must look beyond the number of people affected by various defaults (as we have done here) to the broader consequences. The families of willing organ donors may care little if their kin are defaulted into not being donors, while the families of unwilling donors may care a great amount if their loved ones are harvested for organs. Even if one argues that having more donors despite a few outrages is better for societal welfare, one must admit that the negative press arising from the incidents could cause voters to put an end to the opt-out system, thus decreasing societal welfare.

Sunstein and Thaler (2003) focus primarily on public policymaker use of defaults to identify welfare enhancing interventions. They do, however, also acknowledge the relevance of these interventions to the private sector (but do not consider private sector exploitation of defaults that reduce consumer welfare). Four interventions are identified: 1) “Minimal paternalism”, where a default rule is constructed with the goal of influencing behavior but it is costless or nearly costless to depart from the default plan (this intervention is most consistent with their idea of libertarian paternalism); 2) “Required active choices”, where the
planner is unsure of what choice will promote welfare and so forces people to choose explicitly; 3) “Procedural constraints” typically require more effort and are designed to ensure that not following the default is voluntary and rational rather than a function of defective decision-making (due to, say, a lack of experience); 4) “Substantive constraints” allow people to reject the default but only on certain terms and potentially at considerable cost as well as effort. Planners also have the option of denying choice altogether on the basis that people will reject a default in error. This is more typical of public sector use of defaults though, in some respects, it is what companies do in requiring consumers to read terms and conditions before committing to purchase (arguably to enhance consumer welfare but more likely to reduce scope for subsequent complaints or litigation). It is also what a company does in determining a set of product attributes over which the consumer has no choice (though clearly consumers have choice in comparing different products of competing companies).

In determining the appropriate intervention, there are two approaches that appear to apply to marketers as well as in a public policy context (Sunstein and Thaler 2003). First, a cost-benefit analysis that evaluates the gains and losses associated with the program options. If feasible, this would be an objective assessment of which option maximizes consumer welfare and thus how to set defaults. Our organ donation example illustrates the challenges this poses and a classic critique of consequentialist ethics is the difficulty of forecasting all potential good and bad consequences for all affected parties. Second, to adopt rules-of-thumb: the approach that the majority would choose if explicit choices were required and revealed (but what of the minority?); or a required active choices approach (but some would not choose, others would not make “good” choices, and this abandons the efficiency of defaults); or an approach that minimizes the number of opt-outs (but this might result from
cognitive biases). These heuristics are often suboptimal in our view relative to “smart defaults” or “adaptive defaults”.

**Smart Defaults**

Marketers are in the business of understanding consumer needs and predicting their behavior. Setting defaults can take advantage of that knowledge. Consider the air bag example we used earlier to illustrate heterogeneity in consumer needs. If the deployment of the airbag could react to the kind of occupant of the seat, consumer welfare would be increased. Thus many “Advanced Airbag Systems”, required on all new vehicles in the U.S. since 2006, are designed to sense the weight of the seat occupant to determine whether to activate the airbag. This is a smart default. In helping customers make better decisions about the purchase of retirement investments, a smart default might be based on a simple linear model incorporating the purchaser’s age, family status and intended age at retirement. Other factors, such as the investor’s risk attitude and loss aversion, also can be included. Such defaults would not suit all consumers perfectly, but are superior to the traditional default contribution of not providing a safety net or the more recent ‘one-size-fits-all’ default suggested by many firms.

The challenge for smart defaults is to gather enough information sufficiently quickly to produce a better-customized default than the one-size-fits-all approach. There will always be a tradeoff between the amount of information gathered and the accuracy of the default calculation, but existing market research technology should allow firms to address this problem. From both a consequentialist and a *caveat venditor* (seller beware) perspective, smart defaults are a dominant option.³ We believe they may also be an advantage to the firm as well, assuming they do two things: The first is that they meets the challenge of creating the right smart default. The second, which is much more difficult, perhaps, is to be able to
communicate the effect of defaults upon choice and to convince consumers that their choices are better. In this case, we suspect that firms may profit from the long-term loyalty generated by increased consumer satisfaction.

Smart defaults require the presence of consumer-specific data, some of which may already be known to the marketer (e.g., age, gender, referring URL) and some of which might be collected explicitly to generate the default. The beauty of smart defaults is that they return us to the original idea of marketing as understanding and meeting consumer needs including the differences across consumers evident in market segmentation. What is novel is that smart defaults assume that the firm must understand consumers better than consumers themselves at the beginning of the decision process. Much like a firm uses market research to produce products that meet consumer needs, smart defaults suggest that firms must produce decisions that meet the consumers’ needs as well. This was not the case when our auto manufacturer, who had picked the least expensive default for every choice, failed to meet the needs of most consumers. The smart default design, selecting the right engine, body style, and accessories for both the high performance connoisseur and the parent of a large family, would be a smart default better meeting those needs.

Adaptive Defaults

Another option, particularly relevant to the world of online commerce, is the idea of an adaptive default, one that uses each choice in a series to set other defaults. Instead of making the auto manufacturer’s unfortunate choice of selecting the least expensive options as defaults, a more appropriate, benign, welfare-enhancing default might be to make the default the option that a customer would select in the absence of a default. As we have discussed, smart defaults would improve consumer welfare based on rudimentary knowledge about the consumer.

Smith (1995) placed caveat venditor at the opposite end from caveat emptor on a “marketing ethics continuum”. This position is where consumer interests would be most favored relative to producer interests, but
The alternative of adaptive defaults would require the manufacturer to present the options with defaults that represent the best guess of what might be chosen conditional on what has been chosen to date. For example, someone who chooses a powerful engine, may be more likely to choose certain colors (red), and other consistent options, such as sporty wheels, a sports handling package, and performance tires. Note that unlike the widespread use of packages of options to limit choice, the idea of an adaptive default preserves considerable consumer autonomy (within marketer determined boundaries) and strikes a balance between providing more choice and providing the right choices. It also addresses concerns with choice overload (Iyengar and Lepper 2000) by limiting the options that must be shown to the consumer. Because the number of decisions that must be made is also reduced, ego depletion effects in choice (Baumeister, Muraven and Tice 2000) might be minimized by adaptive defaults.

While smart and adaptive defaults have many merits, there may be some problems associated with their implementation. These clever defaults appear to be choices or judgments that the firm is making for the customer. Who is to blame when a smart or adaptive default does not fit the consumer, such as when the airbag is inappropriate: the manufacturer for having a poor algorithm, or the consumer for passively accepting the default?

**Other Remedies**

In some circumstances, it might be appropriate to require procedural constraints (Sunstein and Thaler 2003) to reduce the prospect of consumers rejecting a benign (welfare enhancing) default. These constraints typically raise the cost of moving away from the default by requiring greater effort (e.g., where software companies provide recommended settings when installing software). In other circumstances, particularly where the default is not welfare enhancing for at least some consumers, warnings and disclosures may be

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it raises concerns about paternalism of the type discussed earlier here in regard to defaults.
warranted. Hidden defaults may be inappropriate or at least require disclosure if there are potentially major negative consequences for consumer welfare. Equally, it may be appropriate to warn consumers of default effects, not unlike how curved rear-view mirrors come with warnings about how they alter perceived distance. However, warnings would be of less practical value as a remedy under the assumption that cognitive biases are at work. If default selection reflects implied endorsement, it might be appropriate to require warnings to the effect that the default option is not endorsed by the company where this is not the consumer welfare maximizing option (e.g., “default settings do not constitute a recommendation and may not be the preference of a majority of consumers”).

More draconian but arguably warranted in some contexts would be regulations preventing the use of defaults or that restrict marketers from using the consumer welfare minimizing default or from unfairly loading the costs of not following the default. In view of the demonstrated powerful effects of defaults, consumer protection agencies should closely monitor their use. We believe that much could be achieved through consumer education—perhaps even through this special issue—so that consumers are better informed of how consciously or otherwise they might respond to defaults.

**CONCLUSION**

We have borrowed a page from an old book on the manipulation of consumers. Though its message has been brushed aside, perhaps rightfully so where it concerns indirect manipulation (as through advertising), recent consumer research documents robust, reliable and more direct effects, the consumer-welfare implications of which merit attention. Taking the strength and scope of default effects as a case in point, we argue that they present considerable potential to impact, both positively and negatively, the outcomes consumers face. Where previous discussions of defaults have focused solely on outcomes, we argue that even when consequences are benign, default manipulations can violate consumer autonomy.
The implications of setting defaults cannot be judged without a theory of why default effects exist. We reviewed three dominant lines of explanation—implied endorsement, cognitive limitations, and effort—and considered how each theory gives rise to different ethical implications. Given how the particular causes of defaults effects matter to consumer welfare and marketing ethics, clarifying the theoretical underpinnings of defaults presents itself as a priority in transformative consumer research. Finally, we examine the options that are available to firms who wish to maximize consumer welfare given the effects of defaults, arguing that ignoring defaults is never justified. Moving beyond benign defaults, we propose two alternatives more in line with marketing principles of understanding and segmenting customers: smart defaults and adaptive defaults.
REFERENCES


Figure 1: Default Outcomes for Consumers

<table>
<thead>
<tr>
<th>Marketer Decision</th>
<th>Individual Consumer Preference</th>
<th>Preferences Misaligned (with consumer majority)</th>
<th>Preferences Aligned (with consumer majority)</th>
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<td></td>
<td>• Individual consumer dissatisfied/harmed</td>
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