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Just One Click: The Reality of Internet Retail Contracting

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JUST ONE CLICK: THE REALITY OF INTERNET RETAIL CONTRACTING

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This Essay explores the enforceability and presence of pro-seller contract terms in internet retail contracts. Analyzing case law on internet contract enforceability and a survey of 500 firms' websites, it demonstrates that even the enforceability of many internet contracts is questionable. It then presents new data that suggest that the prevalence of pro-seller contract terms is far less than usually assumed. It suggests that the benefit of making these terms enforceable is outweighed by the loss of user friendliness required for the necessary interface changes. Finally, it uses fresh statistical analyses to determine what relationship, if any, exists between enforceability, pro-seller contract terms, business size, product channel, or product type. Generally, it concludes that the contract literature has likely overestimated the benefit of the pro-seller contract terms and underestimated the role internet contract terms play in informal enforcement; unenforceable terms may still serve as guideposts to dispute resolution.

I. INTRODUCTION

Scholars have noted for decades the possibility that standard form contracts disadvantage consumers.[1] For many years, contract literature focused on the idea that sellers with market power draft contracts that are disadvantageous to consumers.[2] Law and economics scholars, however,

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1. E.g., Friedrich Kessler, Contracts of Adhesion—Some Thoughts About Freedom of Contract, 43 Colum. L. Rev. 629, 632 (1943) (arguing that standardized contracts allow manufacturers to dictate contractual terms to consumers); Arthur Allen Leff, Contract as Thing, 19 Am. U. L. Rev. 131, 140–41 (1970) (claiming that process of contract negotiation "tended to lessen the possibility of monolithic one-sidedness"); Arthur Alan Leff, Unconscionability and the Crowd—Consumers and the Common Law Tradition, 31 U. Pitt. L. Rev. 349, 350–51 (1970) (arguing that market does not adequately protect consumer from standardized contracts due to monopolies, information asymmetry, and consumer apathy); Stewart Macaulay, Private Legislation and the Duty to Read—Business Run by IBM Machine, the Law of Contracts and Credit Cards, 19 Vand. L. Rev. 1051, 1059–60 (1966) (noting that standardized contracts allow firms to avoid liability for representations from their sales agents, even in situations where consumer believes agent's representations to be binding); Todd D. Rakoff, Contracts of Adhesion: An Essay in Reconstruction, 96 Harv. L. Rev. 1173, 1225–29 (1983) (stating that standardized contracts shift risks to consumers).

2. E.g., Jeffrey Davis, Revamping Consumer-Credit Contract Law, 68 Va. L. Rev. 1333, 1333 (1982) (claiming that form contracts usually allocate most risks and burdens to

have been skeptical about that hypothesis, pointing out that a strategy of dictating pro-seller contract terms would rarely be the optimal technique for exploiting market power.[3] In recent years, however, the debate has shifted as new product distribution channels have changed the technology of contracting. The new concern is that the internet distribution channel allows firms, even those firms without market power, to exploit the cognitive failures of their customers through the "shrouding" of terms and similar techniques.[4]

That concern has become more prominent with the rise of internet retailing, which extensively uses electronic standard-form contracts.[5] This often undermines the notion of assent on which the contract paradigm traditionally depends.[6] Scholars have worried that internet retailers are able to use their websites to draft one-sided contract terms and then obscure them within the website interface so that customers will continue to shop at their sites.[7] This ability to obscure terms within their websites

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consumer); Rakoff, supra note 1, at 1234 (arguing that form contracts impose risks and responsibilities on consumers that might outweigh benefits of lower prices).

3. E.g., Lucian A. Bebchuk & Richard A. Posner, One-Sided Contracts in Competitive Consumer Markets, 104 Mich. L. Rev. 827, 833–34 (2006) (arguing that firms will "dependably treat consumers much better than their contracts require them to do"); Alan Schwartz & Louis L. Wilde, Imperfect Information in Markets for Contract Terms: The Examples of Warranties and Security Interests, 69 Va. L. Rev. 1387, 1414–15 (1983) (asserting that firms will generally supply level of warranty that consumers desire).

4. See Stefano DellaVigna & Ulrike Malmendier, Contract Design and Self-Control: Theory and Evidence, 119 Q.J. Econ. 353, 393–94 (2004) (predicting that firms exploit consumer naiveté regarding contract renewal); Xavier Gabaix & David Laibson, Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets, 121 Q.J. Econ. 505, 505–08 (2006) (predicting that firms will rationally hide information from consumers).

5. See Michelle E. Boardman, *Contra Proferentem*: The Allure of Ambiguous Boilerplate, 104 Mich. L. Rev. 1105, 1114–15 (2006) (arguing that firms will retain ambiguous language so long as they can predict how courts will interpret it); Clayton P. Gillette, Pre-Approved Contracts for Internet Commerce, 42 Hous. L. Rev. 975, 980–82 (2005) (arguing that "market correctives are insufficient to constrain sellers' tendencies to exploit buyers" through contracts of adhesion); Clayton P. Gillette, Rolling Contracts as an Agency Problem, 2004 Wis. L. Rev. 679, 687–89 [hereinafter Gillette, Rolling Contracts] (arguing that it is unlikely that internet consumers will read electronic contracts more closely than traditional consumers read written contracts).

6. E.g., Douglas G. Baird, Boilerplate and Market Power: The Boilerplate Puzzle, 104 Mich. L. Rev. 933, 935–36 (2006) (discussing problems with relying on assumption of arms-length negotiation); Gillette, Rolling Contracts, supra note 5, at 687–89 (arguing that "sellers systematically take advantage of their position to draft terms to which informed buyers would object"); Robert A. Hillman & Jeffrey J. Rachlinski, Standard-Form Contracting in the Electronic Age, 77 N.Y.U. L. Rev. 429, 478–86 (2002) (discussing rational, social, and cognitive factors that place consumers at risk from standardized internet contracts); Ronald J. Mann, "Contracting" for Credit, 104 Mich. L. Rev. 899, 901–05 (2006) (describing problems with assent, readability, fragmentation, and range of choice in standardized contracts).

7. See Stephen E. Friedman, Text and Circumstance: Warranty Disclaimers in a World of Rolling Contracts, 46 Ariz. L. Rev. 677, 712–14 (2004) (arguing that consumers should be protected from hidden disclaimers by allowing enforcement "unless the

may make them more effective at hiding pro-seller contract terms than their bricks-and-mortar counterparts. This, among other concerns,[8] has led many to argue for a new contracting regime that deals with electronic contracting.[9] Indeed, because software is often distributed online, this is a major topic in the ALI's current project, Principles of the Law of Software Contracts.[10]

Generally, this critical scholarly literature reflects an implicit syllogism: Aggressive contract drafting exploits consumer frailties and thus leads to higher profits for retailers.[11] We reject that approach, offering in its place a new and simpler paradigm for understanding electronic contracting. Our central points are: first, that there is a substantial cost to making contracts enforceable and relatively little benefit to making them one-sided; and, second, that for most retailers the costs of making contracts enforceable exceed the benefits. To put it more directly, we suggest that retailers design websites to balance the benefits of extracting purposeful assent with the burdens of complicating the purchase process.[12]

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circumstances indicate otherwise," with circumstances to "include anything . . . that puts the buyer off guard"); see also Sharon K. Sandeen, The Sense and Nonsense of Web Site Terms of Use Agreements, 26 Hamline L. Rev. 499, 547–52 (2003) (questioning use of terms of use, introduced as part of e-commerce industry).

8. See David Gilo & Ariel Porat, The Hidden Roles of Boilerplate and Standard-Form Contracts: Strategic Imposition of Transaction Costs, Segmentation of Consumers, and Anticompetitive Effects, 104 Mich. L. Rev. 983, 1005–08 (2006) (discussing how complex boilerplate may be used strategically for industry collusion, higher consumer prices, increased barriers to entry, and consumer segmentation); Hillman & Rachlinski, supra note 6, at 433–34 (addressing arguments made by lawmakers and academics about adopting new set of rules to deal with electronic contracts); Robert L. Oakley, Fairness in Electronic Contracting: Minimum Standards for Non-Negotiated Contracts, 42 Hous. L. Rev. 1041, 1071–73 (2005) (outlining set of mandatory rules that would ensure fairness in electronic contracts).

9. See, e.g., Gillette, Rolling Contracts, supra note 5, at 712–22 (suggesting judicial or regulatory intervention to internalize buyers' interests); Robert A. Hillman, Online Boilerplate: Would Mandatory Website Disclosure of E-Standard Terms Backfire?, 104 Mich. L. Rev. 837, 855–56 (2006) (finding that mandatory website disclosure of terms may be best strategy); Oakley, supra note 8, at 1100–01 (discussing favorably efforts to require minimum standards for electronic contracts); Margaret Jane Radin, Humans, Computers, and Binding Commitment, 75 Ind. L.J. 1125, 1125–27 (2000) (discussing problems with viewing online contracts through "traditional picture of how binding commitment is arrived at").

10. Principles of the Law of Software Contracts § 2, at 121 (Discussion Draft 2007) [hereinafter ALI Principles] (introducing still incomplete section on standard form agreements).

11. The corollary is that merchants that fail to design contracts that exploit consumer frailties will be unable to compete with those that do, and thus will be driven from the market. Cf. Oren Bar-Gill, Seduction by Plastic, 98 Nw. U. L. Rev. 1373, 1376, 1434 (2004) ("[I]ssuers *have to* exploit consumers' imperfect rationality in order to survive in [the credit card] market.").

12. There is an extensive academic literature, relying heavily on "clickstream data," analyzing the strategies for designing website interfaces so as to maximize positive consumer response. See, e.g., Steven Bellman et al., Designing Marketplaces of the

We illustrate this new paradigm with the results of a survey of the contracts of the 500 largest internet retailers. This survey shows that fewer than ten percent of these retailers have sales processes that create enforceable contracts on their sites and that relatively few of the contracts include terms thought to be detrimental to consumers.[13] Whatever the problems might be with those contracts and their enforcement (and there are some), the terms that the retailers select as worth the trouble of formal enforcement against their customers are relatively benign.[14]

Our discussion proceeds in three steps. We start with a discussion of two background topics: the role of documents in retail contracting and the legal framework for making internet retail contracts enforceable. Second, we describe the empirical results, illustrating the rarity with which internet retail contracts are enforceable or contain harsh terms.

Artificial with Consumers in Mind: Four Approaches to Understanding Consumer Behavior in Electronic Environments, J. Interactive Marketing, Winter 2006, at 21, 29 (noting effect of sorting on price sensitivity); Randolph E. Bucklin et al., Choice and the Internet: From Clickstream to Research Stream, 13 Marketing Letters 245, 252 (2002) (comparing internet choice as captured by clickstream data to supermarket choice as captured by UPC scanner data); Alan L. Montgomery et al., Modeling Online Browsing and Path Analysis Using Clickstream Data, 23 Marketing Sci. 579, 590–93 (2004) (using clickstream data to analyze paths through websites that are more and less likely to result in purchases); Lan Xia & D. Suharshan, Effects of Interruptions on Consumer Online Decision Processes, 12 J. Consumer Psych. 265, 278–79 (2002) (providing guidance on limited negative impact of "interruptions" in online purchasing process).

13. Florencia Marotta-Wurgler's papers have analyzed whether the timing of terms disclosure or market conditions affect the one-sidedness of electronic contracts. See Florencia Marotta-Wurgler, Are "Pay Now, Terms Later" Contracts Worse for Buyers? Evidence from Software License Agreements 24–25 (N.Y. Univ. Sch. Law, Law & Econ. Research Series, Working Paper No. 05-10, 2005), available at http://ssrn.com/abstract=799282 (on file with the *Columbia Law Review*) (finding that terms disclosed before sale are usually more pro-seller than terms disclosed only after sale); Florencia Marotta-Wurgler, Competition and the Quality of Standard Form Contracts: An Empirical Analysis of Software License Agreements 33–34 (N.Y. Univ. Sch. Law, Law & Econ. Research Series, Working Paper No. 05-11, 2005), available at http://ssrn.com/abstract=799274 (on file with the *Columbia Law Review*) (analyzing competitive forces in shaping standard terms). Besides looking at a broader set of internet merchants, our project has a different purpose. Rather than trying to assess whether pro-seller terms are associated with delayed presentation or competitive conditions, we try to explain why firms seek to obtain consent to their contracts.

14. The suggestion that the terms are "relatively" benign implies a baseline about the normal level of adverse terms in consumer contracts. We suggest that the terms are relatively benign primarily because our baseline expectation was that almost all of the contracts would include a large number of adverse terms. Whatever the reasons for the pattern here, it may not be unusual. Ted Eisenberg and Geoffrey Miller find a similar pattern in the terms of arbitration clauses in agreements among large publicly-traded companies. See Theodore Eisenberg & Geoffrey P. Miller, The Flight from Arbitration: An Empirical Study of Ex Ante Arbitration Clauses in Publicly-Held Companies' Contracts 51–52 (Cornell Law Sch. Legal Studies Research Paper No. 06-023, 2006), available at http://ssrn.com/abstract=927423 (on file with the *Columbia Law Review*) ("[L]arge corporate actors do not systematically embrace arbitration [despite reputed advantages].").

Third, we offer some statistical analyses to describe the small group of cases in which merchants do choose to obtain assent to their contracts.

II. BACKGROUND

A brief preliminary discussion of the practical and legal context of retail contracting provides a useful backdrop for the data and analysis we present below.

A. *The Practice of Retail Contracting*

Although consumer transactions pervade everyday life, the actual process of contracting remains largely unexamined. Generally, contractual obligation in a retail transaction has three possible sources. The first is the actions of the parties in conducting the transaction—the retailer's offering of a product at a particular price, the consumer's selection of the product, and the consummation of a sale. Under UCC Article 2, those actions, even in the absence of any documentation, will lead to a contract that incorporates the default terms of Article 2 to supplement the price and quantity terms that are likely to be clear from the overt actions of the parties.[15]

The second is any documents that the seller might provide the consumer to clarify the seller's obligations. In most retail contexts, those are likely to be quite simple, rarely extending beyond return policies, warranties, and the like. Although those documents are likely to be one-sided boilerplate drafted by the seller, the enforceability of those documents will rarely present important disputes, if only because they are likely to be limited to dickered terms, affirmative commitments by the seller (warranty and return provisions), or to disclaimers of warranties that UCC Article 2 specifically validates.[16]

The third source is a separate contract with a remote manufacturer that consumers are likely to see only when they have received the goods and opened the packaging.[17] Although reasonable minds could differ on whether these so-called "shrinkwrap" contracts should be enforced, the law has coalesced around a general acceptance of their enforceability.[18]

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15. U.C.C. § 2-204, § 2-204 cmt. 3 (2000).

16. E.g., U.C.C. § 2-316 (describing how modifications to implied warranties of merchantability for consumers "must be in a record, be conspicuous, and state 'The seller undertakes no responsibility for the quality of the goods except as otherwise provided in this contract'"). The validation of warranties in the UCC is subject to the provisions of the Magnuson-Moss Warranty Act of 1975, 15 U.S.C. §§ 2301–2312 (2000), which, generally speaking, invalidate implied warranties in cases in which merchants provide express warranties. For a detailed discussion, see Daniel L. Keating, Sales: A Systems Approach 166–80 (2d ed. 2003).

17. For an in-depth discussion of contracts with delayed presentation of terms, see generally Robert A. Hillman, Rolling Contracts, 71 Fordham L. Rev. 743 (2002).

18. See id. at 752–56 (discussing different approaches that courts have taken in dealing with delayed presentation of terms); see also Hill v. Gateway 2000, Inc., 105 F.3d 1147, 1150 (7th Cir. 1997) (holding that arbitration provision shipped with computer was

The shift from bricks-and-mortar retailer to online retailer does not necessarily change the potential sources of contract obligation. The customer's decision to place an item in a shopping cart and "click here to buy" provides the electronic parallel to the retail purchasing decision. The website often will have terms that govern its relationship with its customers. And manufacturers that distribute their products through internet retailers are just as able to provide shrinkwrap terms in the box as they are when they distribute their products through catalog, mail-order, or conventional retail outlets. Our focus, as the introduction suggests, is on the second of those sources: the terms that a website provides to govern its relationship with its own customers.

B. *Electronic Contracting*

With respect to traditional contract doctrine, the shift to an online contracting environment poses a particular challenge. The statute of frauds traditionally requires a writing to form a binding agreement involving a substantial sale of goods.[19] To deal with an online electronic contracting environment, the statute of frauds has been revised to permit online retailers the same ability to enter into binding arrangements with their customers that their bricks-and-mortar predecessors enjoyed. To that end, the central provisions of the Uniform Electronic Transactions Act (UETA) and of the Electronic Signatures in Global and National Commerce Act (E-SIGN) also require parity of treatment for electronic records and paper documents.[20]

Those statutes say nothing, however, about the ritual through which a retailer can ensure that it has obtained its customer's binding assent to a contract document. In the language of UETA, "[t]he effect of an electronic record . . . is determined from the context and surrounding circumstances at the time of its creation, execution, or adoption."[21] In a face-to-face context, a concerned retailer will have little doubt that a formal signing of a contract document will be adequate evidence of assent to make the document binding against the consumer. In the online context, however, the youth of the internet and the continuing rapid devel-

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binding on buyer); ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449, 1452–53 (7th Cir. 1996) (holding shrinkwrap license binding on buyer). But see Klocek v. Gateway, Inc., 104 F. Supp. 2d 1332, 1341–42 (D. Kan. 2000) (denying application of arbitration clause contained in form with standard terms packaged inside computer box); U.S. Surgical Corp. v. Orris, Inc., 5 F. Supp. 2d 1201, 1205–07 (D. Kan. 1998) (holding that single use restriction on product package was not binding on buyer); Ariz. Retail Sys., Inc. v. Software Link, Inc., 831 F. Supp. 759, 765 (D. Ariz. 1993) (declaring license agreement shipped with computer software was not binding on buyer). For a forceful criticism of that analysis, see generally James J. White, Contracting Under Amended 2-207, 2004 Wis. L. Rev. 723, 750–51.

19. See U.C.C. § 2-201.

20. Electronic Signatures in Global and National Commerce Act § 101, 15 U.S.C. § 7001; Unif. Elec. Transactions Act § 7, 7(A) U.L.A. 252 (2002).

21. Unif. Elec. Transactions Act § 9(b).

opment of typical user interfaces make it much more difficult to be sure precisely what type of transactional interface provides reliable evidence of assent.

On that point, the prudent retailer would turn to the growing body of case law, which at this point provides considerable guidance as to what types of interfaces are—and are not—sufficiently robust to obtain reliable assent from the retailer's customers. Although too simple in the real world (and thus for the empirical analysis that we present below), it is helpful to start by dividing website interfaces into two broad categories: "clickwrap" and "browsewrap." There are numerous variations of the two categories, and some conflicting decisions, but, in general, courts have been willing to uphold clickwrap interfaces and have been less receptive to browsewrap interfaces.

1. *Clickwrap Cases.* — For purposes of the statistical discussion in the parts that follow, we treat clickwrap as including the following types of interfaces: terms within a frame through which a user must scroll to get to a radio button that must be checked to proceed; terms within a frame and a radio button outside and below that frame that must be checked to proceed; and a statement that the purchase is subject to terms and conditions, a link to those terms, and a radio button that must be checked to proceed. The first two forms of clickwrap have largely been accepted as forcing assent to all the terms included in the contract.[22] The last category has also been held as giving the purchaser an "opportunity to review the terms . . . by clicking on the hyperlink;"[23] thus, these terms will likely govern a transaction preceded by such a clickwrap. There are some types of interfaces that courts have not yet addressed, including sites with a pre-checked radio button and those with a radio button and a link to the terms that is browsewrapped (i.e., not adjacent to the statement). Our expectation is that courts would treat those interfaces as adequate, on the theory that the consumer will have received adequate notice of the terms.

2. *Browsewrap Cases.* — There are numerous ways in which an interface could be treated as browsewrap, but perhaps the defining aspect of browsewrap is that the user need not take affirmative action regarding the terms to complete the relevant transaction. So, for example, the term in its purest form includes an interface that presents a link at the bottom of the page to the terms and conditions. It also includes more ambiguous situations, such as where there is a statement that the purchase is governed by terms that are linked to the page (but there is no affirmative

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22. See ALI Principles, supra note 10, § 2.01 & illus. 4 (codifying rule); Juliet M. Moringiello & William L. Reynolds, Survey of the Law of Cyberspace: Electronic Contracting Cases 2005–2006, 62 Bus. Law. 195, 201–03 (2006) (describing legal distinction between clickwrap and browsewrap). Although discussing shrinkwrapped terms, the same analysis of *ProCD* has been applied to clickwrap agreements online.

23. DeJohn v. The .TV Corp. Int'l, 245 F. Supp. 2d 913, 919 (C.D. Ill. 2003); see also Treiber & Staub, Inc. v. United Parcel Serv., Inc., 474 F.3d 379, 385 (7th Cir. 2007) (holding that UPS pages provided adequate notice and enforcing its clickwrap contract).

requirement that the user click a radio button acknowledging the terms). There are numerous variations between those two extremes, but the one on which we have appellate judicial guidance is the initial end of the spectrum—the pure browsewrap.

The seminal browsewrap case is *Specht v. Netscape Communications Corp.*, in which the court addressed whether browsewrapped terms governed a transaction online.[24] The rule for enforcing terms in an online contract was clearly stated in the case: "[A] consumer's clicking on a download button does not communicate assent to contractual terms if the offer did not make clear to the consumer that clicking on the download button would signify assent to those terms . . . ."[25] Although this rule was applied in the context of downloading software,[26] it has also been used as the test to determine whether certain terms are included in the sale of goods over the internet.[27] Thus, the test asks whether the site provides reasonable notice of the terms of the contract when making a purchase online.[28] The *Specht* court went on to find that a reasonably prudent internet user would not necessarily scroll down to see the bottom of the page where the terms and conditions were located.[29] *Specht*, therefore, provides relatively clear guidance that browsewrap agreements (or links to such agreements) that a consumer cannot see on the screen do not force assent.

As Mark Lemley and others have noted, the distinction between clickwrap and browsewrap has blurred in recent years, as lower courts have suggested the possibility that browsewrap might be enforceable in some contexts.[30] In *Register.com, Inc. v. Verio, Inc.*, for example, the plaintiff (Verio) tried to use *Specht* as a way to avoid the enforcement of terms

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24. 306 F.3d 17, 20 (2d Cir. 2002) (determining whether plaintiffs "agreed to be bound by the software's license terms . . . even though plaintiffs could not have learned of the existence of those terms unless . . . they had scrolled down the webpage to a screen located below").

25. Id. at 29–30.

26. Id. at 20–21 (discussing facts of case—users downloading software provided online).

27. See, e.g., Defontes v. Dell Computers Corp., No. PC 03-2636, 2004 R.I. Super. LEXIS 32, at *17 (R.I. Super. Ct. Jan. 29, 2004) (applying *Specht* rule to sale of computers over internet).

28. *Specht*, 306 F.3d at 31 ("We are not persuaded that a reasonably prudent offeree in these circumstances would have known of the existence of license terms.").

29. Id. at 32 (holding that "a reference to the existence of license terms on a submerged screen is not sufficient to place consumers on inquiry or constructive notice of those terms").

30. See ALI Principles, supra note 10, § 2.01 cmt. b (discussing Ticketmaster Corp. v. Tickets.com, Inc., No. CV99-7654-HLH(VBKx), 2003 U.S. Dist. LEXIS 6483, at *5–*10 (C.D. Cal. Mar. 7, 2003); Mark A. Lemley, Terms of Use, 91 Minn. L. Rev. 459, 472–75 (2006) (comparing browsewrap enforcement in business versus consumer transactions); Moringiello & Reynolds, supra note 22, at 201–03.

of which it had knowledge.[31] Verio argued that the terms were only browsewrap, with no forced assent or notice, because the terms appeared only after it submitted a query (the equivalent of making a purchase) to Register.com (the defendant).[32] The court rejected Verio's argument because Verio had made numerous queries, which put it on notice of the terms of making queries such that later purchases would be subject to those terms.[33] This presents the first exception to the rule stated in *Specht*—a contract can be enforceable even if there is not reasonable notice: "[W]hen a benefit is offered subject to stated conditions, and the offeree makes a decision to take the benefit with *knowledge* of the terms of the offer, the taking constitutes an acceptance of the terms . . . ."[34]

As this discussion of *Register.com* suggests, the lower court cases to date do not provide any reliable template for designing an enforceable browsewrap interface. At most, these cases suggest that website terms can bind a visitor when circumstances suggest that the visitor should have been aware of the terms, typically because of repeated use of the site.[35] This theory seems particularly attractive in cases that involve "screen scraping"—a technique where one business goes to the website of another business and collects data using an automated agent—where it is fair to say that the visitor knows that the activity is unauthorized.[36] It is harder to see how that theory would apply to consumer transactions involving a retail site, where the visitor might use the site dozens of times without ever noticing the terms of use.[37]

In theory at least, a lawyer might decide to "take a chance" on the enforceability of a browsewrap interface, particularly one of the better forms—such as one with a pre-clicked radio button. But the central point

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31. 356 F.3d 393, 401–02 (2d. Cir. 2004) ("Verio contends that in no instance did it receive legally enforceable notice of the conditions Register intended to impose . . . . [But,] Verio admits it knew perfectly well what terms Register demanded.").

32. Id. at 401.

33. Id. at 401–03.

34. Id. at 403 (emphasis added).

35. The ALI Principles state: "[B]rowsewrap may be acceptable, according to some courts, when the transferee should have knowledge of the standard form from previous visits to a site or based on reasonable notice." ALI Principles, supra note 10, § 2.01 cmt. b. The idea that the "knowability" of terms might be adequate to make them enforceable is particularly important in the realm of open source licenses, where the knowability of the terms of a license like the General Public License often will be the principal basis for treating it as a binding contract.

36. See Ticketmaster Corp. v. Tickets.com, Inc., No. CV99-7654-HLH(VBKx), 2003 U.S. Dist. LEXIS 6483, at *5–*10 (C.D. Cal. Mar. 7, 2003) (denying defendant's motion for summary judgment because there was sufficient evidence that defendant knew that its use of automated agent violated plaintiff's terms of use); Lemley, supra note 30, at 472–74 (describing *Ticketmaster* and other cases where courts upheld browsewrap terms against defendant competitors who used automated agents).

37. See Lemley, supra note 30, at 476–77 ("One plausible reading of the cases is that courts in browsewrap cases show greater solicitude to consumers than to businesses, and will enforce browsewraps primarily in business-to-business (b2b) rather than business-to-consumer (b2c) transactions, and perhaps only in repeat transactions.").

for our purposes is clear: A well-advised website designer would require some affirmative action from the user, indicative of assent to the document in question, in order to reliably produce a binding contract. As the draft of the ALI Principles of the Law of Software Contracts suggests, a fair assessment of the cases is that a click-through interface is a "safe harbor" of enforceability beyond which websites stray at their own peril.[38] We now turn to our data to consider the extent to which that problem motivates retailers as they design their sites.

III. The Reality of Internet Retail Contracting

Determining what businesses do is not science; determining what e-commerce businesses do is less than that. E-commerce businesses are continually changing as both the technology and the internet marketplace develop. Defining one class of online sellers is elusive when websites come and go, businesses offer new products and discontinue old ones, and companies merge. Here we take a static picture of a class of online retailers and draw a dataset from that class.[39] The dataset consists of the top 500 internet retailers, determined by *Internet Retailer* as of 2005,[40] together with information about the contracts that those retailers use.

Part A explains the dataset. The point was to collect three categories of information about internet retail contracting: facts about the businesses and their sites, the terms of the contracts that they use, and the robustness of assent required by the interface on their websites. Part B introduces the study by describing the businesses in our dataset, which present an unusually broad cross-section of retailers of various sizes and trade lines. Finally, Part C presents our two main findings: Retailers have rarely designed interfaces to obtain assent to their posted terms, and the posted terms rarely include harsh pro-retailer terms.

A. *Dataset*

Our primary goal in assembling this dataset was to examine the relationship between a retailer's business model and its contracting practices. Thus, our analysis combines *Internet Retailer* survey data about the businesses and their websites with information about the terms of their contracts and the contracting interfaces at each retailer's site.[41] The resulting dataset offers a unique opportunity to examine contracting practices because it includes a cross-section of contracting terms and practices

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38. See ALI Principles, supra note 10, § 2.01 cmt. c.

39. Internet Retailer, Top 500 Guide: Profiles and Statistics of America's 500 Largest Retail Web Sites Ranked by Annual Sales (2006) [hereinafter I500].

40. Id. at 6–18.

41. The terms of each retailer's contracts and its website interface were collected and coded by the authors.

across numerous sectors, together with uniform business information about those firms.

1. *Business Information.* — The information collected from *Internet Retailer* falls into three general categories. First, as evidence of the general size and scope of the business and its site, is the business's 2005 web sales (in dollars), the number of monthly visits to the website, and the number of unique monthly visitors.

Second, as evidence of market power, we calculated the business's market share within its principal merchandising market from *Internet Retailer* and then used that information to calculate CR4 and Herfindahl-Hirschman indices (HHI) for each of the fourteen principal merchandising markets into which *Internet Retailer* divides the dataset.[42]

Finally, we have a group of miscellaneous data points that relate to the business models of the firms and the size of their websites: conversion rate (the percentage of shoppers that completed purchases), average ticket (in dollars), total SKUs on the website,[43] principal merchandising market (allocating the businesses into fourteen categories), and merchandising channel (which divides firms among consumer-branded manufacturers, catalog/call center, retail chain, and virtual store).

2. *Contracting Terms and Interfaces.* — To determine the contracting terms and interfaces of these retailers, we collected data from all of the sites during the first quarter of 2006. Specifically, we logged onto each retailer's home page,[44] selected a product to purchase, and began the purchase process. Where necessary, we registered at the site.[45] We continued through the purchase process to the point where we were reasonably sure that we had completed an order. We saved screen shots of the home page and of each page that indicated a statement relating to consent of terms.[46]

During the process, we also collected copies of all contract documents visible from pages that were visited during the purchase process. Looking broadly for relevant documents, we collected not only "terms and conditions" but also "FAQs" and return and privacy policies and dis-

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42. CR4 is a measure of industry concentration. We calculated CR4 as the percentage share that the top four firms in each market held of the total sales of all firms in each market. HHI is a measure of the size of firms in relationship to their industry. We calculated the HHI as the sum of the squares of the percentage shares of all firms in each market.

43. SKU stands for "stockkeeping unit," which is a measure of how many distinct items of merchandise a retailer sells.

44. If the home page was a page directing the user to multiple companies—a parent company directing the user to its subsidiaries—one subsidiary was selected and we determined both the terms and the type of assent from that one site. See, e.g., I500, supra note 39 (describing Federated Department Stores).

45. If the sites required registration, we collected screen shots of the registration process and all terms and conditions and statements of consent.

46. We did not collect screen shots of the product itself or of the product in a virtual cart if these screens included neither terms nor consent interfaces.

claimers. Ultimately, we collected more than 1,200 documents from 500 sites.

After collecting the information, we coded it to extract two types of information from each site. First, we made a determination related to the level of assent required, ordering assent along an eight-point continuum drawn from the cases discussed above,[47] as modified to reflect the actual practices on the sites.[48] The eight points of our continuum, from lowest level of confidence in enforceability to highest level of confidence in enforceability, are as follows:

1) Pure browsewrap, with no language on any of the order pages that suggests agreement.

2) Statement that a transaction involves consent to a document that is neither displayed nor linked.

3) Statement, not adjacent to the "place order" button, that a transaction involves consent to a specified document that is not displayed but is linked.

4) Statement immediately adjacent to "place order" button that transaction involves consent to a specified, linked document.

5) Pre-checked radio button that acknowledges acceptance of terms and conditions.

6) Radio button that must be affirmatively checked to acknowledge acceptance of terms and conditions.

7) Scrolling through contract terms required before purchase, with radio button.

8) Documents pushed to user at time of entering site or when registering, with registration being a condition to entering the order placement process.

Second, we reviewed the documents at the site. A typical contract—the most representative terminology styles it "Terms of Use"—contains provisions that address site usage (e.g., regulation of online conduct, scope of license, proprietary rights in content, third party proprietary rights, security, privacy, and disclaimers), provisions that address purchases (e.g., return policies, warranties, limitations of liability, and disclaimers), and provisions that relate to modification or enforcement of contract terms (e.g., choice of law, choice of forum, and the like). Our review focused on the use of contracting terms that modify the default rules of UCC Article 2 (or the Restatement, as the case may be) in ways that appear to favor sellers. We selected clauses based on their prominence either in the literature about boilerplate or frequent appearance in the contracts that we reviewed. For lack of a better term, we refer to these as "pro-seller" clauses. The nine terms for which we collected data are:

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47. See supra Part II.

48. When a site had more than one document requiring consent, we assigned a consent level based solely on the document with the most enforceable consent.

1) Disclaimer of implied warranties.
2) Limitation of the types of liability (typically consequential damages).
3) Limitation of the amount of liability (damage caps, typically at the purchase price).
4) Choice of law.
5) Choice of forum (court).
6) Choice of forum (arbitration).
7) Class action waiver.
8) Jury trial waiver.
9) Contractual statute of limitations.

B. *Describing the 1500 Retailers*

A preliminary description of our business variables is valuable for several reasons. First, they give a sense of the broad variety of firms involved in internet retailing, the sectors in which internet retailing predominately occurs, the size of the retailers, and the variation in size among the firms. More importantly, these variables provide the context for understanding our findings regarding their relatively benign use of terms and interfaces. Table 1 provides a summary description of our data about the retailers.

TABLE 1: SUMMARY OF BUSINESS VARIABLES

	Web sales ($M)	Monthly visits (M)	Monthly unique visitors (M)	Conversion rate (%)	Average ticket ($)	Total SKUs (K)
Mean	138	2.8	1.5	3.46%	170	927
Median	22	0.79	0.50	2.5%	100	11,000
S.D.	540	7.9	3.3	3.5%	260	6,200
Skewness	9.8	8.7	6.7	3.7%	8.1	9.9
IQR[49]	51	1.7	1.1	2.1%	90	56
Number	500	500	475	490	492	311

Because our data start with the largest retailers and include all retailers in the top 500, it should be no surprise that on most of the financial variables our data are highly skewed, with a substantial drop-off in size from the largest to the smallest retailers in our dataset. Using web sales, for example, the largest (Amazon.com) has annual sales of more than $8 billion dollars, while the smallest retailer in our dataset (Emitations.com) has sales of only $3.2 million. Indeed, in most cases there is a striking drop-off after a small handful of very prominent retailers. Table 2 shows the five largest sites for each of the variables reported in Table 1.

In addition to the quantitative data about each firm and its website, *Internet Retailer* also broke the firms down along two separate dimensions related to the type of business. First, *Internet Retailer* divides all of the retailers into fourteen separate categories based on the retailer's product

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49. The IQR is the interquartile ratio, the share of the firms between the 25th and 75th percentile.

TABLE 2: TOP RETAILERS ON BUSINESS VARIABLES

	Web sales ($M)	Monthly visits (M)	Monthly unique visitors (M)	Conversion rate (%)	Average ticket ($)	Total SKUs (M)
1	Amazon (8,500)	Amazon (120)	Amazon (43)	Peapod (31%)	BMI Gaming (4,000)	Abebooks (80)
2	Office Depot (3,800)	Apple (63)	Wal-Mart (24)	FreshDirect (29%)	IBuyDigital.com (1,600)	Alibris (60)
3	Staples (3,800)	Wal-Mart (42)	Disney (21)	Market Day (24%)	iFloor.com (1,500)	Biblio (30)
4	Dell (3,780)	Target (42)	Apple (19)	Magellan's (23%)	Skynet (1,500)	CafePress.com (22)
5	HP (2,830)	Overstock.com (39)	Sears (18)	NBTY (20%)	SmoothFitness.com (1,400)	1-800-Contacts (20)

market, as detailed in Table 3. Those data are useful because they permit us to explore the possibility that contracting practices might differ based on the type of product the retailer sells. Second, *Internet Retailer* divides the merchants into four separate "merchandising channels" based on the relationship between the website and the retailer's offline operations. In general, these channels run along a spectrum ranging from virtual (no bricks-and-mortar operations, like Amazon.com) to catalog/call center (such as L.L.Bean) to branded manufacturer (such as Dell) to retail chain (such as Office Depot). Table 4 summarizes the breakdown of merchants by merchandising channel.

TABLE 3: PRODUCT MARKETS OF I500 RETAILERS

Market	Volume (M$)	Percentage	Number	M$/Store (Rank)	CR4 (%)	HHI
Mass Merchant/Dep't Store[50]	18,300	27%	27	678 (2)	72%	2570
Computers/Electronics	17,700	26%	54	328 (3)	64%	1270
Office Supplies	10,300	15%	11	936 (1)	99%	4550
Apparel/Accessories	7,060	10%	109	65 (8)	28%	350
Books/CDs/DVDs	2,500	3.6%	29	86 (5)	74%	1740
Housewares/Furnishings	2,410	3.5%	55	44 (9)	50%	1010
Specialty/Non-Apparel	2,330	3.4%	60	39 (13)	34%	470
Food/Drug	1,879	2.7%	26	72 (6)	57%	1190
Health/Beauty	1,750	2.5%	17	103 (4)	90%	3420
Sporting Goods	1,340	1.9%	39	36 (14)	52%	860
Flowers/Gifts	1,200	1.7%	18	67 (7)	75%	1870
Hardware/Home Improvement	851	1.2%	22	39 (11)	87%	2230
Toys/Hobbies	741	1.1%	19	39 (12)	77%	3630
Jewelry	615	0.9%	14	43 (10)	73%	2070
TOTAL	68,900	100%	500	138	—	—

50. If it seems odd that Table 2 reports Amazon.com as the largest merchant with more than $8 billion in sales and Table 3 reports total sales for the book/CD/DVD sector

TABLE 4: MERCHANDISING CHANNELS OF I500 RETAILERS

Category	Volume (B$)	Percentage	Number	M$/Store (Rank)
Retail Chain	27.8	40%	143	194 (2)
Virtual	20.8	30%	225	92 (3)
Branded Manufacturer	10.5	15%	45	233 (1)
Catalog/Call Center	9.85	14%	87	11 (4)
TOTAL	68.9	100%	500	138

C. *The Rarity of Binding Interfaces or Pro-Seller Contracts*

Because our principal goal is to explore the contracting practices of internet retailers, the business variables discussed above are important primarily as background. Turning to the contracting data, we confess surprise at what we found in both the interfaces and in the contracts themselves.

Our preliminary hypothesis, bolstered by casual experience purchasing on the internet, was that the desire of internet retailers to maintain high conversion rates would motivate many retailers to design interfaces that did not obtain robust "click-through" assent from their customers. Still, skeptical as we were before our data collection, we were startled to find that barely 12% (61 of 500) of our dataset extract any form of consent beyond pure browsewrap. Indeed, dividing the dataset at the point most likely to reflect the broadest reasonable estimate of legal enforceability (the point at which the retailer presents a pre-checked radio button to reflect assent), fewer than 6% (28 of 500) of the retailers have enforceable contracts on their websites.[51] Table 5 summarizes the data on that point.

TABLE 5: DISTRIBUTION OF ASSENT

Form of assent[52]	Number	Percent
Pure browsewrap	439	88.0%
Reference to document	9	1.8%
Reference to linked document	6	1.2%
Reference to linked document beside "order" button	18	3.6%
Pre-checked radio button	3	0.6%
Unchecked radio button	15	3.0%
Scrolling to radio button	6	1.2%
Registration	4	0.8%
TOTAL	500	100%

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of only $2 billion, this is because *Internet Retailer* codes Amazon.com as a mass merchant/department store. See infra note 61 (discussing categories of sales by Amazon.com).

    51. Although we have not comprehensively examined the interfaces of non-U.S. retailers, it is interesting that major sites like Amazon.com and Dell.com have substantially different terms of use at their non-U.S. websites, but quite similar interfaces.

    52. For a description of each of these forms of assent, see supra Part III.A.2.

The data about the terms of the contracts are even less consistent with our prior expectations. Our working hypothesis was that the rarity with which consumers read contracts presented to them on the internet makes it almost costless for a retailer to include pro-seller terms in any contract that the retailer drafts. Thus, we expected, retailers would almost always include the kinds of pro-seller terms that are standard for boilerplate contracts with consumers in other contexts. We were surprised to find that none of the nine clauses that we collected appeared in more than half of the contracts. Perhaps the most surprising finding is that arbitration clauses appear in less than one-tenth of the contracts (only 44 of 500 retailers).[53] The failure of half of the sites to include clauses disclaiming consequential damages and implied warranties is also surprising,[54] given the ever-present possibility that customers could sue an internet retailer seeking to recover damages either from a data breach at the site or from harms to their personal computer arising out of interaction with the site.[55]

TABLE 6: FREQUENCY OF PRO-SELLER TERMS

Clause	Number	Percent
Disclaimer of Implied Warranties	245	49%
Limitation of Damage Types	243	49%
Choice of Law	201	40%
Choice of Forum	159	32%
Limitation of Damages (Caps)	108	22%
Arbitration	44	9%
Class Action Waiver	33	7%
Contractual Statute of Limitations	28	6%
Jury Trial Waiver	6	1%

In some ways, the data we present here speak with clarity. Most obviously, they seem to go far toward resolving the concerns that have preoccupied other writers: that internet retailers are taking advantage of the electronic interfaces the web permits to bind their customers to pro-seller

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53. This is particularly surprising given the likelihood that arbitration will be the only cost-effective method of resolving small-dollar disputes between internet merchants and their customers. See, e.g., Sayeedi v. Walser, 835 N.Y.S.2d 840, 848 (Civ. Ct. 2007) (dismissing action by disgruntled eBay purchaser for want of personal jurisdiction over eBay merchant), discussed in Mark Fass, Contact Held Insufficient to Sue Seller, N.Y.L.J., Mar. 6, 2007, at 1. It also warrants comparison to the credit card context, where arbitration agreements are standard for disputes that are much larger in size, and apparently often have the effect of insulating the card issuer from judicial review of its actions. See generally Mann, supra note 6, at 915–32 (discussing various approaches to resolve credit card related disputes).

54. With respect to implied warranties, one possible explanation is that many of the sites provide express warranties, and thus any disclaimer would violate the Magnuson-Moss Warranty Act, 15 U.S.C. § 2308(a) (2000).

55. For comparative purposes, we note that such clauses are ubiquitous in contracts with credit card issuers, where the issuers' need for such clauses is considerably less clear.

contracts.[56] The fact is, at least for now, and at least at the largest retailers, the contract terms and contracting interfaces of internet retailers are surprisingly benign.

To return to the framework we suggest in the Introduction, retailers should extract consent to pro-seller terms whenever the costs of an additionally complex interface are less than the benefits of the more favorable terms. Thus, to make sense of the data we must infer some combination of relatively high costs of extracting consent and relatively low benefits of pro-seller contracts. More directly, if retailers act rationally, the costs of the additional click must be substantial or many more retailers would be making their contracts more favorable to themselves. The converse proposition is more intriguing to the student of commercial transactions: The benefits of these terms must be surprisingly slight or they would overcome the costs of interface design much more often than they do.[57]

There is, to be sure, another side to the phenomenon. Considering the findings together it is natural to ask, for example, why a business would bother to write a pro-seller contract if it is not going to make the contract enforceable against its customers. It reaps the bad publicity of having a harsh attitude toward its customers but gains none of the benefits of protection from legal liability. We speculate that much of the answer is that the benefits of enforceable contracts are relatively slight because many customers will abide by the terms of contracts even if they are not enforceable. In part this might be caused by a tendency to treat the terms of agreements as reference points for fair resolution of disputes, wholly apart from the anticipated outcomes of litigation.[58] It also might reflect the disparity in sophistication between the retailer and the customer—so that a customer might readily abandon a dispute when confronted by the retailer with terms from the website that purport to undermine the ability to pursue the claim through litigation.

If this analysis is correct, the mere possibility of disgruntled customers is not enough to justify the extra click that brings enforceability; the internet retailer must have a concern that a substantial number of the disgruntled customers will ignore the terms of sale posted on the website and pursue litigation. Absent that concern, there is little basis for making the contract binding, though there is some basis for having the contract include terms that limit the rights of the customer. At the same time, to

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56. See supra notes 7–9.

57. Retailers without click-through interfaces still might assume that their terms will be enforceable. As discussed above, supra Part II.B.2, they might be relying on recent cases suggesting that they would have at least a chance of enforcing browsewrap terms against their customers. Our point, however, is that the transactional lawyer designing the website would use a click-through interface to ensure enforceability if the value of enforceability was substantial in relation to the cost of the additional click.

58. See Oliver Hart & John Moore, Contracts as Reference Points 39 (Nov. 14, 2006) (unpublished manuscript, on file with the *Columbia Law Review*), available at http://ssrn.com/abstract=944784 (suggesting that contracts "can continue to govern the parties' feelings of entitlement").

the extent the purpose of the contract is to palliate disgruntled custom-
ers, there is good reason for the contract to be written in terms that will
sound reasonable to the typical consumer, which suggests that retailers
should include pro-seller clauses only in cases where they are likely to be
useful in the event of disputes.

This dynamic is clearest in the context of privacy policies. The re-
tailer gains little or nothing from making a privacy policy binding, be-
cause the typical privacy policy consists solely of representations and com-
mitments by the retailer as to the collection, use, and protection of
information. If the document includes no commitments on the part of
the customer, the only significance of making the document a binding
contract is that it allows customers to sue the retailer for breach of con-
tract. Surprisingly enough, there is some authority for the proposition
that a retailer is not subject to suit by its customers even if it does violate
the terms of its privacy policy.[59] Thus, in this context, a principal source
of exposure for violating a privacy policy is a complaint from the Federal
Trade Commission enforcing Section 5 of the FTC Act.[60] Similarly, here
we might expect that enforcement by the Federal Trade Commission
eventually might become one of the principal methods of holding in-
ternet retailers to the terms they offer on their websites.

IV. EXPLAINING THE PUZZLE OF INTERNET CONTRACTING

Part III explained why businesses rarely will make contracts binding,
and why they often, though not always, will include pro-seller terms in
their contracts. It did not, however, try to explain *which* businesses will
make their contracts binding or include pro-seller terms and why. We
close in this Part with some preliminary analyses of those questions, in an
attempt to understand what distinguishes the retailers that do draft pro-
seller contracts or obtain consent to their contracts from those that do
not.

Initially, our working hypothesis was that the best place to look for
an explanation of variation in contracting practices was the characteris-
tics of the businesses in question. For example, consider Dell and
Amazon as the two paradigmatic retailers at opposite ends of a spectrum
of contracting needs. Dell has a clear need for a contract with robust
assent. Dell's products are complicated electronic devices that even for
the best of manufacturers will be defective from time to time. Moreover,

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59. See, e.g., In re Jetblue Airways Corp. Privacy Litig., 379 F. Supp. 2d 299, 326–27
(E.D.N.Y. 2005) (finding no claim for breach of privacy policy absent showing of economic
loss, but leaving open possibility of consumer protection claims in most contexts); In re
Nw. Airlines Privacy Litig., No. 04-CV-126, 2004 WL 1278459, at *6 (D. Minn. June 6, 2004)
(rejecting claim for breach of privacy policy because of failure to show sufficient detail to
make it a contract, reliance on it, or damages from its breach).

60. See Federal Trade Commission, Enforcing Privacy Promises: Section 5 of the FTC
Act, at http://www.ftc.gov/privacy/privacyinitiatives/promises.html (last visited Mar. 12,
2008) (on file with the *Columbia Law Review*).

in the cases in which they are defective, one would expect that consumers often will suffer consequential damages of one kind or another (fire or loss of data being the most obvious). At the same time, because of the cost and complexity of the average transaction, the cost in lost customers of adding an additional screen to obtain robust consent seems slight. Thus, it is no surprise that Dell has a robust contracting interface, in which a customer signals affirmative assent by clicking to agree to a contract that includes a disclaimer of implied warranties, a damage cap, a limitation on consequential damages, a choice of law clause, arbitration clause, and waiver of class actions.

Amazon lies at the other end of the spectrum. It is difficult to imagine how Amazon might have exposure to costly consumer litigation. At least with respect to its core business of selling books and music,[61] its products are unlikely to cause serious consequential damages. Those products are unlikely to fail to conform to any warranty that might accompany them unless the products are damaged, and Amazon (like many bookstores) has a lenient return policy that makes serious disputes unlikely.[62] In sum, Amazon has relatively little to gain from an enforceable, pro-seller contract. To be sure, we note above that all internet retailers have some justifiable concern about litigation arising out of the operation of their sites (as opposed to the products that they sell), but that does not undermine the point that Amazon's core business generates less demand for a pro-seller contract than that of many other internet retailers.

At the same time, Amazon—the owner of the renowned (and vilified) "one-click" patent[63]—is the retailer most devoted to streamlined purchases, and thus most likely to be harmed by extra "clicks" in its purchase interface.[64] Thus, it is no surprise that Amazon's interface does

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61. In 2005, about two-thirds of Amazon's revenues ($5.9 billion out of $8.5 billion) came from the sales of "media" products, as opposed to "electronics and other general merchandise." 2005 Amazon.com Annual Report 36, available at http://library.corporate-ir.net/library/97/976/97664/items/193688/AMZN2005AnnualReport.pdf (on file with the *Columbia Law Review*).

62. The dominance of credit cards for internet payments makes it difficult to have an onerous returns policy, given the ease with which customers can disavow claims through the credit card system. In recent years, however, some merchants have begun to scrutinize those claims more aggressively, motivated by the perception of consumer abuse. See Michael Rubinkam, Online Sellers Getting Tough: More Merchants Challenge Fraud and Charge-Backs, Houston Chron., Apr. 17, 2006, at 4 (discussing returns policy of Ice.com, 1500 Retailer # 193).

63. See Martin Campbell-Kelly & Patrick Valduriez, A Technical Critique of Fifty Software Patents 2, 7 (Jan. 2005) (unpublished manuscript, on file with the *Columbia Law Review*), available at http://ssrn.com/abstract=650921) (discussing and rejecting criticisms of one-click patent).

64. See, e.g., Lou Hirsh & Jennifer LeClaire, Kings of Repeat E-Business, E-Commerce Times, Aug. 26, 2002, at http://www.ecommercetimes.com/story/19137.html (on file with the *Columbia Law Review*) (discussing Amazon's early and effective use of personalization technology at its site); Keith Regan, Amazon Dips Toe into Online Grocery Business, E-Commerce Times, June 15, 2006, at http://www.ecommercetimes.com/story/51136.html (on file with the *Columbia Law Review*) (discussing importance of "ultra-convenient

not extract robust consent; it simply states that "[b]y placing your order, you agree to Amazon.com's privacy notice and conditions of use," which are available in small type links at the bottom of the page (links that are not ordinarily visible at the same time as the quoted text). At the same time, the conditions of use include a number of pro-seller clauses: a disclaimer of implied warranties, limitations on consequential damages, choice of law, choice of forum, and arbitration clauses, and a waiver of class actions.

Another complicating factor is the development of interfaces over time, which suggests that the design of retailer contracts and interfaces is subject to a significant learning curve. Dell's history provides the clearest evidence, because four published judicial opinions addressing the presence of assent in online sales with Dell illuminate the development of its interface from 2004 through early 2006.[65] Although it is difficult to clearly determine where Dell was on the consent continuum at any given time without screen shots (which we only have as of the first quarter of 2006), the cases suggest that Dell went through the following progression: beginning in 2004, Dell had a pure browsewrap;[66] sometime in 2005, Dell switched to browsewrap with a statement that a purchase is subject to terms and conditions (and possibly a link next to that statement);[67] and, in the first quarter of 2006, of which we have screen shots, to a statement with a radio button that requires affirmatively clicking to proceed and a link to the terms and conditions.[68] The first two steps in Dell's progression are discussed in reported opinions;[69] but there is not

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[shopping] experience" to Amazon's effort to enter online grocery business). For academic discussion of the importance of short purchase paths at websites, see Montgomery et al., supra note 12.

65. Provencher v. Dell, Inc., 409 F. Supp. 2d 1196, 1199 (C.D. Cal. 2006); Hubbert v. Dell Corp., 835 N.E.2d 113, 118 (Ill. App. Ct. 2005); Rogers v. Dell Computer Corp., 127 P.3d 560, 563 (Okla. 2005); Defontes v. Dell Computers Corp., No. PC 03-2636, 2004 R.I. Super. LEXIS 32, at *4 (Jan. 29, 2004). There is a fifth case that deals with customer's assent, but the court only discusses the shrinkwrapped contract in reasoning that the consumer had assented to the arbitration provision. Stenzel v. Dell, Inc., 870 A.2d 133, 139–40 (Me. 2005).

66. *Defontes*, 2004 R.I. Super. LEXIS 32, at *4 (describing Dell's websites as allowing users to view terms of use "as a hyperlink on the bottom of Dell's website").

67. *Hubbert*, 835 N.E.2d at 118 (stating that following statement was present on three of Dell's order pages: "'All sales are subject to Dell's Term[s] and Conditions of Sale'"). It is hard to determine exactly what website interface confronted the plaintiff in *Provencher*, as the court simply stated: "The Agreement was available for Mr. Provencher's review on Dell's website before, while, and after he ordered the computer . . . ." 409 F. Supp. 2d at 1199. This is even more difficult in *Rogers* where the court professed itself unable to determine "whether the plaintiffs were required to consent to the 'Terms and Conditions of Sale.'" 127 P.3d at 563.

68. I500, supra note 39 (profiling Dell).

69. *Defontes* discusses Dell's site as a browsewrap agreement and uses a reasonable notice standard. 2004 R.I. Super. LEXIS 32, at *17. Both *Rogers* and *Hubbert* seem to view Dell's site as browsewrap with a statement referring to the Terms and Conditions; however, each case uses different reasoning. *Hubbert*, 835 N.E.2d at 121–22 (reasoning based on

yet a case discussing Dell's current online purchasing process, which includes the robust click-through interface discussed above.

In light of the discussion of contracting rules in Part II, it is not surprising that the cases discussing Dell's earlier interfaces were not uniformly favorable. Thus, in its 2004 decision in *Defontes v. Dell Computer Corp.*, the Superior Court of Rhode Island held that the arbitration clause in Dell's terms and conditions did not bind the plaintiff, reasoning that the browsewrap "was not sufficient to put Plaintiffs on notice of the terms and conditions of the sale of the computer."[70] One year later, the Illinois Court of Appeals in *Hubbert v. Dell Corp.* faced a newly remodeled Dell website, on which the terms were available through a hyperlink at the bottom of the page and three order pages stated that "All sales are subject to Dell's Term[s] and Conditions of Sale."[71] The court held that this statement was enough to put a reasonable person on notice of the terms and thus make them binding against customers.[72]

Surely the weakest reasoning employed in this line of cases appears in *Rogers v. Dell Computer Corp.*[73] In *Rogers*, the Oklahoma Supreme Court addressed the same issue as *Hubbert* and *Defontes*, but instead of resolving the question of enforceability based on the objective and undisputed facts about the interface, it saw this issue as a battle of the forms issue to be determined by the facts of each case.[74] Although it had as much evidence as the other two courts that decided the issue, the court in *Rogers* remanded the case for further fact finding to determine when exactly an offer and acceptance occurred, what terms were included in the initial contract, and if those online terms were included or offered as additional terms.[75] The unpredictability of the judicial response to its interface certainly gave Dell a notable incentive to adopt the more robust clickwrap interface that it now uses.

Collectively, this anecdotal information gives some reason to despair in trying to develop a conceptual model of contract interface design that can be verified with quantitative data. The line of cases involving Dell can

notice); *Rogers*, 127 P.3d at 566–68 (reasoning based on time of formation). *Provencher* gives little indication of the status of Dell's website and assumes the validity of the online contract. See 409 F. Supp. 2d at 1199.

70. 2004 R.I. Super. LEXIS 32, at *17.

71. 835 N.E.2d at 121–22.

72. Id. The ambiguity of the term "browsewrap" is evident from the discussion in the ALI Principles, which regards situations like that found in *Hubbert* to be examples of browsewrap despite the relatively plain notice and accessibility of the terms on the order pages. See ALI Principles, supra note 10, § 2.01 cmt. b. In any event, for purposes of the coding in our dataset this would not have been treated as pure browsewrap. Moreover, as we discuss in the text, Dell's subsequent experience in litigation apparently has convinced the company that the decision in *Hubbert* is not sufficiently reliable to justify retaining the interface at issue in that case.

73. 127 P.3d 560.

74. Id. at 568 ("Section 2-207 and other provisions of the U.C.C. apply to the contracts here.").

75. Id.

cut in different ways. As discussed above, the litigation illustrates why it is important for Dell to have the interface that it now has. But it also can be read more critically: Shouldn't it have been obvious to Dell by the turn of the century that it needed a robust contracting interface to protect itself from claims by its customers?

Given those problems, we approach the statistical analysis with an open mind about the possibility of multiple explanations for the contracting practices we have found. We start from the basic hypothesis that the primary reason for having a robust contracting interface is to enforce pro-seller contracting terms. Accordingly, we organize our statistical analysis as an investigation of the data on that question. Our strategy is to start in the first section below with a simple model in which the existence of pro-seller terms is the only variable that we use to explain variations in the robustness of the contracting interface. Subsequent sections will gradually add other variables to explore the extent to which those variables improve the explanatory power of the model or detract from the explanatory power of the clauses in the contract.

A. *Clauses and Assent*

To quantify the existence of pro-seller clauses, we use a binary variable (Pro-Seller Clauses? in Table A1) that indicates whether the contract includes any of the nine pro-seller clauses that we coded. Not surprisingly, there is considerable overlap among the firms that have the selected clauses. Two hundred thirty-four of the firms have none of the clauses. Integrating that data point with Table 6 above suggests that about 90% of the firms that have any pro-seller terms in their documents have a disclaimer of implied warranties (245 of 266) and a limitation of consequential damages (243 of 266). Figure 1 illustrates the number of clauses among the 266 firms that have any pro-seller clauses. As that table suggests, about half of those firms have either four or five of the nine clauses; only three have more than seven of them.[76]

To quantify assent, we use an ordinal variable with values from 1 to 8 reflecting the level of assent (AssentLevel in Table A1). Model 1 in Table A1 reports the results of an ordinary least squares regression of that basic model. As the Table shows, the relationship between the existence of pro-seller clauses and the robustness of the interface is significant at the

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76. Although we are skeptical about the value to be gained by simply counting onerous clauses, we did analyze the relation between the number of onerous clauses in a firm's contract and the level of assent. There is a correlation coefficient of about 13%, significant at the 1% level. Given the discussion in Part II of reasons why a firm might include those clauses and yet not obtain assent to its terms, it is not surprising that the correlation is so low. We also investigated the possibility that a single "super" clause was important, estimating models that used each of the clauses as a separate independent variable. The results of that analysis were inconsistent, suggesting that some clauses might have a positive relationship to assent and others a negative relationship. Because the coefficients on the clauses in those models were unstable with the addition of additional control variables we do not report those results here.

FIGURE 1: OVERLAP OF PRO-SELLER CLAUSES
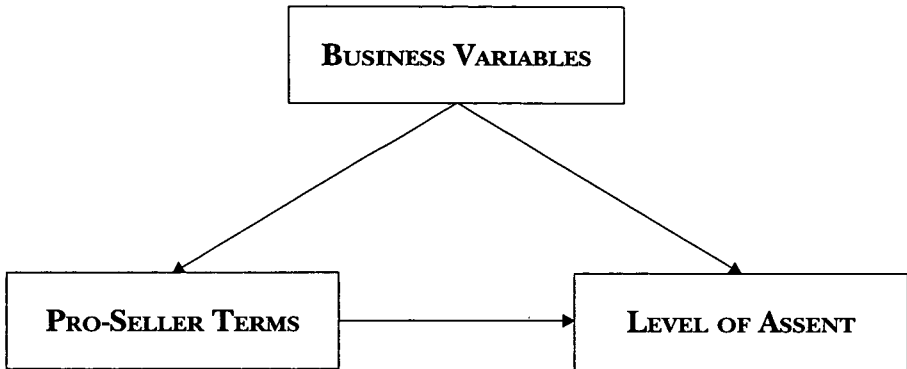
0.1% level. The magnitude of the coefficient (.528) indicates that firms with clauses tend to have an interface that is about one-half level more robust than firms without such clauses in their contracts.[77]

That relationship is reassuring, because it suggests that rational factors are driving the contracting practices of firms, but it is still the case that the great majority of each type of pro-seller clause appears in contracts that are not presented in an interface that would reliably make the contracts enforceable against customers. Accordingly, it would be far too simple to say that firms adopt robust interfaces because their business needs have driven them to include pro-seller clauses in their contracts. The subsequent sections explore the extent to which more complete models buttress the reliability of that analysis.

B. *Business Variables and Pro-seller Clauses*

As the discussion at the beginning of this Part indicates, many features of a business will affect the robustness of the interface a firm selects for its websites. Some of those variables are likely to affect the need for particular contractual protections (and thus affect the interface only indirectly), while others are likely to affect the benefits and burdens of a robust interface indirectly. Because the purpose of this project is to understand the extent to which the selection of the interface is driven by the business need for pro-seller clauses, our strategy is to assess the extent to

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77. Although we do not report them here, we also estimated a parallel set of models using logistic regressions with a binary dependent variable cutting the dataset after the first four categories of assent, at the point (a pre-checked radio button) that approximates the boundary of legal enforceability. The results indicated a similar pattern of relationships, although the levels of statistical significance were often lower. We do not report those models here because of our view that the line between enforceable and unenforceable is not clear in practice. Thus, we believe the model more accurately reflects the motivations of online businesses when it treats each step as reflecting both a marginal increase in the likelihood of enforceability and a marginal increase in the transaction costs of contracting at the site.

which inclusion of those other variables in the model undermines the explanatory power of the clauses variable with which we began.

Our data permit us to explore several possibilities about the relationship between the business model of the firm and its contracting interface. Four general variables seem important. First, if we assume that the value of assent correlates with the price of the good sold, then we should expect firms to seek robust assent more often when they sell expensive objects. If this is true, then average ticket (the average price per order) at the site should relate to the robustness of the interface.

Second, if the total number of products sold reflects the likelihood that the firm sells products for which legal protections might be important, then the variety of products (measured in our dataset by the Total SKUs at the site) might relate to the robustness of assent either directly or indirectly through the need for protective clauses.

Third, different types of sites involve greater concerns about the complexity of the interface. As Table 2 shows, for example, online grocers experience unusually high conversion rates, which suggests that it would be less problematic for them to use a more robust interface than it is for other merchants. As the discussion of Dell's litigation history suggests, other merchants with lower conversion rates will struggle with the technological difficulty of designing a well-crafted interface that extracts consent without unduly distracting customers.[78]

Fourth, we expect a difference between wholly "virtual" firms and those that are adjuncts to bricks-and-mortar firms. The idea is that retailers that start with a website are likely to investigate the value of a robust interface as a standalone question, while retailers that add a website as a new distribution channel for an existing retail operation are likely to view the site as an adjunct to their existing operations. Bricks-and-mortar firms might see no reason why they should seek more robust assent to contracts online than they typically do in their existing stores. If so, these firms might systematically have less robust interfaces than virtual firms. To illustrate that point, consider Table 7, which shows that assent is much more common in wholly virtual firms than it is in firms that have adjunct retail operations.[79]

Finally, as additional controls we included variables to account for the competitive structure of the industry and for the product line. Given the discussion at the beginning of this Part, controls related to the product lines are particularly important. We started with some simple tabulations of the level of assent for each of the fourteen product lines. As

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78. The science (or art, depending on your perspective) of designing retailer website interfaces is a rapidly developing one. To get a sense for the issues designers face, see, e.g., Rachelle Crum, ATG's Cliff Conneighton: E-Tailers "Can't Wing It Anymore", E-Commerce Times, Feb. 21, 2007, at http://ecommercetimes.com/story/55847.html (on file with the *Columbia Law Review*) (interview with interface-design consultant who advises retailers such as Best Buy, Target, Nike, Neiman Marcus, and OfficeMax).

79. Using a two-sample test of proportion, the difference is significant at the 1% level.

TABLE 7: MERCHANDISING CHANNELS AND ASSENT

Category	Volume (B$)	Number	Percentage w/assent
Bricks and Mortar	48.2	275	2.9%
Virtual	20.8	225	8.9%
TOTAL	68.9	400	5.6%

Table 8 illustrates, the percentage of sites obtaining robust assent in particular markets differed widely from the 5.6% in the overall dataset. The boldface type indicates the two markets where the variation was significant at the 5% level: Both computers/electronics and food/drug had unusually high levels of assent. The italics indicate the three markets with variations significant at the 10% level: Books/CDs/DVDs and toys/hobbies had unusually high levels, while apparel/accessories had an unusually low level.[80]

TABLE 8: MERCHANDISING MARKETS AND ASSENT

Market	Volume (M$)	Number	Percentage w/assent
Mass Merchant/Dep't Store	18,300	27	3.7%
Computers/Electronics	**17,700**	**54**	**13.0%**
Office Supplies	10,300	11	0%
Apparel/Accessories	*7,060*	*109*	*1.8%*
Books/CDs/DVDs	*2,500*	*29*	*13.8%*
Housewares/Furnishings	2,410	55	1.8%
Specialty/Non-Apparel	2,330	60	1.7%
Food/Drug	**1,879**	**26**	**15.4%**
Health/Beauty	1,750	17	5.9%
Sporting Goods	1,340	39	2.6%
Flowers/Gifts	1,200	18	5.6%
Hardware/Home Improvement	851	22	9.1%
Toys/Hobbies	*741*	*19*	*15.8%*
Jewelry	615	14	0%
TOTAL	68,900	500	5.6%

Some of these results are easy to understand. For example, the discussion at the beginning of this Part supports the idea that electronics retailers are leaders in obtaining assent. Also, all of the food and drug retailers seeking robust assent come within the subcategory of firms specializing in home delivery of groceries (PeaPod, FreshDirect, Safeway, and Albertson's). Because customers at those retailers are likely to return to the site frequently and spend a great deal of time there, we can speculate that the additional marginal cost of extracting robust assent is relatively slight. Conversely, most of the firms that sell books, toys, and apparel are likely to be adjuncts of bricks-and-mortar firms that customarily

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80. We tested the variations using a two-sample test of proportion and determined significance based on the z statistic from that test.

have sold products without obtaining formal contracts from their custom-
ers. If the firms start from a baseline in which formal contracting has not
been necessary, they may see less reason to require formal contracts than
virtual firms that start without such experience.

To elucidate the effects of those variables, we estimated models in-
cluding not only the clauses variable discussed above, but also the busi-
ness variables and the controls discussed in this section. To account for
the possibility that some of the variables might have direct and indirect
effects mediated by the Pro-Seller Clauses? variable, we separately esti-
mated models with Pro-Seller Clauses? as the dependent variable and
AssentLevel as the dependent variable. The only variable that had a sub-
stantial indirect effect was the number of different products sold by the
retailer (Total SKUs). To facilitate exploration of that variable, Model 2
of Table A1 adds that variable to the model separately. Because the data
for that variable is highly skewed, our analysis uses a log-transformed ver-
sion of the variable. The model suggests that the effect of Total SKUs is
largely indirect. Specifically, Model 2 shows a small and statistically insig-
nificant coefficient on Log Total SKUs. The effect of Log Total SKUs on
Pro-Seller Clauses?, however, is substantial. A separate regression on that
question shows a relation significant at the .01% level. Interestingly, the
addition of Log Total SKUs to the model increases the coefficient of
Pro-Seller Clauses? to .66, suggesting that once we account for breadth of
product line, firms with pro-seller clauses are likely to have an interface
that is two-thirds of a step more robust than firms without pro-seller
clauses.

Model 3 adds the controls discussed above. The model summarized
here uses dummies for the two product lines that differ significantly from
the mean (computers/electronics and toys/hobbies) and uses HHI to
control for concentration in the industry. Both of the industry controls
have substantial positive coefficients, suggesting that firms in those indus-
tries are likely to have more robust interfaces than firms in other indus-
tries. Conversely, the absence of a significant coefficient on the HHI vari-
able, which controls for concentration in the industry, suggests that
market structure is not important in predicting the robustness of inter-
faces in this dataset.[81] The addition of the controls increases the adjusted
R-squared of the model to 8.4%, but does not substantially decrease the
coefficient on the clauses variable (.602), which continues to suggest that
firms with pro-seller clauses will have an interface about one-half step
more robust than firms without pro-seller clauses.

Model 4 adds the additional independent variables for average
ticket, merchandising channel, and conversion rate. In the final model
log, average ticket and conversion rate are statistically significant, but the
coefficient on pro-seller clauses remains about the same. This suggests

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81. We estimated a parallel set of models using CR4 without substantially different
results with respect to our principal hypotheses.

that the addition of these variables improves the explanatory power of the model (the adjusted R-squared in the final model is about 14%) without diluting the importance of pro-seller clauses. In the final model, the co-efficient on Pro-Seller Clauses (.538) suggests that firms with those clauses have interfaces about one-half step more robust than firms with-out those clauses. Consistent with the discussion above, both of the in-dustry controls have positive coefficients. Controlling for the other vari-ables in the model, firms in the electronics industry have interfaces about one-eighth of a step (.128) more robust, while firms in the food and drug industry have interfaces almost an entire step (.869) more robust. The coefficient on the HHI variable remains small and statistically insignifi-cant, as does the coefficient on the log of Total SKUs.

Finally, the model produces substantively significant coefficients for each of the three final variables, all of which control for various features of the website (average ticket, merchandising channel, and conversion rates). First, the coefficient for Log Average Ticket, significant at the .1% level, is .457. This suggests that an increase in the average ticket of 1% would increase the robustness of the interface by almost one-half step. For the other two site-related variables, the analysis is more tentative, be-cause the coefficients, although substantial, are not statistically signifi-cant. Thus, conversion rate bears a coefficient of .046, which suggests that a one percent increase in conversion rate is associated with a one-twentieth step increase in robustness of the interface. To put this in the context of this dataset, moving from the 25th to 75th percentile of con-version rate would be associated with an increase of the robustness of the interface of about a tenth of a level (.09).[82] Although the relation is sta-tistically weak, the Virtual? variable (which distinguishes between busi-nesses that do and do not have bricks-and-mortar counterparts) has a co-efficient of .246, indicating that the interfaces of wholly virtual businesses in this model are about one-quarter step more robust than the interfaces of those that are not wholly virtual. The last column of the table presents beta coefficients that allow us to discern the relative importance, within this dataset, of the variables.[83] Generally, those coefficients suggest that Log Average Ticket (.259), Pro-Seller Clauses? (.186), and Conversion Rates (.124) are the most important explanatory variables, and that the Food/Drug industry dummy (.129) is an important control.

IMPLICATIONS AND CONCLUSION

The central purpose of this Essay is to dispose of some obvious mis-conceptions about internet retailing. This is a burgeoning area of com-merce that promises to be the most rapidly growing type of retail distribu-

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82. The 25th percentile firm has a conversion rate of 1.8% and the 75th percentile firm has a conversion rate of 3.85%. (3.85 − 1.8) (.046) = .0943.

83. Those coefficients show the number of standard deviations of change in the dependent variable associated with a one standard deviation shift of the explanatory variable.

tion for years to come. Yet despite the ready availability of standardized information about contracts, far too little is understood about contracting in the internet retail setting. It seems that for the great majority of internet retailers, the ease of the shopping experience is more important than concerns about possible future liability. Thus, few retailers—only about 6% in our population—use contracting interfaces sufficiently robust to make it reasonable to expect that their contracts are enforceable against their customers. Even more surprisingly, the contracts found on internet retailers' websites contain the standard, pro-seller boilerplate provisions—arbitration, disclaimers of consequential damages, and the like—much less frequently than would be expected. No such clauses appear in the contracts for more than half of the retailers that we studied. We attribute the appearance of the clauses in almost half of the contracts to the conflict between two motivations: the desire to have terms that appear to be benign and the desire to have terms (albeit not in a binding form) to which consumers will accede in the event of a dispute.

More broadly, we hope to contribute to an understanding of the relation between formal and informal modes of contract enforcement. In our view, the data we present here suggest that businesses often can succeed in altering the practical terms of their relations with customers without obtaining enforceable contracts. The apparent use of unenforceable terms to guide customer behavior provides a provocative addition to the debate about whether assent should be the focus of doctrinal rules on contract formation. Among other things, it suggests that doctrinal rules that make pro-seller terms unenforceable will have considerably less impact in the real interactions of customers and merchants than scholars have surmised. This finding is particularly striking because of the remote interactions of the parties. Although many of the customers are repeat customers, there is by definition almost no opportunity online for the kind of personal interaction that characterizes relational contracting as it is commonly understood.

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APPENDIX

TABLE A1: FORCED ASSENT REGRESSIONS

	Model 1		Model 2		Model 3		Model 4	
	Coeff.	Beta	Coeff.	Beta	Coeff.	Beta	Coeff.	Beta
Pro-Seller Clauses?	.528*** (.115)	.194	.659*** (.167)	.228	.602*** (.162)	.208	.538*** (.153)	.186
Log Total SKUs			.0190 (.0425)	.031	.0363 (.450)	.060	.046 (.044)	.075
Electronics					.515* (.250)	.125	.128 (.285)	.0311
Food/Drug					1.164 (.703)	.172	.869 (.612)	.129
HHI					.0001 (.0001)	.077	.0001 (.0001)	.063
Log Average Ticket							.457*** (.137)	.259
Virtual?							.246 (.168)	.085
Conversion Rates							.046 (.039)	.124
R^2	.036		.056		.099		.166	
N	500		311		311		307	

* - .05 ** - .01 *** .001
The table shows coefficients, with robust standard errors in parentheses.