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Theory of the Nudnik: The Future of Consumer Activism and What We Can Do to Stop It

Yonathan A. Arbel* Roy Shapira**

How do consumers hold sellers accountable and enforce market norms? This Article contributes to our understanding of consumer markets in three ways. First, the Article identifies the role of a small subset of consumers—the titular "nudniks"—as engines of market discipline. Nudniks are those who call to complain, speak with managers, post online reviews, and file lawsuits. Typified by an idiosyncratic utility function and certain unique personality traits, nudniks pursue action where most consumers remain passive. Although derided in courtrooms and the court of public opinion, we show that nudniks

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can solve consumer collective action problems, leading to broad market improvements.

Second, the Article spotlights a disconcerting development: sellers' growing usage of big data and predictive analytics allows them to identify specific consumers as potential nudniks and then disarm or avoid selling to them before they can draw attention to sellers' misconduct. The Article therefore captures an understudied problem with big data tools: sellers can use these tools to shield themselves from market accountability.

Finally, the Article evaluates a menu of legal strategies that would preserve the benefits of nudnik-based activism in light of these technological developments. In the process, we revisit the conventional wisdom on the desirability of form contracts, mandatory arbitration clauses, defamation law, and standing doctrines.

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INTRODUCTION

Can consumers hold sellers accountable and enforce market norms? This Article spotlights the disciplinary power of a small subset of consumers, who we dub "nudniks." Nudniks are those consumers who call to complain, complete satisfaction surveys, demand to speak with managers, post detailed online reviews, and file lawsuits. They usually have an innate sense of justice, atypical motivations, or an idiosyncratic utility function, which leads them to pursue action in situations where most consumers remain passive. In courtrooms and in the court of public opinion, nudniks are often derided as petty and vindictive. Yet through their actions, nudniks direct attention to seller underperformance, leading to a variety of legal and reputational sanctions in ways that complement, and sometimes substitute, direct legal intervention. The much-maligned nudniks can therefore generate positive spillovers that reverberate throughout the economy.

Sellers, however, do not remain passive. They have long tried to minimize the legal and reputational risks posed by nudniks. The advent of big data and predictive analytics provides sellers with a game changer: the ability to identify which consumer is a potential nudnik (that is, which consumer is likely to complain publicly and draw attention to seller underperformance), before that consumer even sets foot in their store. Sellers can then silently disarm nudniks or avoid selling to them altogether. This development benefits sellers, as it reduces the legal and reputational risks from nudniks. It may even benefit nudniks themselves, to the extent sellers disarm them by offering them preferential treatment. Yet the development poses a large risk to the greater consumer body, as it deprives consumers of a valuable source of information on seller misbehavior, thereby reducing the effectiveness of market discipline.

This Article's first contribution is to explore the role of the nudniks as engines of market discipline that complement legal institutions. Its second contribution is to shed light on sellers' growing technological ability to circumvent nudniks and dilute market

^{1.} The word nudnik derives from Yiddish. It can be roughly translated to "busybody" or "nag." LION KOPPMAN & STEVE KOPPMAN, A TREASURY OF AMERICAN-JEWISH FOLKLORE 232 (First Jason Anderson Inc. 1998) (1996) (defining a nudnik as a "pest, gossip, or busybody"); LEO ROSTEN, THE NEW JOYS OF YIDDISH 272 (Lawrence Bush ed., 2001) (defining a nudnik as "[a] pest, a nag, an annoyer, a monumental bore"). For more on terminology, see *infra* Section I.A.

discipline. The Article's third contribution is to propose and evaluate legal strategies that would protect the ability of nudniks to continue generating valuable information on seller behavior.

To illustrate the nudnik phenomenon, consider the case of Ben Edelman, a Harvard Business School professor. When Professor Edelman ordered takeout from Sichuan Garden, a local Chinese restaurant, he compared the prices on the receipt to the prices on the online menu and discovered he was overcharged by \$4. Annoved, Edelman sent a complaint through the restaurant's website, which he then followed with an email. The owner responded that although the website was not regularly updated, the current prices were accurately printed on the in-restaurant menus. Although the owner stated that he would fix the error, the correspondence suggests that he did not offer Edelman compensation for the overcharge.² In response, Edelman demanded that he be compensated \$12 for the mishap, citing a local consumer protection law that trebles damages for unfair business practices.3 When the owner refused, Edelman complained to the relevant regulator. Eventually the overcharging story reached local media. The public response largely mocked Edelman's insistence as petty and privileged.4 It failed to recognize the important public service Edelman provided: namely, deterring overcharging. Nor did the public appreciate the fact that one has to be idiosyncratic to provide such a public good. The opportunity cost of the time Edelman spent complaining dwarves the \$12 he sought. If it were not for people like Edelman who go to the trouble, restaurants would have a much easier time systematically overcharging us all.5

Whereas the legal literature has largely neglected the effects of such nudnik-consumers, 6 commercial firms have long invested

^{2.} Hilary Sargent, Ben Edelman, Harvard Business Professor, Goes to War over \$4 Worth of Chinese Food, Bos. (Dec. 9, 2014), https://www.boston.com/culture/restaurants/2014/12/09/benedelman-harvard-business-school-professor-goes-to-war-over-4-worth-of-chinese-food [https://perma.cc/Y842-L7S5].

^{3.} MASS. GEN. LAWS ch. 93A, § 9 (2019).

^{4.} Elizabeth Barber, A Harvard Professor Launched an Epic Rant over an Extra \$4 on his Chinese Takeout Bill, TIME (Dec. 10, 2014), http://time.com/3627282/harvard-professor-chinese-takeout-ben-edelman/ [https://perma.cc/G3P6-RYRM].

^{5.} On March 1, 2019, we put on our investigative reporter hats and called the restaurant to inquire about the entrée pricing, and we found that the prices indicated on the website match exactly those offered by the restaurant. Telephone interview with Victoria Moffa, Research Assistant, Univ. of Ala. (Mar. 1, 2019).

^{6.} To the extent that legal scholars have touched these issues, it was usually within the context of how the haves assert their rights more than the have-nots. In other words, existing treatments focus on how sociodemographic differences between those who complain and those that do not suppress the voices and concerns of marginalized groups. See, e.g., Amy J. Schmitz, Access to Consumer Remedies in the Squeaky Wheel System, 39 PEPP. L. REV. 279 (2012); Lauren E. Willis, Performance-Based Consumer Law, 82 U. CHI. L. REV. 1309, 1326 (2015).

resources in identifying and minimizing their risks. Indeed, a rich literature in marketing explores consumer complaining behavior and, in particular, how to handle serial complainers. In recent years, sellers have enjoyed a breakthrough in their ability to target and disarm nudniks. Rather than dealing with nudniks as they complain, sellers can use big data and predictive analytics to identify which of their consumers are nudniks long before the nudniks even buy from them. The early identification allows sellers to effectively silence these nudniks by offering preferential treatment or avoiding servicing them altogether. In other words, new technological tools allow sellers to dampen the flow of negative information to the market and reduce the risk of legal and reputational sanctions.

In this sense, the Article dovetails with the burgeoning legal literature on big data and personalized contracts. The existing literature has focused either on the promise of tailoring services to each consumer's preferences or on concerns with privacy and discrimination.⁸ In other words, the scholarship focuses on efficiency and fairness considerations as they affect the individual receiving personalized treatment. In contrast, this Article focuses on third-party effects. As we show, these tools are increasingly effective at allowing firms to escape market accountability.

The Article proceeds in three parts. Part I explains who the nudniks are, what they do, and how they can, in some cases, generate significant social benefits. Drawing on a number of examples, we show that nudniks can effectively solve some of the collective action problems that plague consumer markets; they take action even when a cold costbenefit analysis counsels inaction. We note that some of the nudniks' actions can be frivolous or focus on parochial interests and that more research is needed to identify the exact conditions under which nudniks provide the most value. Yet, drawing on studies in the consumer complaining behavior literature, we show why the impact that nudniks have on seller behavior cannot be dismissed as immaterial or predominately negative. Rather, the existing evidence indicates that nudniks impose considerable market discipline. Traditional theories of

^{7.} See infra Part I. Note, for example, the calls in the marketing literature to study nudniks so "that businesses could identify individuals with this proclivity and steer them away from their establishments." RICHARD L. OLIVER, SATISFACTION: A BEHAVIORAL PERSPECTIVE ON THE CONSUMER 402 (2d ed. 2015).

^{8.} See Gerhard Wagner & Horst Eidenmüller, Down by Algorithms? Siphoning Rents, Exploiting Biases, and Shaping Preferences: Regulating the Dark Side of Personalized Transactions, 86 U. CHI. L. REV. 581 (2019); infra note 193.

market discipline focus on consumers who read contracts. But recent empirical studies suggest that very few consumers actually read contracts. Thus, it will be productive for scholars and policymakers to shift focus from those who read to those who complain. While serial readers are almost mythical creatures, serial complainers are very real.

Part II switches attention from nudniks to the firms that deal with them. This Part emphasizes the disconcerting development of sellers' ability to identify and target nudniks earlier in the transaction process. The earlier targeting limits the positive spillovers from nudniks' complaints. Part II therefore dovetails with the longstanding legal literature on private versus public resolution of disputes: settlement versus trial, secrecy versus openness, and so on. While the extant literature focuses on what happens when the consumer is in the "claiming" stage (say, after she files her complaint), we show that new technological tools allow sellers to dismiss the issue much earlier. 11 The ability to dissolve potential conflicts earlier may save some administrative costs, but it comes at the expense of legal and reputational deterrence. When a dissatisfied consumer posts a detailed review online, the information may be forever etched in the internet's memory, even if the consumer is later appeased. When the consumer files a lawsuit, even if it is later settled, the filing leaves a public trail. Prospective consumers and information intermediaries, such as investigative reporters and consumer watchdogs, are able to pick up these public indications of seller misbehavior and use them to inform consumer decisions. By contrast, when the seller knows which consumers are likely to post reviews and file complaints, and targets these specific complainers before they even form their claims, this aspect of reputational deterrence is undermined.

Part III develops legal strategies that would preserve nudnik-based activism in light of these emerging technological threats. Unlike most law and economics analyses, which invoke the prospect of reputational deterrence as justification for scaling back legal intervention, we argue that legal intervention may be required to facilitate reputational deterrence. Permitting sellers to silence complainers before their complaints reach the market weakens the

^{9.} See, e.g., Alan Schwartz & Louis L. Wilde, Intervening in Markets on the Basis of Imperfect Information: A Legal and Economic Analysis, 127 U. PA. L. REV. 630 (1979) (arguing that a minority of consumers who read can enforce market discipline).

^{10.} See Ian Ayres & Alan Schwartz, The No-Reading Problem in Consumer Contract Law, 66 STAN. L. REV. 545 (2014). On the critiques of the Informed Minority Theory, see infra notes 87–106

^{11.} For the "naming, blaming, claiming" typology, see William L.F. Felstiner et al., *The Emergence and Transformation of Disputes: Naming, Blaming, Claiming...*, 15 LAW & SOCY REV. 631 (1980).

functionality of the market for sellers' reputations. This Part shows why existing frameworks for regulating big data and scoring algorithms are ill-equipped to deal with the particular problem of nudnik targeting. We then sketch concrete strategies for judges, regulators, and legislators, such as relaxing standing requirements, amending defamation laws, or closing loopholes in the Consumer Review Fairness Act. 12

We conclude by reflecting on some of the broader lessons, such as the underappreciated dangers of personalizing contracts. Bottom-up market discipline is an essential part of functioning markets, yet it remains understudied in the legal literature. We seek to highlight one specific aspect of market discipline, namely, how it benefits from the efforts of a small subset of consumers. This aspect makes market discipline vulnerable to technologies that allow the accurate and early targeting of these consumers.

I. HOW NUDNIKS AFFECT SELLER BEHAVIOR

What makes a certain consumer a nudnik? And what is it exactly that nudniks do—how do they affect seller behavior? This Part defines nudniks and clarifies the role they play in enabling consumer markets to function effectively.

Section A defines nudniks by juxtaposing them with prototypical consumers. Nudniks are unlike the majority of consumers, who remain passive both before entering a transaction (e.g., not reading the terms of the contract) and after it (e.g., not noticing seller underperformance or noticing but doing nothing about it). Nudniks also differ from other active consumers in that their activism does not come from shopping for the best deal ex ante but rather from demanding that their transactional expectations be met ex post. 13 To further underscore the unique characteristics of nudniks, Section B provides motivating examples of nudniks in action. Section C then categorizes the various channels through which nudniks express their dissatisfaction with sellers. Nudniks often voice their concerns about the seller publicly for example, by filing a lawsuit, posting a detailed negative review online, or enlisting the help of the media. As a result, nudniks' actions draw the attention of other market players, setting a reputational sanction in motion and deterring seller misbehavior. Section D homes

^{12.} Consumer Review Fairness Act of 2016, Pub. L. No. 114-258, 130 Stat. 1355 (to be codified at 15 U.S.C. § 45b).

^{13.} Transactional expectations are the full set of expectations that consumers form about the transaction. These expectations are informed by the contract, but also by seller representations, advertisements, seller reputation, background knowledge, and life experience. See infra notes 112–113 and accompanying text.

in on the deterrence point by comparing our theory of the nudnik with prevalent theories of market discipline and considering some of their limitations. One key observation is that nudniks pressure sellers not just to honor their contractual commitments but also to go beyond the contract and meet supracontractual expectations.

A. Who Are the Nudniks?

What do we mean by "nudnik"? The term derives from Yiddish and can be translated as "a bore, a nag, a jerk," or a "busybody" and a "pest." We chose this term for our purposes precisely because it is relatively unfamiliar. The abovementioned familiar terms carry strong, negative connotations, whereas we wish to employ "nudnik" as a judgment-neutral description of a certain type of consumer: one who is constantly active in vindicating violations of her transactional expectations of the seller.

A nudnik is someone who demands to speak with the manager, writes an angry letter to the editor, or brings a lawsuit over a torn pair of pants that cost \$40. More precisely, the definition of "nudnik" for our purposes is two-pronged: (1) an *active* consumer, (2) who acts even when a cold cost-benefit analysis suggests otherwise. Nudniks act even when others conclude that "it's not worth it" because they possess an idiosyncratic utility function. Nudniks therefore belong to a broader category that the socioeconomic literature dubs "willing punishers": individuals who are willing to incur personal costs in order to punish others who misbehave. 15

Consider first the "active consumers" prong. Nudniks are unlike the overwhelming majority of consumers, who regularly remain passive. These passivists—which is to say, most of us—engage with

^{14.} KOPPMAN & KOPPMAN, supra note 1, at 232 ("[A] pest, gossip, or busybody."); Nudnik, WIKTIONARY, https://en.wiktionary.org/wiki/nudnik (last visited May 7, 2020) [https://perma.cc/NB7R-RTUS] ("[A] bore, a nag, a jerk."). On the long line of terms from the "legal Yiddish" family tree, see Alex Kozinski & Eugene Volokh, Lawsuit, Shmawsuit, 103 YALE L.J. 463 (1993).

^{15.} See Elinor Ostrom, Collective Action and the Evolution of Social Norms, 14 J. ECON. PERSP. 137, 142 (2000) (discussing how certain individuals are "willing punishers": they engage in costly sanctions to facilitate social control).

^{16.} The marketing literature has long documented that most consumers remain passive. LEON G. SCHIFFMAN & JOSEPH WISENBLIT, CONSUMER BEHAVIOR 421 (11th global ed. 2015) ("Research indicates that only a few unsatisfied customers actually complain."); TECH. ASSISTANCE RESEARCH PROGRAMS, U.S. OFFICE OF CONSUMER AFFAIRS, CONSUMER COMPLAINT HANDLING IN AMERICA: A FINAL REPORT (1979) [hereinafter TARP]; Stephen S. Tax & Stephen W. Brown, Recovering and Learning from Service Failure, 40 MGMT. REV. 75, 77 (1988) (finding that ninety percent of consumers do not complain); Clay M. Voorhees et al., A Voice from the Silent Masses: An Exploratory and Comparative Analysis of Noncomplainers, 34 J. ACAD. MARKETING SCI. 514, 514 (2006) ("The majority of dissatisfied customers fail to complain.").

the product and service only at a basic level, both ex ante (when shopping) and ex post (when feeling dissatisfied with the service or product). When problems arise—the contractor did not show up on time, the fridge is less energy efficient than advertised, or the medical bill includes an unidentified small charge—the passivists may not notice, or may notice but do nothing about it. At most, the passivist will refrain from buying the same product again, passive-aggressively mention to the contractor that he was expected earlier, or note her disappointment to her immediate surroundings. As one marketing textbook summarizes: "Consumers do not do anything, in the main, in response to consumption." ¹⁷

Why are so few consumers active? Many factors contribute to passivism, including the opportunity cost of spending time to complain, conflict aversion, personality type, and ignorance about one's rights. ¹⁸ Importantly, remaining a passive consumer and free riding others' efforts is often the rational thing to do—another example of the well-documented rational apathy phenomenon we see with voters and investors. ¹⁹ After all, standing up for one's rights comes at immediate costs. It involves social discord and may require a considerable investment of time and effort. ²⁰ The benefits of taking such action, by contrast, are uncertain. The seller may not yield to the consumer's demands, and even if she does, the value of remedial action may not be significant. In sum, the value of an uncertain replacement of a product one complains about is often outweighed by the certain investment of time and effort complaining. ²¹

For most of us, what Ben Edelman did defies logic. The opportunity cost of the time that Professor Edelman—a well-paid speaker and consultant²²—spent corresponding with the restaurant

^{17.} OLIVER, supra note 7, at 385; see also John W. Huppertz, Firms' Complaint Handling Policies and Consumer Complaint Voicing, 24 J. CONSUMER MARKETING 428, 428 (2007).

^{18.} See, e.g., Robin M. Kowalski, Complaints and Complaining: Functions, Antecedents, and Consequences, 119 PSYCHOL. BULL. 179 (1996) (examining how different personality types experience the lodging of complaints); Marsha L. Richins, A Multivariate Analysis of Responses to Dissatisfaction, 15 J. ACAD. MARKETING SCI. 24 (1987).

^{19.} On rational apathy among consumers, see William M. Landes & Richard A. Posner, *The Private Enforcement of Law*, 4 J. LEGAL STUD. 1, 33 (1975), and Roger Van den Bergh & Louis Visscher, *The Preventive Function of Collective Actions for Damages in Consumer Law*, 1 ERASMUS L. REV. 5 (2008).

^{20.} For a review of the marketing literature on the costs and benefits of complaints, see Huppertz, *supra* note 17, at 429–30. To illustrate, in a study of 149 dissatisfied consumers who did not complain, shortage of time was the leading professed reason for inaction. Voorhees et al., *supra* note 16, at 519.

^{21.} Huppertz, *supra* note 17, at 429–30.

^{22.} See Biography, BEN EDELMAN, http://www.benedelman.org/bio/ (last visited May 7, 2020) [https://perma.cc/45ZJ-HW73]; CV of Benjamin G. Edelman, BEN EDELMAN, http://www.benedelman.org/cv.pdf (last visited May 7, 2020) [https://perma.cc/Z3JB-HR8V].

was well in excess of the \$12 he sought. For nudniks, however, spending the time to assert their claim is simply the right and natural thing to do.

This brings us to the second prong in the nudnik definition their unique makeup. These crusading consumers tend to share certain values and innate personality traits. Studies in consumer psychology find that certain consumers have traits that make them more "eager to complain . . . while others . . . simply hate the idea of complaining."23 Some of the serial complainers are simply more assertive and aggressive than the rest of us.²⁴ Others have a strong level of "commitment," meaning they hold certain things as extremely important or, more concretely, have a strong innate belief that contracts should be honored.²⁵ Still others operate on spite: they are more prone than others to feel that a seller providing inferior service or a defective product is disrespecting them. In all, nudniks are consumers who possess what an economist might call an "idiosyncratic utility function":26 they are not wired like the rest of the consumer body. For most of us, spending hours fighting a \$4 overcharge is not worth our time; for nudniks, it comes instinctively—it is the "rational" thing to do.

Nudniks, then, are active. Yet not all active consumers are nudniks. Within the category of active consumers, there are different varieties.²⁷ Some consumers are active in the sense that they take time to read and understand each term in the contract. These consumers are active shoppers, comparing not just the price and quality of the good or service, but also the terms of the transaction.²⁸ They will not fly with a certain airline if it does not regularly compensate for delays and will not go to car dealerships that do not offer warranties.

^{23.} Min Gyung Kim et al., The Relationship Between Consumer Complaining Behavior and Service Recovery: An Integrative Review, 22 INT'L. J. CONTEMP. HOSP. MGMT. 975, 978 (2010).

^{24.} Richins, *supra* note 18, at 25 ("[C]onsumer assertiveness and aggression have recently been recognized as correlates of complaint behavior.").

^{25.} See Nancy Stephens & Kevin P. Gwinner, Why Don't Some People Complain? A Cognitive-Emotive Process Model of Consumer Complaint Behavior, 26 J. ACAD. MARKETING SCI. 172, 178 (1998).

^{26.} See, e.g., Michael H. Riordan, Contracting in an Idiosyncratic Market, 14 Bell J. Econ. 338 (1983). To be sure, some nudniks may be motivated by material gains—compensation, future discount, or "freebies"—but as the Edelman example illustrates, the value of the (private) gain often pales in comparison to the effort required to earn it.

^{27.} In a recent symposium on the future of private law, we offered a classification of various consumer types and how they relate to consumer activism. See Yonathan A. Arbel & Roy Shapira, Consumer Activism: From the Informed Minority to the Crusading Minority, 69 DEPAUL L. REV. (forthcoming 2020) (on file with authors).

^{28.} Such "shoppers" are usually the focus of economic theories of search behavior. See, e.g., Sara Fisher Ellison, Price Search and Obfuscation: An Overview of the Theory and Empirics, in HANDBOOK OF ECONOMICS RETAILING & DISTRIBUTION 287 (Emek Basker ed., 2016) (discussing price search and its equilibrium effects).

Unlike these shoppers, nudniks do most of their work post-consumption. Rather than focusing on shopping for better contracts, nudniks focus on *enforcement*. Whenever they feel wronged, nudniks fight back, even when other types of active and sophisticated consumers would not bother. To be sure, there is bound to be some categorical overlap: some nudniks are also sophisticated and shop aggressively before they purchase. But many nudniks often choose a product based on a superficial comparison, the way most passivists do. This cursory shopping effort does not preclude the nudnik from exerting maximum effort when the product fails to meet her expectations.²⁹

Nudniks are therefore part of the small subset of private enforcers. A classic example here is class action plaintiffs (or, more generally, "private attorneys general"),³⁰ who through their enforcement action can generate market discipline. Private attorneys general are, in a sense, bounty hunters: they pursue action only when a cold cost-benefit analysis justifies it. If the costs of collecting their bounty become high—think, for example, about the recent rise of mandatory arbitration clauses and class action waivers³¹—bounty hunters stop enforcing. Nudniks, by contrast, fight against seller underperformance almost instinctively, even at a personal cost, because it is "in their blood." As such, nudniks can fill important gaps in legal and market discipline.

B. What Nudniks Do: Motivating Examples

To provide some context for the nudnik phenomenon, let us consider a few cases of nudniks in action and then highlight several recurring themes.

Consider first the case of Hasan Syed, a Chicago businessman. In 2013, British Airways lost Syed's father's luggage en route to Paris.³²

^{29.} On acting based on violated expectations see *infra* note 112 and accompanying text; see also Ayres & Schwartz, supra note 10, at 550–51 (noting that consumers often have a good grasp of some of the terms that govern their relationship with sellers, even without reading their contract). Note that sophistication often leads to negative spillovers and cross-subsidies from less sophisticated consumers. See generally Peter A. Alces & Jason M. Hopkins, Carrying a Good Joke Too Far, 83 CHI.-KENT L. REV. 879, 890 (2008); Xavier Gabaix & David Laibson, Shrouded Attributes, Consumer Myopia, and Information Suppression in Competitive Markets, 121 Q.J. ECON. 505 (2006); Amy J. Schmitz, Remedy Realities in Business-to-Consumer Contracting, 58 ARIZ. L. REV. 213, 238–39 (2016). With nudniks, by contrast, partly because the activity is done at the enforcement stage, the possibility of positive spillovers (as in drawing others' attention) is greater.

^{30.} See, e.g., Bryant Garth et al., The Institution of the Private Attorney General: Perspectives from an Empirical Study of Class Action Litigation, 61 S. CAL. L. REV. 353, 355 (1988).

^{31.} See AT&T Mobility LLC v. Concepcion, 563 U.S. 333, 349 (2011).

^{32.} See Angry Traveler Pays Big Bucks for Tweet, CNN MONEY, https://money.cnn.com/video/news/2013/09/04/n-british-air-twitter-war-mclaughlin.cnnmoney/index.html (last visited

Annoyed, Syed took his grievance to social media, where he tweeted the following:



Don't fly with @British_Airways. They can't keep track of your luggage.

Promoted by

This otherwise common tweet had one uncommon twist: as seen in the bottom left, the tweet was promoted by Syed. Syed paid Twitter \$1,000 to have this tweet and similar ones broadcasted to over seventy thousand potential British Airways consumers.³³ In a short time, the wide exposure of his tweets drew the attention of mass media outlets, which exponentially increased the exposure. Syed's efforts in airing his grievances received their own term: "complaintvertising."³⁴ His guerrilla campaign bore fruit: British Airways located the luggage, hand-delivered it to his dad in Paris, and issued a public apology.³⁵ Syed declared victory,³⁶ while the company suffered substantial losses, and its mishandling of Syed's original claim is now studied by marketing scholars and practitioners.³⁷

Similar tactics were used by Eugene Mirman, a comedian annoyed with Time Warner Cable because they twice failed to show up for their installation appointment. Like Syed, Mirman invested in widely disseminating his grievances. He took out a full-page advertisement in the New York Press, where he mocked the company's policy of failing to notify customers of rescheduled appointment times: "Did Stalin ever call people before he arrested them and sent them to

May 7, 2019) [https://perma.cc/73JT-PVXK] (reporting that Syed acknowledged his tweet as an ad).

^{33.} Hasan Syed (@HVSVN), TWITTER (Sept. 3, 2013, 3:46 PM), https://twitter.com/HVSVN/status/375026963347304449 [https://perma.cc/X5FH-6ERR]; see also Kevin Foresti (@Kforesti), TWITTER (Sept. 4, 2013, 9:08 AM), https://twitter.com/Kforesti/status/375289284276006912 [https://perma.cc/PF7J-FXZN].

^{34.} Jason King, Complaintvertising: Word of Mouth's Evil Twin, HUFFINGTON POST (Oct. 23, 2013, 1:14 PM), https://www.huffingtonpost.com/jason-king/complainvertising-word-of_b_4143073 [https://perma.cc/EZ8M-2NPV].

^{35.} See Angry Traveler Pays Big Bucks for Tweet, supra note 32.

^{36.} Hasan Syed (@HVSVN), TWITTER (Sept. 3, 2013, 9:56 PM), https://twitter.com/HVSVN/status/375120159477755904 [https://perma.cc/WRB6-5HVV].

^{37.} See, e.g., Gisèlede Campos Ribeiro et al., The Determinants of Approval of Online Consumer Revenge, 88 J. BUSINESS RES. 212 (2018).

die in Siberian work camps? No! Why should Time Warner Cable have a policy that is any different from Stalin's?"³⁸

The Sved and Mirman examples showcase the idiosyncratic utility function emblematic of nudniks. Both were willing to invest time, effort, and valuable resources—at least \$1,000 in Syed's case—to widely disseminate their dissatisfaction, even though such an outlay far outweighs the remedy they sought (getting the bag back or having the cable guy show up on time). Syed was perhaps motivated by spite. With Mirman, the idiosyncratic utility function probably stemmed from the unique private benefits he gets from complaining publicly: his strong interest in publicity.³⁹ Others invest money to raise public awareness of product and service issues because of their personal ideology. A case in point is drywall pioneer and multimillionaire Phil Sokolof, who suffered a heart attack at a young age and decided to spend millions on public campaigns against the "McDonald'ses" of the world for using too much fat in their products.⁴⁰ Public opinion polls showed that Sokolof's campaign got people to frequent the restaurants he targeted less and eventually got the restaurants to change their products.41

Not all nudniks have money to purchase ads in national newspapers. Some air their grievances by singing. When country music artist Dave Carroll was frustrated with United Airlines for mishandling and breaking his favorite guitar, he wrote a song and uploaded it to

^{38.} Eugene Mirman, My Letter to Time Warner Cable, EUGENE MIRMAN (May 25, 2011), http://www.eugenemirman.com/news/2015/5/19/my-letter-to-time-warner-cable [https://perma.cc/JQQ8-TLHM]. Mirman's efforts attracted attention, as they were reported on in the media. See, e.g., Megan Angelo, This Guy Just Took Out a Full Page Ad to Tell Time Warner How Much They Suck, Bus. Insider (May 26, 2011, 3:46 PM), https://www.businessinsider.com/time-warner-cable-eugene-mirman-ad-2011-5 [https://perma.cc/XZJ6-HCVC].

^{39.} To be sure, the examples we use throughout this piece illustrate that there is no one "classic" format of a nudnik: for some, the private benefits play a bigger role than for others. For all of them, though, the cold cost-benefit calculation works differently than for most other consumers.

^{40.} Businessman Takes Out Ad Against Fast-Food Fat, DESERET NEWS (Apr. 5, 1990), https://www.deseret.com/1990/4/5/18854935/businessman-takes-out-ad-against-fast-food-fat [https://perma.cc/JT57-SPA4]; Marcella S. Kreiter, Group Accuses McDonald's of 'Poisoning' America, UNITED PRESS INT'L (Apr. 4, 1990), https://www.upi.com/Archives/1990/04/04/Group-accuses-McDonalds-of-poisoning-America/3593639201600/ [https://perma.cc/NWB2-9UV7].

^{41.} See Scott Hume, Fast-Food Faces Wary Public, ADVERT. AGE, July 2, 1990, at 1 (noting the decline in people willing to frequent these restaurants). Shortly after the aforementioned public opinion polls, McDonald's announced the switch from animal fat to vegetable oil for its fries. For reviews of Sokolof's campaign that include criticisms and objections, see Ronald J. Adams & Kenneth M. Jennings, Media Advocacy: A Case Study of Philip Sokolof's Cholesterol Awareness Campaigns, 27 J. Consumer Aff. 145 (1993), and Malcolm Gladwell, McDonald's Broke My Heart, REVISIONIST HIST., http://revisionisthistory.com/episodes/19-mcdonalds-broke-my-heart (last visited May 7, 2020) [https://perma.cc/YD77-4JCC].

YouTube.⁴² His "United Breaks Guitars" song went viral, reaching number one on the iTunes Music Store and earning over nineteen million views as of this writing.⁴³ Here as well, mainstream media picked up the story and widely publicized it. United suffered a huge reputational hit; some estimated that the incident led to a ten percent decline in its market capitalization.⁴⁴ Beyond compensating Carroll, United reacted by committing to change its customer service policy, and it now uses Carroll's video in its internal trainings.⁴⁵

Nudniks who do not have deep pockets or a singing talent can still go to great lengths to disseminate their claims through other channels—for example, by enlisting the help of mass media. When Philadelphians Diana and Jason Airoldi were frustrated with Comcast for skirting appointments for six weeks, they called a local journalist.⁴⁶ The reporter ran a story about their travails and called the mother of Comcast's CEO to complain about her son's company's behavior.⁴⁷ The paper followed up with an update when Comcast subsequently changed its ways.⁴⁸

^{42.} See United Breaks Guitars, DAVE CARROLL MUSIC, https://www.davecarrollmusic.com/songwriting/united-breaks-guitars/?v=7516fd43adaa (last visited May 7, 2020) [https://perma.cc/5GAV-4SXF].

^{43.} See David Dunne, United Breaks Guitars, JOSEPH L. ROTMAN SCH. MGMT., https://3gz8rn1ntxn33t9p221v8mlgtsq-wpengine.netdna-ssl.com/wp-content/uploads/United-Breaks-Guitars-Case-Jan-11-10-21.pdf (last visited May 7, 2020) [https://perma.cc/9M42-PCVA] (prepared by Dunne as a case study for in-class discussion).

^{44.} See Eddie Wrenn, The Sweet Music of Revenge: Singer Pens YouTube Hit After United Airlines Breaks His Guitar . . . and Shares Plunge 10%, DAILY MAIL (July 24, 2009, 9:12 AM), https://www.dailymail.co.uk/news/article-1201671/Singer-Dave-Carroll-pens-YouTube-hit-United-Airlines-breaks-guitar—shares-plunge-10.html [https://perma.cc/3CEQ-5P85]; see also Allison R. Soule, Fighting the Social Media Wildfire: How Crisis Communication Must Adapt to Prevent from Fanning the Flames 35–49 (2010) (unpublished Master's thesis, University of North Carolina at Chapel Hill) (on file with authors) (detailing the sentiment in YouTube comments about the United Airlines smashed guitar incident).

^{45.} See Broken Guitar Song Gets Airline's Attention, CBC NEWS (July 8, 2009, 3:00 PM), https://www.cbc.ca/news/entertainment/broken-guitar-song-gets-airline-s-attention-1.802741 [https://perma.cc/K8KX-S4AP]. Carroll's is not the only case of a consumer holding sellers accountable by singing. When Bank of America customers were frustrated with how the bank stealthily delayed mortgage approvals, they posted a video of themselves singing a plea to hear back. The musical plea was successful, and the bank issued a public apology, closed the loan, and offered monetary compensation. See Christina Ng, Georgia Couple Pleads with Bank of America in Music Video, ABC NEWS (Dec. 16, 2011), https://abcnews.go.com/blogs/business/2011/12/georgia-couple-pleads-with-bank-of-america-in-music-video/ [https://perma.cc/U837-V7NU].

^{46.} See Ronnie Polaneczky, Bombast from Comcast?, PHILA. INQUIRER (Feb. 7, 2015, 3:01 AM), https://www.philly.com/philly/news/20150208_Bombast_from_Comcast_.html [https://perma.cc/ZVU3-8YVB].

^{47.} Id.

^{48.} See id.

All these examples (and others⁴⁹) showcase four recurring themes. We already highlighted the first one, namely, how nudniks have *idiosyncratic utility functions*: they will take action even when the costs far outweigh the immediate financial benefits. Second, because of their idiosyncratic utility functions, nudniks tend to be *repeat players*. Professor Edelman did not just target Sichuan Garden; according to some reports, he had previously complained about various other "misbehaving" restaurants in the Boston area.⁵⁰ Syed and Mirman reportedly have a history of complaintvertising against various companies.⁵¹ Sokolof did not just spend \$3 million on ads against McDonald's; he went on to campaign against other companies as well, spending \$15 million overall.⁵²

A third recurring theme, which is probably also attributed to nudniks' idiosyncratic makeups, is that they are quite often *derided by the public*. To return to our opening example, Professor Edelman was widely mocked for being petty, privileged, and ruthless.⁵³ Even academics often refer to nudniks in pejorative terms, such as

^{49.} At the risk of stating the obvious, we note that most nudniks' efforts go unreported, as their daily actions against underperforming sellers rarely receive widespread media attention. The reader can probably summon ample examples from her own personal experience with nudniks in her close and intermediate circles.

^{50.} In one case, Edelman presented a discount coupon at a sushi restaurant, and when the restaurant refused to honor it, he threatened that he would write to the Boston Licensing Board to have their food and liquor licenses revoked. See Hilary Sargent, There's More: Edelman Did this Before, and Worse, BOSTON.COM (Dec. 10, 2014), https://www.boston.com/culture/restaurants/2014/12/10/theres-more-edelman-did-this-before-and-worse [https://perma.cc/KG96-NEPK].

^{51.} See, e.g., Will Robinson, Bob's Burgers Voice Actor Eugene Mirman Buys Newspaper Ad to Bemoan Parking Ticket, Ent. WKLY. (July 14, 2015, 12:00 PM), https://ew.com/article/2015/07/14/bobs-burgers-eugene-mirman-parking-ticket/ [https://perma.cc/SBJ2-W923] (reporting that Mirman used a full newspaper advertisement to publicize his disappointment in a \$15 parking ticket); Best Full Page Ad Ever, IMGUR (July 12, 2015), https://imgur.com/xjrCG0E [https://perma.cc/GL8Z-VCCD] (depicting Mirman's complaint about an unreasonable \$15 parking ticket); Hasan Syed (@HVSVN), TWITTER (Oct. 18, 2013, 4:07 PM), https://twitter.com/HVSVN/status/391309476617154560 [https://perma.cc/5SXL-7LDR] ("Before you use @Square Cash, read about their horrible customer service here bit.ly/nCcLxl.").

^{52.} Wolfgang Saxon, *Phil Sokolof, 82, a Crusader Against Cholesterol, Is Dead*, N.Y. TIMES (Apr. 17, 2004), https://www.nytimes.com/2004/04/17/us/phil-sokolof-82-a-crusader-against-cholesterol-is-dead.html [https://perma.cc/5X4S-Q9CQ].

^{53.} See Nathan J. Robinson, Stop Eviscerating the Harvard Professor Who Threatened to Sue a Chinese Restaurant Over \$4. He Has a Point., NEW REPUBLIC (Dec. 13, 2014), https://newrepublic.com/article/120558/ben-edelman-harvard-prof-angry-over-4-overcharge-haspoint [https://perma.cc/UB33-CP9T] ("By now even Ben Edelman thinks Ben Edelman is fairly despicable.... The consensus is that he's a cheap, entitled bully and that the immigrant restaurant owner is a hapless victim.").

"squawk[ers]"⁵⁴ or "terrorists."⁵⁵ Notwithstanding this public derision, a fourth recurring theme is that nudniks' efforts tend to *generate* positive spillovers that benefit the entire consumer body, including those who mock them. In the abovementioned examples, the targeted companies did not just compensate the specific nudnik, but also apologized publicly and implemented policy changes.

To be sure, not all nudnik activities benefit other consumers. Some nudniks raise frivolous complaints. Others voice legitimate concerns but their voices do not echo enough to reach others and effect change. To better understand when and how nudniks create positive spillovers, we now move to categorizing nudniks' various modes of operation.

C. How Nudniks' Activity Impacts Sellers

How do consumers react to seller failure? Lawyers naturally tend to think about the aggrieved consumer's legal options: Does she have a case? Would the seller settle? Is the expected recovery likely to offset the costs of filing a lawsuit? Outside the legal literature, however, awaits an entire body called consumer complaining behavior ("CCB") literature, which studies how consumers respond to failure in ways other than litigation. The action decision action decision with her purchase, she faces an action/no-action decision. Those that decide to act face a second-level choice on how to act. Most act privately; that is, they do not buy the product anymore. They act without confronting others. A small minority of dissatisfied consumers decides to act more publicly and does confront others. They then face a third-level choice: either seek redress from the company directly, as in talking to the manager, or air their grievances outside, as in notifying a regulator, filing a lawsuit, or posting a negative review online.

^{54.} See Jack Dart & Kim Freeman, Dissatisfaction Response Styles Among Clients of Professional Accounting Firms, 29 J. BUS. RES. 75, 75-76 (1994) (analogizing customer complaints to "the firm, authorities, or media" to a "squawk").

^{55.} See SCHIFFMAN & WISENBLIT, supra note 16, at 44. ("The Terrorists are customers who have had negative experiences with the company and spread negative word-of-mouth. Companies must take measures to get rid of terrorists.").

^{56.} Hirschman's model of voice, exit, and loyalty is perhaps the most familiar to legal scholars. See Albert O. Hirschman, Exit, Voice, and Loyalty (1970). Other models are less familiar to us but even more influential in the CCB literature. See, e.g., Ralph L. Day & E. Laird Landon, Jr., Toward a Theory of Consumer Complaining Behavior, in CONSUMER AND INDUSTRIAL BUYING BEHAVIOR 425 (Arch G. Woodside et al. eds., 1977).

^{57.} HIRSCHMAN, supra note 56, at 30-43 (noting that in the consumer markets context, "exit" is far more prevalent than "voice").

^{58.} See Kowalski, supra note 18; Richins, supra note 18.

The type of consumer response that generates the most positive spillovers is airing one's grievances publicly. Airing it out publicly informs other consumers and helps them calculate their decisions. Yet public confrontation requires much more effort than "[p]ersonal boycotting," 59 so most consumers avoid it. Nudniks, with their idiosyncratic utility functions, do not. Most consumers stop at the first level by deciding not to act. Many others halt at the second level by deciding to act without confronting others. Nudniks, by contrast, do not fear the confrontation and go all the way. As a byproduct, their actions diffuse information about seller behavior and allow other consumers to decide with whom they want to keep doing business and with whom they do not.

1. Facilitating Introspection by Sellers

Albert Hirschman famously introduced the notions of "voice" and "exit." Voicing dissatisfaction is not a nudnik-specific action. Many of us passive consumers occasionally employ voice, as in telling our waiter that the dish we ordered was not cooked to our liking. What distinguishes nudniks (besides using their voices more frequently) is that they are more likely to escalate their complaints up the organization's ladder. They do not stop at the bulwark of the front desk. 61

Exit, the quintessential private action, is similarly not unique to nudniks. Many passive consumers will stop purchasing from a seller who disappointed them and will switch to a competitor. What separates nudniks from passivists is the degree to which they are willing to go when exiting. Most passive consumers would not exit in concentrated markets, where there are few viable alternatives (and thus no competitors to switch to). 62 Nudniks, with their unique convictions and preferences, will. Consider for example Drew Weaver, a Coloradan who was annoyed by his internet provider's data overage charges. The fact that Weaver did not have any viable alternatives in his area did not

^{59.} See Claire P. Bolfing, How Do Customers Express Dissatisfaction and What Can Service Marketers Do About It?, J. SERVS. MARKETING, Spring 1989, at 5, 7.

^{60.} See HIRSCHMAN, supra note 56.

^{61.} Amy Schmitz summarized the barriers to meaningful voice thusly: "Anger may fuel a consumer's initial e-mail, phone call, or negative online review, but consumers generally do not follow up after receiving no reply or facing long hold times on customer service phone lines." Schmitz, *supra* note 29, at 233. Nudniks are more persistent in following up.

^{62.} See, e.g., T. Randolph Beard et al., "Can You Hear Me Now?" Exit, Voice, and Loyalty Under Increasing Competition, 58 J.L. & ECON. 717, 718 (2015) ("Consumers' discipline of firms is thought to be least effective under monopoly and presumably increases in effectiveness as market structure atomizes.").

stop him from making the principled decision to disconnect from internet services altogether.⁶³

By escalating their voices (or exiting in unusual circumstances), nudniks can lead to a change in the seller's policies.⁶⁴ High-level managers or owners are not always aware of failures in their own organizations. The nudnik's voice may alert top decisionmakers to underperformance among lower-level employees, failures in product lines, or changes in consumer preferences and market conditions.⁶⁵ In these scenarios, nudniks are effectively providing free monitoring services for sellers, which may in turn lead to meaningful introspection and reform in seller practices. Indeed, marketing scholars have long recognized the value (to sellers) of feedback that nudniks generate.⁶⁶ A concrete example comes from Amazon's Jeff Bezos, who made his email address publicly available and actively monitors it, calling on dissatisfied buyers to reach out directly to him and flush out problems he may not be aware of in his giant organization.⁶⁷

In other words, nudniks' loud voices can serve as a much-needed wake-up call, which benefits the seller and, by extension, passive buyers.

Still, all too often the problem is not that sellers inadvertently underperform, but rather that they deliberately save costs by cutting corners. ⁶⁸ In these scenarios, keeping the complaint in-house would not bring improvement in seller behavior. This is where the more potent channels of nudnik behavior enter: airing grievances publicly.

^{63.} See Jon Brodkin, Comcast Said He Used Too Much Data—So He Opted to Live Without Home Internet, ARSTECHNICA (Sept. 15, 2017, 8:41 AM), https://arstechnica.com/information-technology/2017/09/a-comcast-data-cap-tale-unexplained-overage-drives-man-to-cancel-service/[https://perma.cc/DXN9-MXL7].

^{64.} To be sure, individual exit in itself may not be enough, but unusual and visible exit could sometimes lead to a cascade of exits or a consumer boycott. See MONROE FRIEDMAN, CONSUMER BOYCOTTS: EFFECTING CHANGE THROUGH THE MARKETPLACE AND THE MEDIA 1–21 (1999) (discussing the basic mechanics of consumer boycotts).

^{65.} See HIRSCHMAN, supra note 56, at 31.

^{66.} See, e.g., Kim et al., supra note 23, at 980 ("[S]ervice providers are advised to encourage consumers to lodge complaints in order to have an opportunity to recover from the failure.").

^{67.} See Catherine Clifford, The Brilliant Business Lesson Behind the Emails Jeff Bezos Sends to His Amazon Executives with a Single '?', CNBC (May 7, 2018, 1:37 PM), https://www.cnbc.com/2018/05/07/why-jeff-bezos-still-reads-the-emails-amazon-customers-send-him.html [https://perma.cc/SC3A-EZM8] ("[T]he tech executive still has a customer-facing email address at Amazon, because hearing from consumers helps him identify pain points."). Another example comes from Sheraton Hotels, which reportedly provided financial compensation to consumers who voiced their concerns to the hotel's managers. Stephanie Paterik, Sheraton Plans to Burnish Image by Paying Guests for Bad Service, WALL STREET J. (Sept. 6, 2002, 12:07 AM), https://www.wsj.com/articles/SB1031256929121917755 [https://perma.cc/YJG8-UNAR].

^{68.} See OLIVER, supra note 7, at 385 (summarizing work in marketing on how too often management actually opts to "shield itself from the onus of complaint data").

2. Facilitating Legal and Reputational Sanctions Against Sellers

Nudniks express their concerns publicly, and alert others in the process, through four primary channels.

First, nudniks can *litigate* their grievances. Although every consumer can file a lawsuit for breach, few do.⁶⁹ After all, most breaches of consumer contracts involve sums that are too low to justify litigation. As Judge Posner quipped, "only a lunatic or a fanatic sues for \$30."⁷⁰ To solve this problem, commentators have proposed a litany of measures: class actions, punitive damages, waiving fees, subsidizing legal representation, shifting attorney's fees to the winning party, changing burdens of proof, and so on.⁷¹ Yet each of these measures is too imperfect or malleable to dramatically alter the cost-benefit analysis so that filing small-yet-meritorious claims would become common. Nudniks, by contrast, do not rely on these measures—they may invest in litigating their claim out of their strong sense of principle, spite, or ideology, disregarding the monetary cost-benefit calculation. Once nudniks file a lawsuit, they are also the type of plaintiffs who will not readily accept a settlement offer.⁷²

When nudniks air their grievances in public courtrooms, they not only contribute to the development of decisional law and legal deterrence, but also create a public record of seller behavior, thereby contributing to better *reputational* deterrence. Litigating their claims, even when small and seemingly petty, produces information about seller behavior, which in turn helps other consumers decide from whom they want to purchase.⁷³

^{69.} See Carnegie v. Household Int'l, Inc., 376 F.3d 656, 661 (7th Cir. 2004) ("The realistic alternative to a class action is not 17 million individual suits, but zero individual suits.").

⁷⁰ *Id*

^{71.} See Yonathan A. Arbel, Adminization: Gatekeeping Consumer Contracts, 71 VAND. L. REV. 121, 157–71 (2018) (reviewing initiatives designed to increase consumer participation).

^{72.} See Julie Macfarlane, Why Do People Settle?, 46 McGill L. J. 663 (2001) (highlighting litigants' nonfinancial motivations to reject settlements).

^{73.} We come back to this point later, in Section II.B. The idea is that even if the media does not report on any small-claim litigation, the mere filings of such lawsuits by nudniks create a public database of seller misbehavior. Court documents allow investigative reporters to engage in what they call "pattern-identifying." See Roy Shapira, Law as Source: How the Legal System Facilitates Investigative Journalism, 37 YALE L. & POLYREV. 153, 210 (2018) [hereinafter Shapira, Law as Source] ("We learned from interviews, tip sheets, and successful investigative projects, that pattern-identifying is perhaps the most important way in which the legal system helps investigative reporters."). On the link between legal and reputational sanctions, see also Scott Baker & Albert H. Choi, Reputation and Litigation: Why Costly Legal Sanctions Can Work Better than Reputational Sanctions, 47 J. LEGAL STUD. 45 (2018), and Roy Shapira, Reputation Through Litigation: How the Legal System Shapes Behavior by Producing Information, 91 WASH. L. REV. 1193 (2016) [hereinafter Shapira, Reputation Through Litigation].

Second, nudniks often enlist the help of the *media*. For example, when a consumer named Liz found an unexpected charge for the safe in her hotel room (supposedly to cover the costs of a warranty for the safe's content), she approached NBC and complained. "[I]t's totally sneaky," she said, arguing that the hotel should have informed her of the charges "up front."⁷⁴ Her story led to a full-blown investigative report of hidden fees in hotels.⁷⁵ Liz's charges were reversed, many other consumers were forewarned, and other hotels observed the reputational backlash that such practices can create.⁷⁶

From a journalist's perspective, such tips and stories provide a valuable source of interesting stories about seller misconduct—an "information subsid[y]."⁷⁷ Yet most dissatisfied consumers do not share their stories with the media, either because they do not have the time or do not wish to risk their privacy and potential confrontations with disgruntled sellers. It often takes a nudnik to jumpstart media scrutiny.

A third potential venue for dissatisfied consumers is complaining to the regulator.⁷⁸ In some circumstances, complaining to the regulator can prove advantageous to the complainer, so even non-nudniks engage in it. The Consumer Financial Protection Bureau ("CFPB"), for example, collects consumer complaints, routes them to the company, and then follows up to make sure the company responds properly.⁷⁹ In many other instances, however, complaints to the regulator do not result in private benefits to the consumer. The Federal Trade Commission ("FTC"), for instance, explicitly informs consumers

^{74.} See How to Avoid Hidden Hotel Fees, NBC4 WASH. (Feb. 8, 2019, 11:10 PM), https://www.nbcwashington.com/on-air/as-seen-on/How-to-Avoid-Hidden-Hotel-Fees_Washington-DC-505584862.html [https://perma.cc/9ZVA-8W2W].

^{75.} Id.

^{76.} Id.

^{77.} For example, NBC4 Washington invites consumers to share issues with the promise that "we are responding to EVERY consumer issue!" See Do You Have a Consumer Issue to Report? Tell NBC4 Responds!, NBC4 WASH., https://www.nbcwashington.com/news/local/NBC4-Responds-Consumer-Complaint-IssueReport-Susan-Hogan-378873701.html (last updated Dec. 12, 2019, 10:49 AM) [https://perma.cc/49FV-THLG]. On the "information subsidies" term and its relevance, see Shapira, Law as Source, supra note 73, at 166–67, explaining that "information subsidies" are "stories provided to newsrooms by insiders, public relations departments, think tanks, NGOs, and the like."

^{78.} The argument in this paragraph can extend to "private regulators," such as the Better Business Bureau, which collects as many as 800,000 complaints annually. See US BBB 2018 Statistics, BETTER BUSINESS BUREAU, https://www.bbb.org/globalassets/local-bbbs/council-113/media/complaint-stats/2018/us-bbb-2018-statistics-complaints.pdf (last visited May 7, 2020) [https://perma.cc/WM48-CYCY]. For more on private handling of complaints, see Rory Van Loo, The Corporation as Courthouse, 33 YALE J. ON REG. 547 (2016).

^{79.} See Learn How the Complaint Process Works, CONSUMER FIN. PROTECTION BUREAU, https://www.consumerfinance.gov/complaint/process/ (last visited May 7, 2020) [https://perma.cc/N9RB-UJGS] ("We'll forward your complaint and any documents you provide to the company and work to get a response from them.").

that it "cannot resolve individual consumer complaints." ⁸⁰ Complaining under these conditions is costly to the complainer. So most consumers do not invest the time in complaining, even though complaining would be beneficial for society by facilitating better-informed regulations, helping the regulator warn other market participants, and shaming underperforming sellers. ⁸¹ It takes consumers with idiosyncratic utility functions—nudniks—to initiate such privately costly yet socially beneficial complaints.

Finally, nudniks engage in the production and dissemination of peer-to-peer reputational information. So Consumers increasingly rely on online customer reviews when making purchasing decisions. So Consumers often do read and engage with other consumers' reviews, unlike the fine print. He was to consumers who are dissatisfied with their purchases do not share their dissatisfaction online. One study, for example, estimates that only fifteen in a thousand consumers produce reviews. These reviewers, only a handful include a detailed description of what exactly went wrong, thus making most reviews minimally informative. The upshot, again, is that an important

^{80.} See Submit a Consumer Complaint to the FTC, FED. TRADE COMMISSION, https://www.ftc.gov/faq/consumer-protection/submit-consumer-complaint-ftc (last visited May 7, 2020) [https://perma.cc/6WFA-NBWL]; see also Rory Van Loo, The Missing Regulatory State: Monitoring Businesses in an Age of Surveillance, 72 VAND. L. REV. 1563 (2019).

^{81.} For a discussion about regulators' increased reliance on publicizing complaints online, see Nathan Cortez, *Regulation by Database*, 89 U. COLO. L. REV. 1 (2018).

^{82.} See Yonathan A. Arbel, Reputation Failure: The Limits of Market Discipline in Consumer Markets, 54 WAKE FOREST L. REV. 1239, 1254–55 (2019) ("While everyone benefits from having this public resource, producers of reputational information are not directly compensated for their contributions."); Shmuel I. Becher & Tal Z. Zarsky, E-Contract Doctrine 2.0: Standard Form Contracting in the Age of Online User Participation, 14 MICH. TELECOMM. TECH. L. REV. 303, 316–20 (2008) ("[L]ate recognition of biased [contractual] terms will not change the vendors' actions vis-à-vis other consumers—unless the information concerning the transaction flows from the aggrieved consumer to the ex ante consumers contemplating a transaction with the same vendor.").

^{83.} See Michael Anderson & Jeremy Magruder, Learning from the Crowd: Regression Discontinuity Estimates of the Effects of an Online Review Database, 122 Econ. J. 957, 983 (2012).

^{84.} See, e.g., How Online Reviews Influence Sales, SPIEGEL RES. CTR. 2, https://spiegel.medill.northwestern.edu/_pdf/Spiegel_Online%20Review_eBook_Jun2017_FINAL. pdf (last visited May 7, 2020) [https://perma.cc/Z7WZ-L3NV] (reporting that nearly ninety-five percent of shoppers read reviews before shopping); Local Consumer Review Summary 2019, BRIGHT LOCAL (Dec. 11, 2019), https://www.brightlocal.com/research/local-consumer-review-survey/ [https://perma.cc/J4Z3-BJ94] (putting that number at eighty-two percent of shoppers who read reviews when considering shopping at local businesses).

^{85.} See Eric T. Anderson & Duncan I. Simester, Reviews Without a Purchase: Low Ratings, Loyal Customers, and Deception, 51 J. MARKETING RES. 249, 251 (2014).

^{86.} See, e.g., Wayne R. Barnes, The Good, the Bad, and the Ugly of Online Reviews: The Trouble with Trolls and a Role for Contract Law After the Consumer Review Fairness Act, 53 GA. L. Rev. 549, 553–54 (2019) (illustrating the difficulty of distinguishing between helpful (factual) and unhelpful ("uninhibited, over-the-top hyperbole") reviews); Max Woolf, A Statistical Analysis of 1.2 Million Amazon Reviews, MAX WOOLF'S BLOG (June 17, 2014), http://minimaxir.com/2014/

mechanism of market governance—online reviews—is carried by the efforts of a small subset of consumers who are willing to incur the costs: nudniks.

To be sure, these channels of voicing dissatisfaction are disparate: some, such as litigation, require much higher private and social costs than others, such as posting reviews online. We group them together here to underscore one crucial yet underappreciated point: the overwhelming majority of consumers do not engage with any of these channels. To the extent that these channels carry information on seller behavior, it is largely through the work of a small subset of consumers—nudniks.

* * *

Through all these channels of voicing dissatisfaction, nudniks are an engine of market discipline. If restaurants can systematically overcharge \$4 without anyone contesting such a practice, they have little incentive to reform. Nudniks, through various modes of action, make restaurants pay for illicit practices. Nudniks hold sellers accountable, thereby potentially benefiting the broader, mostly passive consumer body. Our claim is not that every nudnik's complaint necessarily produces value, but rather that some do. Nudnik-type activism is therefore an important, understudied aspect of market discipline.

D. Relation to the Extant Literature and Limitations

To further shed light on nudniks' contribution, this Section juxtaposes nudnik-driven activism with other theories of market discipline, such as the informed minority theory and the reputational discipline theory. This Section then highlights several limitations of nudnik-based activism.

1. From an "Informed Minority" to Nudniks

Perhaps the most influential theory of market discipline has been Alan Schwartz and Louis Wilde's "informed minority theory." The theory concedes that many consumers are too uninformed and

^{06/}reviewing-reviews/ [https://perma.cc/5F8C-3G5G] (finding that only ten percent of reviews studied had a minimum of ten helpfulness data points).

^{87.} See Schwartz & Wilde, supra note 9. On the theory's influence, see R. Ted Cruz & Jeffrey J. Hinck, Not My Brother's Keeper: The Inability of an Informed Minority to Correct for Imperfect Information, 47 HASTINGS L.J. 635, 647–48 (1996).

insufficiently sophisticated to fend for themselves. This does not mean, however, that markets should be regulated. Schwartz and Wilde argued that as long as a minority of consumers reads and negotiates contract terms, contracts will reflect the preferences of most consumers, including those who do not read the fine print.⁸⁸ The idea is that if the minority is sufficiently large to surpass a critical mass, then firms will find it worthwhile to compete over this segment of the market. And because firms tend to offer standard form contracts, the only way a firm can win the hearts of the informed minority segment is by offering better terms across the board.⁸⁹ The informed minority theory quickly gained prominence, becoming the lynchpin of economic analyses of consumer law.⁹⁰

Yet in recent years there has been a growing realization that the assumptions underlying the theory may be unrealistic. A growing body of research shows that the number of consumers who read the fine print, at least in online contracts, is so small that it is unlikely to reach a critical mass.⁹¹ This is not surprising—reading contracts is a time-intensive activity that people dislike, with uncertain and often marginal benefits.⁹² Further, in recent decades there has been a steady increase in the volume and length of contracts and disclosures, making reading and comprehending almost impossible.⁹³ Accordingly, many

^{88.} See Schwartz & Wilde, supra note 9, at 638 ("The presence of at least some consumer search in a market creates the possibility of a 'pecuniary externality': persons who search sometimes protect nonsearchers from overreaching firms.").

^{89.} See George L. Priest, A Theory of the Consumer Product Warranty, 90 YALE L.J. 1297, 1347 ("If a small group of consumers reads warranties and selects among products according to warranty content, manufacturers may be forced to draft warranties responsive to the group's preferences, even though the large majority of consumers generally neglect warranty terms.").

^{90.} See Cruz & Hinck, supra note 87; Eyal Zamir, Contract Law and Theory: Three Views of the Cathedral, 81 U. CHI. L. REV. 2077, 2102 n.77 (2014) (compiling references).

^{91.} See, e.g., Yannis Bakos et al., Does Anyone Read the Fine Print? Consumer Attention to Standard-Form Contracts, 43 J. LEGAL STUD. 1, 4 (2014) ("We find that the fraction of consumers who read such contracts is so small that it is unlikely that an informed minority alone is shaping software license terms."). We elaborate on the flaws of the informed minority theory in Arbel & Shapira, supra note 27.

^{92.} See Omri Ben-Shahar, The Myth of the 'Opportunity to Read' in Contract Law, 5 EUR. REV. CONT. L. 1, 15 (2009) (discussing the burdens of reading and how not reading is actually the rational decision); Yonathan A. Arbel & Andrew Toler, All-Caps 4 (Ala. Working Paper Series 3519630, 2019), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3519630 [https://perma.cc/WDB2-P27D] (discussing ways to make reading terms and conditions more bearable). Even the use of conspicuous formatting to highlight terms does not seem to improve matters for consumers. See Ben-Shahar, supra (finding, in a series of experiments, that capitalization of key clauses in consumer contracts fails to improve consumer outcomes).

^{93.} See OMRI BEN-SHAHAR & CARL E. SCHNEIDER, MORE THAN YOU WANTED TO KNOW: THE FAILURE OF MANDATED DISCLOSURE 94–101 (2014) (discussing the "accumulation problem" of disclosures and how they "compete with each other for people's time and attention"); WENDY WAGNER ET AL., INCOMPREHENSIBLE! 49 (2019) ("[I]n some cases the law even encourages sellers to be more incomprehensible, rather than less.").

have abandoned the informed minority theory.⁹⁴ Even Schwartz himself seems to concede it is unrealistic.⁹⁵

A related prominent theory is the reputational discipline theory. This theory holds that sellers will sometimes perform even beyond the letter of the contract in order to build their reputation and brand name.96 On this view, one-sided clauses give the firm the power—but not the obligation—to perform the contract in a self-serving way. Firms have incentives to go beyond the contract and often do.97 While we agree that reputational considerations shape seller behavior, the reputational discipline theory is too simplistic, resting on unrealistic assumptions of consumer learning and consumer sharing.98 The theory sweeps critical issues under the rug: How is it exactly that quality reputational information emerges? Who creates it? Who widely disseminates it? Quality reputation information is, in a sense, a public good.99 Private players often do not have the right incentives (or ability) to create and disseminate this public good. 100 As a result, reputational information is too often unreliable; the market overreacts to certain types of seller misbehavior and underreacts to others.¹⁰¹

In sum, there is a vacuum in theories of bottom-up market discipline. Both prevalent theories—informed minority and

^{94.} See BRIAN H. BIX, CONTRACT LAW: RULES, THEORY, AND CONTEXT 52 (2012) ("Electronic contracting has raised doctrinal and practical problems that were not resolved well by existing law."); Zamir, supra note 90, at 2102–03 ("Outside of the law-and-economics community, most people would quite confidently say . . . that hardly a soul reads standard-form contracts.").

^{95.} See Ayres & Schwartz, supra note 10, at 552 ("[T]he state should jettison the disclosure project of making all terms accessible to consumers with the expectation that consumers can read the entire document.").

^{96.} See Lucian A. Bebchuk & Richard A. Posner, One-Sided Contracts in Competitive Consumer Markets, 104 MICH. L. REV. 827, 827–28 (2006) ("A seller concerned about its reputation can be expected to treat consumers better than is required by the letter of the contract."); Jason Scott Johnston, The Return of Bargain: An Economic Theory of How Standard-Form Contracts Enable Cooperative Negotiation between Businesses and Consumers, 104 MICH. L. REV. 857, 858 (2006) ("[A] firm will often provide benefits . . . beyond those that its standard form obligates it to provide Firms do this because they have an interest in building and maintaining cooperative, value-enhancing relationships with their customers.").

^{97.} See Shmuel I. Becher & Tal Z. Zarsky, Minding the Gap, 51 CONN. L. REV. 69, 90-91 (2019) (explaining that firms often account for characteristics like consumer power, emotion, and sophistication when determining whether to go beyond the terms of a contract).

^{98.} Others have criticized the reputational discipline theory on other grounds, such as fairness. See, e.g., Eyal Zamir & Yuval Farkash, Standard Form Contracts: Empirical Studies, Normative Implications, and the Fragmentation of Legal Scholarship, 12 JERUSALEM REV. LEGAL STUD. 137, 162–67 (2015) (warning, for a number of reasons, against an entire reliance on the reputational discipline theory).

^{99.} See Shapira, Reputation Through Litigation, supra note 73, at 1211.

^{100.} Id.

^{101.} See generally Arbel, supra note 82, at 1286-87 (noting that informational distortions can lead companies to either overreact or underreact to certain feedback); Shapira, Reputation Through Litigation, supra note 73, at 1203-11.

reputational discipline—suffer from key theoretical and empirical flaws. The theory of nudnik-based activism, by contrast, escapes these flaws. Nudniks' unique makeup and modes of operation make them a more robust vector of market discipline for the following four reasons.

First, nudnik-based activism does not require a critical mass of active consumers to effect change in seller behavior. One nudnik may be enough. In the informed minority theory, the mechanism that brings about change is market competition over the purses of active consumers. The theory therefore requires a critical mass of comparison shoppers, or else it would not be worthwhile for sellers to compete over them. 102 One comparison shopper electing to purchase elsewhere is not enough. With nudniks, by contrast, the mechanisms that bring about change are reputational and legal. In today's interconnected world, a single nudnik's squawk can reach numerous other consumers and convince them to take their business elsewhere. 103 The threat of reputational sanctions, in turn, makes sellers change their behavior ex ante. 104 YouTube allowed a single man—Dave Carroll—to call the mighty United Airlines to order. Twitter helped another—Hassan Syed—make British Airways apologize and change their practices.

To be sure, one nudnik will not always be enough. In fact, sometimes even several nudniks and their repeated public complaints may not be enough to solve market pathologies. Our claim here is more modest: sellers care about their reputation and realize that one complaining consumer may be enough to put reputational sanctions in motion. Indeed, this is a recurring theme among marketing scholars and reputation practitioners: beware of the single active consumer.¹⁰⁵

^{102.} See Florencia Marotta-Wurgler, Does Contract Disclosure Matter?, 168 J. INSTITUTIONAL THEORETICAL ECON. 94, 98 (2012) ("If this critical mass of comparison shoppers exists, disclosure will be effective in sufficiently competitive markets, because sellers will have an incentive to satisfy the informed buyers.").

^{103.} See Franklin G. Snyder & Ann M. Mirabito, The Death of Contracts, 52 DUQ. L. REV. 345, 395 (2014) ("[A] handful of disgruntled consumers can seriously affect [firms'] reputations and their businesses.").

^{104.} Nudniks' complaints may also generate nonreputational disciplinary effects, such as creating psychological pressures on sellers. See Mark Seidenfeld, Cognitive Loafing, Social Conformity, and Judicial Review of Agency Rulemaking, 87 CORNELL L. REV. 486, 509–10 (2002) (reviewing psychological studies on workers that demonstrate the significant demoralizing effects of complaints).

^{105.} See Chrysanthos Dellarocas, Reputation Mechanisms, in 1 HANDBOOKS IN INFORMATION SYSTEMS: ECONOMICS AND INFORMATION SYSTEMS 629, 639 (Terrence Hendershott ed., 2006) (explaining that, in some circumstances, "even a single negative rating on a seller's feedback history reveals the fact that the seller is not honest"); Corné Dijkmans et al., A Stage to Engage: Social Media Use and Corporate Reputation, 47 TOURISM MGMT. 58, 59 (2015) ("Even a single unhappy customer can cause reputational damage via social media platforms..."); No Online Customer Reviews Means BIG Problems in 2017, FAN & FUEl, https://fanandfuel.com/no-online-customer-reviews-means-big-problems-2017/ (last visited May 7, 2020) [https://perma.cc/G74A-

As one reputation management firm puts it: "[E]ven a single upset individual can wreak havoc on your business—unless you catch the problem early and do something about it." 106

A second key distinction that makes nudnik-based activism more robust is that nudniks do not engage in monetary cost-benefit analysis. Other types of active consumers (such as comparison shoppers) would be active only if they deem it worthwhile. Therefore, the prevalence of "readers" in a given market is largely a function of outside circumstances, such as the length and complexity of contracts, or the feasibility of negotiating ex ante with sellers. When contract length and complexity increases, as they have in the digital age, fewer consumers will read.¹⁰⁷ The nudnik's crusade, by contrast, is relatively immune to the rising costs of activism.

The rise of the digital age therefore did not harm nudniks' ability to effect change but, in fact, increased it. Changes in the information environment—the rise of the internet and, in particular, social media—made nudniks potentially more impactful by boosting their signals. 108 Nudniks have always noticed being overcharged, but now, they can post a negative review online about it and reach a broad audience. 109 Everyone searching for that seller in the future may find the nudnik's complaint that the seller fails to honor contractual obligations. What may once have been an ephemeral signal is now etched forever in the internet's memory. It is not a coincidence that big business is often behind campaigns for a "right to be forgotten." 110

Third, nudnik-based activism generates more spillovers. One comparison shopper who reads through a contract does not make other shoppers more sophisticated. By contrast, one nudnik who goes public with her concerns can reduce the costs to other consumers of becoming informed about a seller's competence and integrity. She allows other

LZVE] (finding in a survey that thirty-five percent of respondents might avoid a product on the basis of a single negative review).

^{106.} Online Reputation Management, BERNSTEIN CRISIS MGMT., https://www.bernsteincrisismanagement.com/portfolio-item/online-crisis-and-issuesmanagement/ (last visited May 7, 2020) [https://perma.cc/UX5H-PKGE].

^{107.} BEN-SHAHAR & SCHNEIDER, supra note 93, at 94-101.

^{108.} See, e.g., Barnes, supra note 86, at 562 ("The reviews also increase consumers' power over the businesses they support."); Becher & Zarsky, supra note 82, at 321–33 (discussing the flow of information between customers and potential customers).

^{109.} At the same time, the abundance of information nowadays may sometimes limit the visibility of any individual signal.

^{110.} See Amy Gesenhues, The Inevitable Happened: First Company Provides "Right to Be Forgotten" Removal Service, SEARCH ENGINE LAND (June 25, 2014, 12:01 AM), https://searchengineland.com/reputation-vip-online-management-firm-launches-site-assist-googles-forget-form-194998 [https://perma.cc/4ED6-B7VS] (explaining that Google has entered the business of helping peoples' online activity be forgotten).

consumers to notice that they too were overcharged and may push them to complain. By going through the takeout receipt and comparing it to the prices on the restaurant's website, the nudnik reduces the costs of becoming active for other consumers.

Finally, nudniks impact seller behavior not just by making sure sellers honor their contractual obligations, but also by pushing sellers to go beyond the contract. According to the informed minority theory, a small subset of consumers pushes sellers to offer better contracts to everyone. With nudniks, by contrast, a small subset of consumers pushes sellers to perform better, regardless of sellers' contractual obligations. Nudniks frequently assert transactional expectations: the rights they believe they should have. 111 The marketing literature has long recognized the importance of consumer expectations, as captured by the influential expectancy disconfirmation theory. 112 According to this theory, consumers often operate based on their expectations from the transaction, and these expectations are not necessarily based on the specific contract in question. Expectations rather come from consumers' experience with similar transactions, their general sense of fairness, and market norms.113 Importantly for our purposes, when a "regular" (read: passive) dissatisfied consumer finds out that there is a mismatch between her (violated) expectations and what is owed to her according to the contract, she often gives up the fight. Nudniks do not.

To return to our example of the NBC story on a hotel charging for a safe in the room: the hotel explicitly stipulated that a charge would be imposed to cover a warranty on the safe. 114 The hotel was therefore

^{111.} See Bebchuk & Posner, supra note 96, at 830 ("The expected cost of the term to the buyer must be discounted by the likelihood that reputational considerations will induce the seller to treat the buyer fairly even when such treatment is not contractually required."); Johnston, supra note 96, at 877 (explaining how consumer expectation can sometimes affect a seller's probability of expanding the terms of a contract); see also Clayton P. Gillette, Rolling Contracts as an Agency Problem, 2004 WIS. L. REV. 679, 722 (explaining that, when a consumer does not read a contract, a court might determine that "[s]ome terms may be sufficiently salient or evince a sufficient identity of interests between readers and nonreaders that market mechanisms largely internalize the interests of nonreading buyers").

^{112.} See Rolph E. Anderson, Consumer Dissatisfaction: The Effect of Disconfirmed Expectancy on Perceived Product Performance, 10 J. MARKETING RES. 38, 43 (1973) (determining that, because some might overestimate technology or innovation, "consumers may have unrealistically high expectations for product performance even without the added boost of promotional claims"); see also Andrew Dahl & Jimmy Peltier, A Historical Review and Future Research Agenda for the Field of Consumer Satisfaction, Dissatisfaction, & Complaining Behavior, 28 J. CONSUMER SATISFACTION, DISSATISFACTION & COMPLAINING BEHAV. 5, 5 (2015) (noting that the expectancy disconfirmation theory is a "predominant theoretical approach").

^{113.} Legal scholars have recently become aware of, and accommodated, the expectation disconfirmation theory. See, e.g., Ayres & Schwartz, supra note 10, at 551 (using the phrase "term optimism" to explain that, for several reasons, "consumers expect a contract to contain more favorable terms than it actually provides").

^{114.} See discussion supra note 74 and accompanying text.

seemingly not in breach of any contractual obligation. Nevertheless, it breached Liz's expectations. Liz felt that hotels should not behave this way, so she shared her complaints with the media and ignited a reputational fallout. A much more famous and consequential example came in 2017, when United Airlines evicted a paying passenger from the flight to accommodate another passenger, ¹¹⁵ Even though the airline company's contract stipulated it could deboard the passenger, United Airlines stakeholders found the harsh treatment uncalled for and unfair. The incident led to a swift and significant decline in passengers' willingness to fly United. ¹¹⁶ The entire airline industry took notice, and the industry practices changed. ¹¹⁷

In all these examples, what separates nudnik-based activism from other forms of market discipline is the mechanism of change. Nudniks create a legal and reputational risk for sellers. Sellers who narrowly adhere to their contractual obligations may win in the courtroom but lose in the court of public opinion. Nudnik-driven reputational effects are sometimes enough to push firms to conform to consumers' transactional expectations.¹¹⁸

Legal scholars should therefore shift from focusing on consumers' reading behavior to focusing on consumers' complaining behavior. Instead of an informed minority theory, we offer the theory of the nudnik—a sort of "crusading minority." Firms that anticipate the existence of nudniks are more likely to observe their contractual commitments ex post and invest in quality control and customer service ex ante. To reiterate, such bottom-up market discipline can occur even without a critical mass of consumers reading and comprehending

^{115.} See Erin McCann, United's Apologies: A Timeline, N.Y. TIMES (Apr. 14, 2017), https://www.nytimes.com/2017/04/14/business/united-airlines-passenger-doctor.html [https://perma.cc/R7FM-B7GT]; Christina Zdanowicz & Emanuella Grinberg, Passenger Dragged Off Overbooked United Flight, CNN (Apr. 10, 2018), https://www.cnn.com/2017/04/10/travel/passenger-removed-united-flight-trnd/index.html [https://perma.cc/D2DE-NKXH] (explaining that the passenger paid for his ticket, refused to give up his seat, and was subsequently removed from the plane—rather forcefully).

^{116.} See, e.g., Kevin Quealy, How Much Would You Put Up With to Avoid United Airlines?, N.Y. TIMES (Apr. 17, 2017), https://www.nytimes.com/2017/04/17/upshot/how-much-would-people-put-up-with-to-avoid—united-airlines.html [https://perma.cc/H297-CW4S] (presenting survey-based evidence that shows those with knowledge of the removal incident avoided United Airlines).

^{117.} See Stacey Leasca, This Is How Likely It Is That You'll Get Bumped from a Flight, TRAVEL & LEISURE (Nov. 17, 2017), https://www.travelandleisure.com/airlines-airports/airlines-bumping-passengers-less [https://perma.cc/C5AY-E8KE] ("Since the incident, major airlines — not just United — have changed their policies for overbooking.").

^{118.} The incident led to a marked decrease in the rate of bumping passengers, from 0.62 per 10,000 to 0.44, the lowest rate in decades. *Airline Bumping Rate Lowest in Decades*, U.S. DEP'T TRANSP. (Sep. 7, 2017), https://www.transportation.gov/briefing-room/dot6417 [https://perma.cc/GV8M-KVWS].

contracts. All that is needed is (1) some consumers with nudnik-style personality traits and (2) sellers who care about their reputations.

2. The Limits of Nudniks

As we have noted, not all nudnik activities create positive value. Some complaints are petty and frivolous, exacting costs instead of exposing real issues. To evaluate nudniks' *overall* social impact, one should consider both the benefits and the costs of nudniks' actions. And while we cannot offer an exact quantification of the two sides of the equation, we offer here suggestive evidence based on a synthesis of the marketing literature, which could inform how we design future research or think of potential policy implications.

Perhaps the biggest potential limitation of nudnik-based activism is that nudniks' concerns and expectations are not always aligned with the concerns of other (less idiosyncratic) consumers. To the extent that nudniks complain about petty, inconsequential things, it is unlikely that their complaints will effect meaningful positive change in seller behavior. In other words, the concern is that nudniks will force sellers to focus too much on things that only nudniks care about. This concern, however, seems limited in practice. The CCB literature offers several indications that most nudniks operate in what we would call "good faith" and that their complaints seemingly implicate broader consumer interests. For example, if nudniks complain about things only nudniks care about, we would expect little correlation between product quality and complaints. In reality, however, various studies show that consumer complaining behavior is inversely related to product quality. 119 That is, when the quality of the product is higher, consumers complain less, and vice versa. This finding suggests that nudnik activism is tied to actual defects in a product that are relevant to the broader consumer body.

Another related concern is that nudniks complain for selfish motivations, to get "freebies" and "comps," or to simply "troll" for attention. Here as well, empirical evidence casts doubt on the scope of the problem: serial complainers who raise an issue are *more* likely (compared with passive consumers) to become repeat, loyal customers if sellers learn from their mistakes and resolve the issue.¹²⁰ This

^{119.} See Beard et al., supra note 62, at 741 (claiming that, within the telephone industry, "observed levels of changes in quality... are negatively and statistically significantly related to complaint levels"); Silke J. Forbes, The Effect of Service Quality and Expectations on Customer Complaints, 56 J. INDUS. ECON. 190 (2008) (providing empirical data based on complaints in the airline industry).

^{120.} See TARP, supra note 16, at 64 (finding that "profits increase as the percentage of satisfactorily resolved complaints increases"); Amy K. Smith & Ruth Bolton, An Experimental

suggests a certain degree of good faith on the side of nudniks. Similarly, another finding in the literature is that serial complainers are not only more likely to complain against firms that behave badly, but also more likely to *compliment* firms that behave well.¹²¹ We read these studies as suggesting that, on average, nudnik-consumers are simply the more active version of the majority of passive consumers: they notice and confront more readily, but they notice and confront real issues.

Instead of depicting nudniks as merely trolls who are out for revenge or "comps," the existing evidence suggests that many of them are consumers who deeply care about how they are being treated.

But there is a broader point in play here. Our assessment of nudniks' social impact should be detached from our judgment of nudniks' motivations. All too often the court of public opinion tends to focus on nudniks' "weird" motivations and portray nudniks as vengeful and petty. Even academics and judges treat nudniks as "freeloaders," "fraudulent returners," and "peer-induced esteem-seekers." 122 Yet the fact that a nudnik has some selfish motivations does not mean she cannot advance the broader good. 123 True, some nudniks may be seeking revenge, attempting to receive material compensation, looking for validation from others, or acting out of a sense of entitlement. Absent such motivations, however, very few consumers would act when dissatisfied, and sellers could continue to systematically overcharge and underperform, assured of no negative consequences. These atypical motivations help nudniks break out from consumers' rational apathy. We should therefore judge nudniks' behavior based on the outputs—do they push firms to meet other consumers' expectations?—rather than the inputs.

Further, even when some nudniks sound false alarms, several mechanisms tend to screen frivolous nudnik complaints and highlight worthwhile ones. Judges screen the merits of legal complaints. Investigative reporters follow up on tips from nudniks only if the story

Investigation of Service Failure and Recovery: Paradox or Peril?, 1 J. SERV. RES. 65, 77 (1998) (finding that, when complaints are addressed well, "excellent service recoveries can lead to increased customer satisfaction and repatronage intentions"); Voorhees et al., supra note 16, at 523 (illustrating that complainers with "satisfactory recovery" were substantially likely to become repeat purchasers).

^{121.} See Arbel, supra note 82, at 1265-67 (documenting the high share of positive reviews on Amazon and other platforms).

^{122.} Kate L. Reynolds & Lloyd C. Harris, When Service Failure is Not Service Failure: An Exploration of the Forms and Motives of "Illegitimate" Customer Complaining, 19 J. SERVS. MARKETING 321, 325 (2005); see also Barnes, supra note 86, at 603-04 (calling consumers who write emotional and nonfactual negative reviews "trolls").

^{123.} See ADAM SMITH, THE WEALTH OF NATIONS 9-10 (Jonathan B. Wight ed., Harriman House 2007) (1776) ("It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest.").

represents a wide pattern of seller misbehavior. And fellow consumers discount baseless negative online reviews. The fact that other consumers are passive does not mean that they are clueless. The other consumers can infer, based on their own experience and common sense, whether a nudnik's complaint raises a valid problem that is indicative of the seller's behavior. If a nudnik frivolously complains about Amazon not shipping items fast enough, other consumers can rely on their own good experience with Amazon and discount the claim.

* * *

To be sure, much more research on the nudnik phenomenon is needed. Our discussion thus far has focused on the *overall* impact of nudniks, and we have cited some evidence suggesting that the net effect is likely beneficial. Ideally, we would want further research that goes beyond the "on average" claims and delves into the cross-sectional variation—identifying the circumstances under which nudniks are most or least likely to generate positive contributions.¹²⁴ Yet the existing examples and studies already indicate that some nudniks do contribute to meaningful market discipline, thereby positively affecting other consumers. At a minimum, then, the existing evidence suggests that we cannot dismiss outright the role that nudniks play in affecting seller behavior. The gaps left by other modes of market discipline leave ample room for these active, idiosyncratic consumers to provide an important public service.

II. HOW SELLERS REACT TO NUDNIKS: THE FUTURE OF CONSUMER ACTIVISM

Thus far we have focused on one side of the equation—namely, how nudniks fight underperforming sellers and hold them accountable. But sellers do not remain passive. It is therefore time to switch focus to how sellers fight back. More accurately, we must ask: How do sellers reduce the legal and reputational risks posed by nudniks?

While the nudnik phenomenon has remained understudied in the legal literature, the firms that face nudniks viscerally understand their importance. Firms have long invested resources in attempts to channel nudniks' complaints to less visible backchannels or mollify

^{124.} Another promising avenue for future research comes from potential concerns about the equality aspects of nudnik activities. One could claim, for example, that nudniks "enjoy disproportionate power due to social or economic status." Schmitz, *supra* note 6, at 280. We elaborate in Arbel & Shapira, *supra* note 27, at 22.

them with preferential treatment.¹²⁵ But in recent years, technological advancements have started disrupting the balance of power between sellers and nudniks. Sellers are increasingly enjoying access to big data and predictive analytics tools that will allow them to effectively silence nudniks.¹²⁶ The equilibrium is changing.

We used to think of market discipline as a process whereby buyers choose the firm they want to buy from. Yet in today's world, sellers can increasingly choose the customers they want to sell to. Put differently, economic analysis has traditionally assumed that only sellers have a reputation to protect; but in today's environment, buyers have reputations too. As this Part details, firms evaluate potential buyers in multiple ways, including their propensities to complain and publicly confront the underperforming seller.

Companies now store troves of data on consumer behavior at the individual level. Using widely available consumer scores, predictive analytics, and machine learning, sellers can make sense of all the data and predict future consumer behavior. Critically, these algorithms can predict certain personality traits in each consumer, including the traits that make a consumer a nudnik.¹²⁷ Section A details how sellers can use these tools to identify nudniks before they walk into their stores. These sellers can then either avoid selling to nudniks or silence them before they draw public attention to seller misconduct. Section B explains why the new technological ability to locate and silence a nudnik early, before she even forms her claim, is a game-changer. Timing matters: the earlier a seller can identify and silence a nudnik, the more likely it is that the seller reduces the risk of legal and reputational sanctions, and the less likely other consumers are to enjoy the positive spillovers from nudnik behavior.

A. Targeting Nudniks

Nudniks pose a reputational and legal threat to sellers, and so sellers have strong incentives to separate nudniks from non-nudniks and then placate nudniks before they publicly air their grievances. The question, then, is not whether sellers have the will but whether they have the way to target nudniks. In recent years, firms have increasingly

^{125.} See, e.g., Barnes, supra note 86, at 554-55 (noting that firms attempt to include nondisparagement clauses in consumer contracts).

^{126.} Predictive analytics refers here to models that allow businesses to make sense of big data and use it to their advantage. See generally Dennis Hirsch, Predictive Analytics Law and Policy: A New Field Emerges, 14 I/S: J.L. & POLY FOR INFO. SOCY 1, 1 (2017).

^{127.} See Ariel Porat & Lior Jacob Strahilevitz, Personalizing Default Rules and Disclosure with Big Data, 112 MICH. L. REV. 1417, 1434–38 (2014) (explaining that firms throughout different industries are collecting data to better classify the behaviors and personalities of their consumers).

gained access to new forms of big data—information on each consumer's past interactions with one's own company as well as with other sellers—and to predictive analytics tools: models that predict each consumer's proclivity to act publicly when dissatisfied. Connecting the dots is straightforward: we have ample reason to believe that sellers will use the newfound technological capabilities to reduce and contain the nudnik-based risks.

To be sure, finding smoking-gun evidence on such nudniktargeting practices is difficult. This is probably by design: firms do not shout from the rooftops that they can identify and disarm nudniks, but rather treat their use of big data as proprietary information and shield it with trade secret protections. 129 As a result, targeting practices "remain a mystery to consumers" 130 and are understudied by researchers.¹³¹ In this Section, we nevertheless document various indications that piece together a picture of sellers gradually improving their nudnik-circumventing abilities: identifying who is a nudnik and who is not (Section II.A.1) and then disarming them (Section II.A.2). We should be careful not to overstate our claim; it is hard to evaluate the scope of these practices given their secretive nature. What we can offer are suggestive indications of emerging trends. At the same time, we should not discount these indications: at a minimum, they suggest an early trend and a near-future trajectory. After all, firms' usage of consumer scores, big data, and predictive analytics to target nudniks is only likely to increase in the coming years. 132

^{128.} Id.

^{129.} See id. at 1435; Brenda Reddix-Smalls, Credit Scoring and Trade Secrecy: An Algorithmic Quagmire or How the Lack of Transparency in Complex Financial Models Scuttled the Finance Market, 12 U.C. DAVIS BUS. L.J. 87, 117–18 (2011) (explaining that, with credit score computations, companies can often protect their algorithmic practices through trade secret theory); Van Loo, supra note 78, at 601 ("[B]ehind a veil of trade secrecy corporations' dispute systems exploit market failures and use unequal rules of procedure.").

^{130.} Amy J. Schmitz, Secret Consumer Scores and Segmentations: Separating "Haves" from "Have-Nots," 2014 MICH. St. L. REV. 1411, 1427; see Max N. Helveston, Consumer Protection in the Age of Big Data, 93 WASH. U. L. REV. 859, 864 (2016) ("For the vast majority of lines of insurance, there is essentially nothing limiting the amount of data that insurers can collect about individuals and very little controlling their use of consumers' personal information.").

^{131.} See Moshe Davidow, Organizational Responses to Customer Complaints: What Works and What Doesn't, 5 J. Serv. Res. 225, 225 (2003) ("Unfortunately, with all of that complaining, the implications of customer complaint behavior for organizations have been examined far less often."); Torben Hansen et al., How Retailers Handle Complaint Management, 22 J. CONSUMER SATISFACTION, DISSATISFACTION & COMPLAINING BEHAV. 1, 1 (2009) ("While many studies have investigated the complaint process from the consumer side, those from the side of business are few and far between.").

^{132.} See Helveston, supra note 130, at 880 (noting that, in the insurance industry, use of evolving technologies will continue to increase, along with the list of potentially concerning implications).

1. Identifying Nudniks

Sellers nowadays have highly specific data on each consumer's past dealings and her personality traits, which they can turn into predictions about future behavior. Specifically, sellers can identify each consumer's tendency to be a nudnik. This is hardly trivial. Prior to recent advances in information technologies, recoding each consumer's past interactions with one's own firm was costly, and the data was not readily available (because it was stored in hard-to-search paper records). Nowadays, firms can easily purchase from data brokers all the information they want about consumers' past interactions with other sellers. Using this data, firms can predict whether a given consumer is a nudnik before that consumer even sets foot in their store. Sellers are already tracking consumers along three nudnik-relevant dimensions: their past complaining behavior, their likelihood to complain in the future, and the impact that their complaint is likely to have on others.

First, customer relation management ("CRM") software allows sellers to log information on each interaction with each customer, including the volume and valence of past complaints: ¹³⁴ How many complaints did the customer file? How detailed or negative were the complaints? How many items did the customer return to the store? The minute a customer contacts them, sellers therefore know all relevant information on the customer's tendencies, including how "serial" of a complainer she is. ¹³⁵ As one report puts it, firms use such data to decide "whether a customer is routed promptly to an attentive service agent or relegated to an overflow call center." ¹³⁶ It is hard to overstate how advanced CRM tools have revolutionized the way that sellers handle buyers; it suffices to note that it is a \$30 billion industry. ¹³⁷

^{133.} See discussion infra notes 141-145 and accompanying text.

^{134.} See Bang Nguyen, The Dark Side of Customer Relationship Management: Exploring the Underlying Reasons for Pitfalls, Exploitation and Unfairness, 19 J. DATABASE MARKETING & CUSTOMER STRATEGY MGMT. 56, 58 (2012) ("[B]y adopting new technologies and the Internet, firms have enabled CRM schemes to flourish. Using emails, social media, for example, Facebook pages, YouTube and Twitter, and blogs, the communication directed towards potential customers can now be customised at an individual level."); Van Loo, supra note 78, at 564 ("When a consumer reaches out about a dispute, computer algorithms typically analyze all relevant internal and external information available to estimate two main variables: behavior and net worth.").

^{135.} Van Loo, supra note 78, at 564-65.

^{136.} Natasha Singer, Secret E-Scores Chart Consumers' Buying Power, N.Y. TIMES (Aug. 18, 2012), https://www.nytimes.com/2012/08/19/business/electronic-scores-rank-consumers-by-potential-value.html [https://perma.cc/N5UM-4U4R].

^{137.} See Shanhong Liu, Customer Relationship Management Software Market Revenues Worldwide from 2015 to 2022 (In Millions of U.S. Dollars), STATISTA (Jan. 14, 2020), https://www.statista.com/statistics/605933/worldwide-customer-relationship-management-market-forecast/ [https://perma.cc/Q2JU-JNHH].

Importantly, consumer data increasingly encompass more than just the consumer's interactions with the specific seller in question. "Data brokers" now collect and trade consumer data between sellers. 138 As the FTC has reported, these brokers collect thousands of different types of information per consumer—not just purchase history, but also "intimate details of consumers' financial, social, and personal lives." It is a small step from here to identifying nudniks: if you know who is likely to post glowing reviews, you also know who is likely to post scathing ones. 140

Historically, sophisticated targeting techniques were available only to the largest retailers (because costs were prohibitive). Now, the increased availability of (and competition among) third-party data brokers reduces the costs of consumer targeting so that more and more sellers are likely to use it.

Second, beyond having access to better information about each consumer's past behavior, sellers now have access to better predictions about each consumer's future behavior. Today, America's consumers are being scored on a variety of metrics—well beyond the famous credit score—by a multitude of firms that analyze data from a great variety of sources. 141 Sellers can use these scores to customize their treatment of individual customers. "Customer churn models" accurately predict the probability that a given customer would be dissatisfied and abandon the business. 142 Customer lifetime value ("CLV") scores predict not just the probability that a given customer will make a purchase, but also "the likelihood a person will . . . bad-mouth a company." Other

^{138.} See generally Schmitz, supra note 130, at 1419-33 (explaining the growth in the data broker industry and how these brokers utilize consumer data).

^{139.} *Id.* at 1413; *see* EDITH RAMIREZ ET AL., FED. TRADE COMM'N, DATA BROKERS: A CALL FOR TRANSPARENCY AND ACCOUNTABILITY I-Ix (2014), http://www.ftc.gov/system/files/documents/reports/data-brokers-call-transparency-accountability-report-federal-trade-commission-may-014/140527databrokerreport.pdf [https://perma.cc/R6R9-GEW9].

^{140.} See Helveston, supra note 130, at 878 (showing that the insurance industry uses big data and predictive analytics not just in marketing, but also in claim management).

^{141.} See Pam Dixon & Robert Gellman, The Scoring of America: How Secret Consumer Scores Threaten Your Privacy and Your Future 6–10 (2014), http://www.worldprivacyforum.org/wp-content/uploads/2014/04/WPF_Scoring_of_America_April2014_fs.pdf [https://perma.cc/KK5H-4DHF].

^{142.} See Abdelrahim Kasem Ahmad et al., Customer Churn Prediction in Telecom Using Machine Learning in Big Data Platform, 6 J. Big Data 28, 34 (2019); Anupam Kundu, Machine Learning Powered Churn Analysis for Modern Day Business Leaders, Towards Data Sci. (Oct. 24, 2018), https://towardsdatascience.com/machine-learning-powered-churn-analysis-for-modern-day-business-leaders-ad2177e1cb0d [https://perma.cc/TGB2-UGYR] (explaining churn and its effect on business management).

^{143.} Khadeeja Safdar, On Hold for 45 Minutes? It Might Be Your Secret Customer Score, WALL St. J. (Nov. 1, 2018, 11:04 AM), https://www.wsj.com/articles/on-hold-for-45-minutes-it-might-be-your-secret-customer-score-1541084656 [https://perma.cc/NUS6-NF4L]; see also Kundu, supra note 142 (describing how a predictive churn model can impact CLV).

metrics predict the likelihood that a given consumer will return items.¹⁴⁴ The proliferation and growing sophistication of these scores allows firms to target nudniks more accurately than ever before.

Finally, beyond assessing how likely a given consumer is to publicly voice her frustration, sellers nowadays can also predict how strong and far the nudnik's cry will echo. The FTC found that companies today track each consumer's social influence scores, based on the number of followers on social media and other metrics. Last Cross-referencing this information with information collected from online review platforms such as Yelp and Airbnb allows data collectors to obtain a rich profile of each consumer and their propensity to complain. Data-analysis providers then openly sell their proprietary technology to use the data to identify who is a "fan" of a given seller or service, Last Who is likely to complain, and how influential the complaint is going to be. Sellers can use these scores to assess the reputational risk posed by each consumer. In other words, sellers can not only identify which consumers are likely to make waves about company failures but also predict how tall those waves will be.

^{144.} Khadeeja Safdar, How Your Returns Are Used Against You at Best Buy, Other Retailers, WALL STREET J. (Mar. 13, 2018, 5:30 AM), https://www.wsj.com/articles/how-your-returns-are-used-against-you-at-best-buy-other-retailers-1520933400 [https://perma.cc/3PN5-NJG7].

^{145.} See What Information Do Data Brokers Have on Consumers, and How Do They Use It?: Hearing Before the S. Comm. on Commerce, Sci., & Transp., 113th Cong. 66–72 (2013) (statement of Jessica Rich, Director, Bureau of Consumer Protection, Federal Trade Commission); RAMIREZ, supra note 139, at 31 (explaining how data brokers convert analyses into various marketing scores for consumers).

^{146.} See, e.g., Jure Leskovec, Web Data: Amazon Reviews, STAN. NETWORK ANALYSIS PROJECT, https://snap.stanford.edu/data/web-Amazon.html (last visited May 7, 2020) [https://perma.cc/WZ56-7NFS] (compiling a dataset that tracks Amazon reviews over a period of eighteen years). It is telling that, on more than one occasion, academic researchers managed to use such open databases to build software that identifies negative reviews and engages with them. See, e.g., Yu-Han Chen & John Merrick, Real Time Yelp Reviews Analysis and Response Solutions for Restaurant Owners, DATA SCI. ACAD. BLOG (Sep. 29, 2017), https://nycdatascience.com/blog/student-works/real-time-yelp-reviews-analysis-response-solutions-restaurant-owners/[https://perma.cc/L6SV-FEB6] (building a bot that identifies negative reviews in Yelp and responds to them); see also Karen Robson et al., Making Sense of Online Consumer Reviews: A Methodology, 55 INT'L J. MKT. RES. 521 (2013) (doing the same for negative reviews in Apple's App Store).

^{147.} See, e.g., Sys. & Method for Managing Advertising Intelligence and Customer Relations Management Data, U.S. Patent Application No. 20130218640 (filed Aug. 22, 2013).

^{148.} Schmitz, *supra* note 130, at 1430–32. For an early account, see ED KELLER & JON BERRY, THE INFLUENTIALS (2003) (explaining how a small group of influential Americans affect the decisions of others). For a real-world example, see *How to Find and Source the Best Influencers for Your Brand*, OBVIOUSLY, https://www.obvious.ly/en/platform-identification (last visited May 7, 2020) [https://perma.cc/2QLP-LZAB] (assisting firms in identifying social media "microinfluencers").

These emerging technological capabilities allow firms not just to identify nudniks early but also to disarm them effectively, an issue that we turn to now.

2. Disarming Nudniks

A seller who identifies a nudnik would want to minimize the nudnik's impact as quickly as possible. Sellers have always employed a wide array of disarming tactics, such as settling outside the courthouse, delivering private apologies, or offering complimentary services. But here as well, big data and predictive analytics are transforming nudnik-disarming tactics. They are doing so along three key dimensions: selective remedies, muffling, and avoiding selling to (or gagging) nudniks to begin with.

Offering selective remedies to dissatisfied consumers is hardly a new practice, but technological tools make the practice much more granular and effective. In a sense, selective remedies are a form of ex post discrimination: if two buyers were wronged, and one of them is identified as assertive while the other is not, then sellers will go to greater lengths to appease the former. 152 New technologies allow sellers not only to better identify whom to appease, but also how to appease them. Predictive analytics and CRM software tell sellers whether the dissatisfied consumer who has a propensity to fight is after money, validation, replacement, or an apology. Sellers can then tailor the remedy to this specific consumer, without changing their practices toward other consumers. It is telling that firms today spend more effort on resolving social media complaints than they do on offline complaints;

^{149.} See Sébastien Mena et al., On the Forgetting of Corporate Irresponsibility, 41 ACAD. MGMT. REV. 720, 725 (2016) (noting that following failures, firms engage in "forgetting" tactics, trying to make their stakeholders discount what happened, including by silencing those who keep reminding others of the failure).

^{150.} See Yonathan A. Arbel & Yotam Kaplan, Tort Reform Through the Backdoor: A Critique of Law and Apologies, 90 S. CAL. L. REV. 1199 (2017) (explaining how privileged apologies have been used to limit victims' recovery and shield injurers from liability).

^{151.} See Schmitz, supra note 6, at 280-82 (describing the industry practice of offering complainers preferential treatment in "debt, insurance, and other business-to-consumer" contexts). Sellers can also respond to troublesome consumers by playing hardball, as in denying service and charging higher rates.

^{152.} See, e.g., Becher & Zarsky, supra note 97, at 90-91; Johnston, supra note 96 (providing an economic theory for how standard-form contracts enable cooperative negotiation). In Becher & Zarsky's account, sellers offer selective remedies to retain the complaining customer and project a good image toward noncomplaining customers. In other words, they focus on how sellers earn reputation credit points, while we focus on how sellers avoid reputational sanctions.

the former comes with greater reputational risk.¹⁵³ Further, in the past, decisions on who and how to appease were crude: if a customer was a known celebrity or an opinion leader, that customer would get special treatment. Nowadays, firms can offer a more effective sliding scale, tailoring their specific treatment to the type of influence the customer might have based on various customer scores.¹⁵⁴

We can see evidence of such tailored preferential treatment in the work of third-party providers who offer firms an "influencer strategy," which means ranking consumers based on their influence on others and prioritizing those with more influence. Recent documentaries on the Fyre music festival showed how the organizers offered ticket-buyers different housing options based on each buyer's social media scores: "influencers" were offered villas, while "followers" were offered huts. 156

A second channel for minimizing nudniks' effects is *drowning* out their voices. This, essentially, is the service that many reputation-management firms sell: increasing the volume of irrelevant or positive content in order to drown out negative content.¹⁵⁷ By overwhelming consumers with irrelevant information, reputation-management firms reduce the chances that any valuable information produced by nudniks will be seen or used. After all, for most users, page eight of Google

^{153.} Mike Maughan, Why Angry Consumers Should Head to Instagram When It Is Time to Make a Complaint, CNBC (Jan. 27, 2019, 9:00 AM), https://www.cnbc.com/2019/01/25/for-angry-consumers-instagram-complaints-gets-the-quickest-results.html [https://perma.cc/QWJ8-7WBD].

^{154.} COUNCIL OF ECON. ADVISORS, EXEC. OFFICE OF THE PRESIDENT, BIG DATA AND DIFFERENTIAL PRICING, 8–13 (2015), https://obamawhitehouse.archives.gov/sites/default/files/whitehouse_files/docs/Big_Data_Report_Nonembargo_v2.pdf [https://perma.cc/VPX3-VZUQ] (noting that big data shifted price and terms differentiation from broad demographics proxies to personal indicators).

^{155.} The Scrunch company, for example, advises firms to:

[[]E]nsure that your influencer/s always receive the premium service. For example, if you're an airline you wouldn't seat your influencers in economy or premium economy. They should be seated up front in first class with all the bells and whistles. If their experience is amazing, then the content they share with their community will be amazing!

Georgia Mee, How to Give Influencers an A+ Experience and Why It's Important, SCRUNCH, https://www.scrunch.com/blog/give-influencers-a-great-experience# (last visited May 7, 2020) [https://perma.cc/84G8-L4GC].

^{156.} E.g., FYRE: THE GREATEST PARTY THAT NEVER HAPPENED (Netflix 2019).

^{157.} See Phil Lockwood, Turn a Negative Into Positive—Online Ratings, Reviews, and Your Business—Plus: 10 Common Questions Answered, DISTILL AGENCY (Oct. 23, 2017, 5:51 AM), https://www.distillagency.com/blog/turn-negative-into-positive-online-ratings-reviews-business [https://perma.cc/MGL2-Y5FY] (encouraging clients to "[g]et more positive [online] reviews to drown out the negative"); see also Van Loo, supra note 78, at 583 (noting firms' usage of "fake review mills," meant to overwhelm online review sites with positive reviews).

search results is where information goes to die.¹⁵⁸ While the first channel, selective remedies, is meant to convince nudniks not to disseminate damning information in the first place, the second channel, muffling of consumers' voices, is meant as damage control once the nudnik has already publicly voiced frustration.

Lastly, and perhaps most potently, sellers can now use personalized contracts to either *limit the consumer's ability to purchase* from them or to complain after the purchase. 159 Before the rise in identification technologies, firms had to use blunt tools that applied to all consumers. For example, firms could install a forced arbitration clause in their form contracts to limit the reputational effects of public dispute resolution. 160 But adopting such provisions may, in itself, cause a reputational backlash. A timely example comes from the legal sector, where law students publicly battled law firms that adopted mandatory arbitration provisions, getting the firms to reverse course. 161 Another timely example is gag clauses in form contracts, which limit every consumer's ability to post negative reviews about the business. Yet these provisions, too, are salient and may cause a backlash. Indeed, after one business installed a gag clause requiring that consumers who post negative reviews pay \$2,500, Congress intervened and enacted the Consumer Review Fairness Act. 162 which invalidates such clauses. 163

It is therefore much better for firms to keep their nudnikavoidance tactics under the radar by using them on a case-by-case basis. One strategy would be to avoid engaging with nudniks to begin with. To illustrate the dynamics, consider how on Airbnb, the online vacation rentals marketplace, some hosts apparently refuse to rent their houses to certain guests based on these guests' propensity to write negative

^{158.} This practice goes hand in hand with firms' efforts to push right-to-be-forgotten laws, which would allow them to remove unfavorable records entirely. See Gesenhues, supra note 110 (explaining the business model of addressing consumer removal requests).

^{159.} It is beyond the scope of this Article to analyze, in full, the reasons why consumers would not try to masquerade as nudniks. In short, we note that sellers can disarm nudniks by treating them negatively, as in refusing service or charging a higher price.

^{160.} See Beth Davis, Mandatory Arbitration Agreements in Long-Term Care Contracts: How to Protect the Rights of Seniors in Washington, 35 SEATTLE U. L. REV. 213, 214 (2011) (explaining the impact of arbitration agreements on stifling public outrage); Roy Shapira, Mandatory Arbitration and the Market for Reputation, 99 B.U. L. REV. 873 (2019) (outlining the debate surrounding mandatory arbitration and reputation).

 $^{161.\} See$ Roy Shapira, Law and Reputation: How the Legal System Shapes Behavior by Producing Information (forthcoming 2020).

^{162.} H.R. REP. No. 114-731, at 5-6 (2016).

^{163.} Consumer Review Fairness Act of 2016, Pub. L. No. 114-258, 130 Stat. 1355 (to be codified at 15 U.S.C. § 45b). We come back to the Act, and point out an important loophole in it, *infra* Part III.

reviews.¹⁶⁴ A Forbes commentator summed it up nicely: "I, like many other in-the-know hosts, tend to dig into Airbnb to see a guest's past posted reviews. If I see nothing but bitterness and complaining, they're a hard pass."¹⁶⁵ Given that the overwhelming majority of Airbnb guests refrain from writing a detailed negative review (even when one is merited),¹⁶⁶ the ability of hosts to avoid the few that do post reviews decreases the informativeness of reviews. Similar dynamics have been in play in offline contexts, such as doctors avoiding litigious patients¹⁶⁷ or landlords avoiding litigious tenants.¹⁶⁸

B. The Implications of Targeting Nudniks

There is nothing new about sellers exerting effort to silence buyers who could publicly challenge them. Think, for example, about the prevalence of confidential settlements, which some view as defendant firms bribing plaintiffs to not warn others. Why does it matter, then, that sellers have recently gotten better at targeting nudniks? If sellers would have eventually paid nudniks off even without big data tools, why does it matter that they can now identify and pay them off much earlier? This Section shows that timing matters. The earlier sellers can identify and disarm nudniks, the fewer positive spillovers nudniks generate. Earlier interventions limit not only the effectiveness of legal deterrence but also the effectiveness of reputational deterrence.

^{164.} AirReview, CHROME WEB STORE, https://chrome.google.com/webstore/detail/airreview/plkdnpjpnhhnmigmekaocdfokkmebdnm?hl=en-US (last visited May 7, 2020) [https://perma.cc/ZU4J-54UZ]; see, e.g., Annet3176, Airreview - a Little Helpful Extension to Screen Guests, AIRHOSTS F., https://airhostsforum.com/t/airreview-a-little-helpful-extension-to-screen-guests/30341 (last visited May 7, 2020) [https://perma.cc/X3JN-69YQ] ("I use it and find it helpful.").

^{165.} Seth Porges, All Airbnb Hosts Should Use This Chrome Extension for Screening Guests, FORBES (July 27, 2017, 12:50 PM), https://www.forbes.com/sites/sethporges/2017/07/27/all-airbnb-hosts-should-use-this-chrome-extension-for-screening-guests/#4c4c9a5d4081 [https://perma.cc/FA9V-PKLB]; see also u/IamWoe, Best Hosts, What Would You Love to See in a Message?, REDDIT (Mar. 30, 2019), https://www.reddit.com/r/AirBnB/comments/b7e37i/best_hosts_what_would_you_love_to_see_in_a_message/ejr6p1l/ [https://perma.cc/8V2E-TKPY] (discussing how owners use AirReview to screen potential tenants).

^{166.} See Georgios Zervas et al., A First Look at Online Reputation on Airbnb, Where Every Stay is Above Average (Apr. 12, 2015) (unpublished manuscript), https://papers.srn.com/sol3/papers.cfm?abstract_id=2554500 [https://perma.cc/F7SS-VTJ4] (finding that the majority of reviews are positive, even for properties that are of lower quality, as judged by their reviews on another platform).

^{167.} See Rachel Emma Silverman, Database for Doctors Tracks Litigious Patients, WALL ST. J. (Mar. 5, 2004, 12:01 AM), https://www.wsj.com/articles/SB107844497811447118 [https://perma.cc/B9M7-KQN8]. This particular database has since been shut down.

^{168.} See Esme Caramello & Nora Mahlberg, Combating Tenant Blacklisting Based on Housing Court Records: A Survey of Approaches, 2017 CLEARINGHOUSE REV. 1 (detailing the practice of tenant-screening bureaus, which collect housing court data and sell them to landlords).

1. Diluting Legal Deterrence

By using technology to identify and disarm nudniks early, sellers can significantly dilute legal deterrence.

To see why, let us first consider the benchmark: namely, legal deterrence before big data. Firms have always had incentives to pay handsomely to settle a nudnik's claim in exchange for the nudnik's commitment to confidentiality. Indeed, most cases settle secretly, with the parties stipulating to keep the details of their dispute private. Legal scholars were quick to note the divergence of private and public interests here: both parties have incentives to handle their disputes in ways that limit public access to information. Defendants are willing to pay more for a confidentiality provision to save themselves the risk of adverse publicity and exposure to subsequent class actions. Consumer plaintiffs anticipate defendants' willingness to pay for secrecy and use it as a bargaining chip. A plaintiff who receives a generous offer may be inclined to accept it because she does not factor in the loss of positive spillovers. That is, at this point she may not care whether relevant information becomes available to third parties. 171

Yet, in a world without big data, confidential settlements could still generate deterrence. One reason is that the plaintiff who complains first, and exposes a certain defect, may be able to extract a hefty settlement amount from the defendant company. Say a nudnik-plaintiff has exposed a practice of overcharging takeaway purchases by \$4 each. The plaintiff anticipates that the overcharge has been occurring over one month and that each day the restaurant services one hundred takeaway orders. The plaintiff therefore anticipates that the defendant restaurant had been overcharging other customers to the tune of \$12,000 collectively. The other customers are currently not aware that they were overcharged, and the restaurant would like to keep it that way. If the nudnik drives a hard bargain, she should be able to reach a large settlement, well beyond the harm of \$4 and up to

^{169.} See Jon Bauer, Buying Witness Silence: Evidence-Suppressing Settlements and Lawyers' Ethics, 87 OR. L. REV. 481, 491 nn.16–19 (2008) (compiling references); Erik S. Knutsen, Keeping Settlements Secret, 37 Fla. St. U. L. REV. 945, 946 n.1 (2010) (same).

^{170.} See Steven Shavell, The Fundamental Divergence Between the Private and the Social Motive to Use the Legal System, 26 J. LEGAL STUD. 575, 605 (1997) (describing settlement as a means of securing privacy and maintaining secrecy at the expense of social goals); Wendy Wagner, When All Else Fails: Regulating Risky Products Through Tort Litigation, 95 GEO. L.J. 693, 709–10 nn.71–74 (2007) (compiling references that address privacy through settlement).

^{171.} See Shapira, Law as Source, supra note 73, at 204 (outlining the conflicting interests when looking at settlement as a remedy).

^{172.} See generally Saul Levmore & Frank Fagan, Semi-Confidential Settlements in Civil, Criminal, and Sexual Assault Cases, 103 CORNELL L. REV. 311 (2018) (exploring how, under certain conditions, even confidential (or semi-confidential) settlements can generate deterrence).

\$12,000. That settlement, in itself, approaches a sanction that is sufficiently large to deter overcharging. As a result, even though the other customers were not informed, such settlements save them from additional overcharging in the future.¹⁷³

The ability of plaintiffs to extract rents depends, however, on when they settle. Deterrence through confidential settlements happens only when the nudnik-plaintiff can assess defendants' exposure to liability for other plaintiffs (and thus know how hard a bargain to drive). When firms target nudniks early, they reduce the likelihood that the first plaintiff accurately perceives the number of other victims or the extent of harms done to them. 174 The seller can avoid selling to the nudnik altogether. The seller can sell to the nudnik but offer preferential treatment ex ante, so that the nudnik is not dissatisfied with her purchase. If a nudnik is dissatisfied, the seller can offer a quick, full refund and better treatment ex post, before the nudnik escalates her complaint into a lawsuit. And even if a nudnik files a lawsuit, the seller can settle early, before the lawsuit reaches the discovery stage. Although the nudnik does not need discovery to tell her she was wronged, she often needs discovery to tell her how many others were wronged and whether the misbehavior in question was an isolated mistake or an ongoing practice. Further, because sellers often keep early targeting practices secret, 175 the nudnik does not know why or when in the process she was targeted and does not know whether she is the lone complainer or just the first. As a result, the nudnik is less likely to extract rents from sellers and produce deterrence. 176

There is a broader point here. Legal scholars and policymakers are constantly engaged in the policy debate of private versus public resolution of disputes: settlement versus trial, confidentiality versus openness, mandatory arbitration versus litigation, and so on.¹⁷⁷ But all these debates may become moot if potential defendants can silence potential plaintiffs early. To use the classic naming-blaming-claiming typology,¹⁷⁸ the extant literature focuses on what happens *after* grievances evolve into lawsuits in the post-claiming stages. In contrast, we highlight the ability of companies to interject earlier, before the

^{173.} Id.

^{174.} Id. at 353.

^{175.} See Porat & Strahilevitz, supra note 127, at 1434–38 (noting the secrecy around big data practices).

^{176.} It also helps that the seller is able to tell the complaining buyer: "You are the only one who has experienced problems with the product! You must have done something wrong."

^{177.} See, e.g., Bauer, supra note 169, at 493-94 nn.27-31 (compiling references); Jack H. Friedenthal, Secrecy in Civil Litigation: Discovery and Party Agreements, 9 J.L. & POLY 67, 67-68 n.1 (2000) (same).

^{178.} See Felstiner et al., supra note 11.

aggrieved party files a lawsuit, in the pre-claiming—and sometimes even pre-blaming—stages. Scholars have warned that when claims are funneled into private and confidential channels of resolution, we lose some of the deterrent effect¹⁷⁹ as well as the development of a vibrant body of law to guide future behavior. ¹⁸⁰ The same logic applies when the injured parties have not even formed their claims to begin with. In fact, the logic applies more forcefully, if only because settling before claiming reduces not just legal deterrence but also *reputational* deterrence.

2. Diluting Reputational Deterrence

One way to build a good reputation is by investing in offering higher quality products and better customer service. Another (nonexclusive) way is to invest in appearance management.¹⁸¹ When technological changes make investing in appearances more effective, they crowd out incentives to invest in the actual product and service. Drowning out bad reviews has roughly the same effect as not having bad reviews written about you at all.¹⁸²

The ability to silence nudniks early in the process significantly reduces a firm's exposure to reputational risk through two key conduits: online reviews and litigation.

Consider online reviews first. Only a small subset of consumers bother to write detailed reviews that spotlight the negative aspects of a product or service. 183 If—as in the Airbnb example—sellers can avoid selling to these detailed-review-writing buyers (or sell them a better product or service), then seller failures become invisible to the market.

Next, consider the much less intuitive channel of litigation. If sellers can target nudniks early and settle any claims these nudniks might have before they file lawsuits, sellers will significantly reduce not just legal risk but also reputational risk. This is because litigation and

^{179.} See, e.g., David Luban, Settlements and the Erosion of the Public Realm, 83 GEO. L. REV. 2619, 2649–50 (1995) (outlining this particular problem through a discussion of product liability claims); Jillian Smith, Secret Settlements: What You Don't Know Can Kill You!, 2004 MICH. St. L. REV. 237.

^{180.} See, e.g., Elizabeth Chamblee Burch, Securities Class Actions as Pragmatic Ex Post Regulation, 43 Ga. L. Rev. 63, 117–18 (2008) (exploring deterrence-based critiques to arbitration); Lynn M. LoPucki, Delaware's Fall: The Arbitration Bylaws Scenario, in CAN DELAWARE BE DETHRONED?: EVALUATING DELAWARE'S DOMINANCE IN CORPORATE LAW 35, 51 (Stephen M. Bainbridge et al. eds., 2018) (articulating the state of arbitration bylaws in Delaware law).

^{181.} See generally Benjamin Klein & Keith Leffler, The Role of Market Forces in Assuring Contractual Performance, 89 J. Pol. Econ. 615 (1981) (describing how reputational considerations can ensure contractual performance).

^{182.} Note that competitive pressures would not necessarily push firms toward investing in actual quality and away from appearance management. In fact, the opposite is more likely to happen. See GEORGE A. AKERLOF & ROBERT J. SHILLER, PHISHING FOR PHOOLS (2015).

^{183.} See Woolf, supra note 86.

reputation are interconnected. What happens in the courtroom trickles out and affects the court of public opinion.¹⁸⁴

A short primer on reputation through litigation is in order. Litigation affects sellers' behavior not just directly, by forcing them to compensate aggrieved customers, but also indirectly, by producing information on how the sellers behaved. To the extent that information produced during litigation becomes public, it affects the way that outside observers treat the defendant seller. Litigation affects the seller's reputation through various channels: revelation, diffusion, certification, and attribution of information. A firm's ability to target potential plaintiffs early, before they even become plaintiffs, distorts the operation of all those channels.

Take revelation, for example. Litigation can affect reputations by extracting damning information about the sellers that market players were not privy to. 188 The classic example here is internal email communications exposed during discovery that show the seller knowingly skirted safety concerns and later engaged in a cover-up. Yet if a firm manages to settle the nudnik's claim earlier, chances are it will escape discovery and will not be forced to disclose electronic communications.

Another common effect of litigation concerns the *diffusion* of damning information. For reputational sanctions to be meaningful, the revealed information has to be widely diffused, so as to reach a critical mass of stakeholders that will take their business elsewhere. ¹⁸⁹ This is usually achieved via media coverage. In a separate project, one of us showed that litigation shapes the frequency and tenor of media coverage. ¹⁹⁰ For example, content analysis of the Pulitzer Prizewinning investigative projects over the past twenty years reveals that over half relied heavily on "legal sources" such as regulatory investigation reports and court documents. ¹⁹¹

^{184.} See Shapira, supra note 160, at 887-89 (describing four ways in which litigation affects reputation).

^{185.} See Shapira, Reputation through Litigation, supra note 73; Roy Shapira, A Reputational Theory of Corporate Law, 26 STAN. L. & POL'Y REV. 1, 7 (2015).

^{186.} See Shapira, supra note 160, at 885-88.

^{187.} *Id.* We elaborate here only on two channels (revelation and diffusion) for considerations of brevity and scope. For the other two channels (attribution and certification), see *id.*

^{188.} Shapira, supra note 185, at 13.

^{189.} Shapira, supra note 160, at 886.

^{190.} See Shapira, Law as Source, supra note 73, at 173-76.

^{191.} Id. at 186-92. There exist multiple reasons for investigative reporters' reliance on legal sources. Litigation feeds journalists so-called "information subsidies": court documents reduce the costs to journalists of covering a story about product defects or bad customer service. Id. at 166-67. They provide information that is well-documented and detailed, contains good quotes from internal company documents, and is libel-proof. Id. at 173-75.

Thus, if sellers are able to disarm nudniks before they form their claims and file them in court (or complain to a regulator), they greatly reduce the risk of media scrutiny. Interviews with reporters reveal a common practice of what they call "pattern-identifying": searching legal databases to discover how many claims were filed with respect to the issue they are investigating. 192 Identifying such patterns has spurred many investigative reports; yet in a world where no paper trail is created—because no claim was filed—the ability of reporters to locate and uncover stories of seller misconduct is significantly hampered. Put differently, litigation is an important source of media stories on seller misconduct. Without litigation, the ability of the media to hold sellers accountable falters.

* * *

In recent years, legal scholars have started exploring the negative aspects of big data tools that are used to segment buyers. Yet the existing accounts focus on privacy, fairness, equality, and due process in the context of effects on specific customers. ¹⁹³ This Part has shifted the focus from how personalization affects justice and efficiency toward targeted consumers to how personalization affects market forces overall.

To illustrate some of the implications of nudnik-circumventing technologies, we can simply recast the informed minority model. Schwartz and Wilde explicitly stipulated that their model of market discipline rests on the assumption that firms cannot distinguish between searching and nonsearching consumers (what is known as a "pooling" equilibrium). But while pooling may have been a realistic equilibrium forty years ago when Schwartz and Wilde penned their model, nowadays, when each consumer carries her own reputation score, sellers can and increasingly do treat consumers differently. As a result, the rest of us passive consumers, who do not search in advance

^{192.} Id. at 210.

^{193.} See Schmitz, supra note 130, at 1415–18 (suggesting that big data tools allow firms to discriminate in ways that perpetuate stereotypes and aggravate the rift between haves and havenots); Van Loo, supra note 78, at 577 (warning about unfair process and inequalities in firms' internal dispute resolution practices); see, e.g., Kate Crawford & Jason Schultz, Big Data and Due Process: Toward a Framework to Redress Predictive Privacy Harms, 55 B.C. L. Rev. 93, 96–109 (2014) (voicing privacy concerns over predictive analytics).

^{194.} See Schwartz & Wilde, supra note 9, at 663 (noting that if firms would be able to separate searchers and nonsearchers, they would "exploit nonsearchers by charging them higher prices or providing them with lower quality products and services than would be offered to comparison shoppers").

or enforce after the fact, are worse off. Is there a way to stop this development?

III. HOW TO STOP THE FUTURE

Part I highlighted the important role that a small minority of crusading consumers can play in holding sellers accountable. Yet Part II provided reasons for pessimism: technological advancements in the collection and analysis of consumer behavior data could eventually allow sellers to curtail the role that nudniks play. Even if one recognizes, as we do, that nudnik behavior is not always socially beneficial, one should still be concerned with the prospect of sellers avoiding or silencing nudniks wholesale. Sellers have incentives to block not just the "bad" nudniks but also—indeed even more so—the "good" ones, those who bring real issues with seller behavior to light. In other words, there is reason to worry about the future of consumer activism. 195 It is time to turn our attention to whether it is possible to forestall the nudniks' extinction.

Section A explains why some intervention is needed, despite what other accounts of market discipline advocate. While previous accounts view reputation as a justification to scale back legal intervention, we focus on how legal intervention is needed to facilitate a well-functioning market for reputation. 196 Section B argues that existing proposals to regulate big data tools are ill-equipped to deal with the unique problems that nudnik targeting generates. Section C sketches potential legislative, regulatory, and judicial solutions. The solutions fall into one of two categories: (1) buck the trend of nudnik targeting to preserve nudnik-based market discipline; or (2) ramp up legal channels of consumer protection to compensate for sellers' takeover of this channel of market discipline. Section D clarifies that, across all these solutions, our aim is not to maximize nudnik activity but rather to optimize it. Not all nudnik-based activism generates social benefits. Accordingly, our aim should be to facilitate value-creating nudnik actions while minimizing value-destroying nudnik actions.

^{195.} The only reason not to worry about the trend of sellers gaining proficiency in identifying and disarming nudniks is if you believe that the market currently systematically overdeters sellers. If this is the case, letting sellers curtail market discipline would merely bring us back to normal.

^{196.} See Arbel, supra note 82, at 1287–1303 (offering reputation-by-regulation as a systematic way to use legal institutions to foster the creation and creation of reputational information); Shapira, Law as Source, supra note 73, at 200; Shapira, Reputation Through Litigation, supra note 73, at 1238.

A. Why Legal Intervention Is Needed

Legal scholars have long recognized that reputation matters in consumer markets. Yet existing accounts usually invoke reputation as a justification for *scaling back* legal intervention. A classic example is the Lucian Bebchuk and Richard Posner model, which states that sellers mindful of their reputations will treat buyers fairly, often going beyond what is legally required. ¹⁹⁷ Many scholars have suggested that the argument applies even more forcefully to the sharing economy, in which reputational information is readily available, and, therefore, top-down regulation is often superfluous. ¹⁹⁸ Under these assumptions, the need for legal intervention is minimal, as reputational concerns supposedly carry the burden of deterrence on their own.

In contrast, we argue that legal intervention is needed to protect the market for reputation. The creation of reputational information hinges on buyers noticing seller misconduct and diffusing that information to other buyers. If sellers can intercept the production of reputational information, they will be able to evade reputational discipline.

One basic difference in the underlying assumptions drives these stark differences between our model's legal implications and existing models' legal implications. In existing accounts, only sellers have a reputation to protect; in our account, buyers have reputations too. Existing accounts did not—and could not, given the time when they were written—factor in the technological developments that allow sellers to track buyers' behavior and assign a score to each of us. Yet in today's world, sellers can readily purchase information telling them which consumer is likely to go on a crusade, share embarrassing information, and complain to the regulator.

The ability to assign a reputation score to each consumer changes the equilibrium. In the old models, buyers are the ones deciding from whom to purchase; in our model, sellers decide to whom they want to sell. As a result, sellers that care about their reputation do not have

^{197.} Bebchuk & Posner, supra note 96, at 831-33.

^{198.} See, e.g., ARUN SUNDARARAJAN, THE SHARING ECONOMY: THE END OF EMPLOYMENT AND THE RISE OF CROWD-BASED CAPITALISM 138 (2016) ("Eventually, peer-to-peer platforms may provide a basis upon which society can develop more rational, ethical, and participatory models of regulation."); Benjamin G. Edelman & Damien Geradin, Efficiencies and Regulatory Shortcuts: How Should We Regulate Companies Like Airbnb and Uber?, 19 STAN. TECH. L. REV. 293, 300 (2016) (describing how service providers can better assess customers when reputational evidence is readily available); Adam Thierer et al., How the Internet, the Sharing Economy, and Reputational Feedback Mechanisms Solve the "Lemons Problem," 70 U. MIAMI L. REV. 830 (2015). For the economists' perspective, see, for example, Alex Tabarrok & Tyler Cowen, The End of Asymmetric Information, CATO UNBOUND (Apr. 6, 2015), https://www.cato-unbound.org/2015/04/06/alex-tabarrok-tyler-cowen/end-asymmetric-information [https://perma.cc/MHZ2-X26Z].

to invest as much in treating all consumers nicely; they can instead invest in treating a *small subset* of consumers nicely (or, worse, avoiding them altogether). The upshot is straightforward: recognizing the importance of reputation does *not* justify scaling back legal intervention across the board. In fact, it may justify adding new forms of legal intervention. ¹⁹⁹

B. Why Existing Modes of Intervention Are Less Likely to Work

Legal scholars and policymakers have recently started turning their attention to big data and predictive algorithms, proposing solutions for potential dangers. Yet neither the proposed changes nor the existing legal tools are well equipped to deal with the specific nudnik-targeting problem we highlight here. This is because existing accounts focus on the dangers of opaque, unequal, and unfair treatment of the targeted consumers.²⁰⁰ We, by contrast, highlight the fundamentally different problem of third-party effects on *nontargeted* consumers.

A recent White House report exemplifies the conventional worries: big data and predictive analytics, the report notes, "may facilitate discrimination against protected groups," thus taking "advantage of unwary consumers." Accordingly, the report proposes (1) using existing antidiscrimination laws to tackle the unfair treatment of historically disadvantaged groups, and (2) increasing transparency to inform consumers of how sellers are treating them differently. Do 202

But nudniks are not a protected class. The existing antidiscrimination laws ban discrimination based on factors such as race, gender, or sexual orientation.²⁰³ These laws do not ban discrimination based on proclivity to complain. Relying on existing antidiscrimination laws will therefore not solve the nudnik-targeting

^{199.} See Arbel, supra note 82, at 1287–1303 (advocating "Reputation-by-Regulation"—the use of law to preserve and harness the power of reputation); Shapira, Law as Source, supra note 73, at 200–01 (arguing for a more cautious approach to scaling back legal intervention). To be clear, not all of our proposals involve greater regulatory interventions. We focus on the type of intervention (pro- or anti-reputation creation) rather than the size of intervention (more or less regulation).

^{200.} See, e.g., CATHY O'NEIL, WEAPONS OF MATH DESTRUCTION: HOW BIG DATA INCREASES INEQUALITY AND THREATENS DEMOCRACY 8 (2016) (on the inequality problem); FRANK PASQUALE, THE BLACK BOX SOCIETY: THE SECRET ALGORITHMS THAT CONTROL MONEY AND INFORMATION 9 (2015) (on the opacity problem). But see Arbel, supra note 71, at 174 (noting that opaqueness can be a virtue as it allows agencies to design gaming-proof interventions).

^{201.} COUNCIL OF ECON. ADVISORS, supra note 154, at 16.

^{202.} Id

^{203.} Helveston, supra note 130, at 875.

problem. Nor are nudniks "unwary consumers." More sunlight will not necessarily disinfect nudnik-targeting practices because the problem is not one of information. The assumption behind disclosure solutions is that the target audience would resist the disclosed practice once they become aware of it. But if sellers disarm nudniks by offering them better treatment, nudniks have no reason to flag such behavior. Disclosure would not work either.

Addressing the nudnik-targeting problem will therefore require some creative thinking on the part of legislators, regulators, and judges.²⁰⁴ The next Section proposes some initial counterintuitive strategies.

C. Proposed Solutions

Banning outright the use of big data and predictive analytics is infeasible and makes little sense, as these tools can offer benefits not just to sellers but also to consumers. The goal is to find a way to limit the use of nudnik-targeting technologies that limit the production and propagation of useful information. Section III.C.1 highlights the legal tools that regulators can employ, while Section III.C.2 focuses on how judges can reinterpret longstanding doctrines to mitigate the effects of nudnik targeting. The choice between the different methods we offer should depend on one's assessment of the severity of nudnik targeting at a given point in time and in a given market. After all, the nudnik-targeting trend is in its early stages, so we are aiming at a moving target. This is where Section III.C.3 comes in, which is directed at scholars and sketches ways in which the nudnik perspective can inform future research.

1. Lessons for Regulators

On paper, regulators already have the tools to deal with the dangers of nudnik targeting. Section 5(a) of the Federal Trade Commission Act prohibits unfair, deceptive, or abusive practices ("UDAP"). The section and its equivalents at the state level grant wide authority to numerous regulators (trade commissioners, consumer protection agencies, and so on) to pursue big data practices that they

^{204.} See Becher & Zarsky, supra note 97, at 75 ("[C]ounter-intuitively, policy makers should add firms' lenient conduct to the growing list of firms' suspicious behaviors.").

^{205.} See Helveston, supra note 130, at 864-65.

perceive as harming consumers.²⁰⁶ Yet applying the UDAP standard to nudnik-targeting practices is far from straightforward.²⁰⁷

To find nudnik-targeting practices unfair, regulators will have to show that the targeting is "likely to cause substantial injury to consumers," which cannot be avoided or is not offset by other benefits. ²⁰⁸ Yet sellers could readily find commercial justifications for their targeting practices. If sellers charge nudniks a higher price, they can rationalize it based on the nudnik's propensity to consume more customer service resources. If sellers offer nudniks preferential treatment, they can present it as catering to the nudnik's special needs. ²⁰⁹ And when sellers avoid nudniks to begin with, their practices may be too opaque for someone on the outside to notice.

It is perhaps better to think of nudnik targeting as "deceptive" toward *other* consumers: when sellers target buyers who are likely to notice and share damning information about them, they maintain a factually inaccurate brand image by silencing justified criticisms.²¹⁰ To reiterate, the problem here is not between the contractual parties, but rather with third parties: the broad societal interest in having a well-functioning market for seller reputation. Recognizing nudnik targeting as "deceptive" would therefore require creative interpretation.

Fortunately, Congress has recently provided a blueprint for the proper balance between protecting the information flow and preserving freedom of contract: the Consumer Review Fairness Act of 2016 ("CRFA").²¹¹ The CRFA voids provisions in form contracts that restrict

^{206.} See Dee Pridgen, The Dynamic Duo of Consumer Protection: State and Private Enforcement of Unfair and Deceptive Trade Practices Laws, 81 ANTITRUST L.J. 911, 914 (2017) (reviewing equivalents at the state level).

^{207.} Compare Matthew A. Bruckner, The Promise and Perils of Algorithmic Lenders' Use of Big Data, 93 CHI.-KENT L. REV. 3, 43–47 (2018) (discussing difficulties with regulating big data under the 'unfairness' standard), with Dennis D. Hirsch, That's Unfair! Or Is it? Big Data, Discrimination and the FTC's Unfairness Authority, 103 KY. L.J. 345, 347–48 (2014) (calling for the regulation of big data on the basis of UDAP legislation).

^{208. 12} U.S.C. § 5531(c)(1)(a) (2012); see also NAT'L CONSUMER LAW CENTER, UNFAIR AND DECEPTIVE ACTS AND PRACTICES § 4.3.2.2 (9th ed. 2016) ("[A]n act or practice must cause or be 'likely to cause' substantial injury to consumers.").

^{209.} The nudniks themselves may believe that they deserve the preferential treatment for being more active than other consumers.

^{210.} Note, for example, how the law deals carefully with advertising that rests on consumer endorsements. 16 C.F.R. \S 255.2 (2019).

^{211.} Consumer Review Fairness Act of 2016, Pub. L. No. 114-258, 130 Stat. 1355 (to be codified at 15 U.S.C. § 45b). As of now, three states have enacted similar laws: CAL. CIV. CODE § 1670.8 (West 2020); 815 ILL. COMP. STAT. 505/2UUU (2019); MD. CODE ANN., COM. LAW § 14-1325 (LexisNexis 2020). A similar bill is also pending: New York A5718, TRACKBILL, https://trackbill.com/bill/new-york-assembly-bill-5718-prohibits-the-use-of-non-disparagement-clauses-in-consumer-contracts/1391172/ (last visited May 7, 2020) [https://perma.cc/K3AE-MPT8]. On CRFA and its limitations, see generally Eric Goldman, Understanding the Consumer Review Fairness Act of 2016, 24 MICH. TELECOMM. & TECH. L. REV. 1 (2017).

the consumer's ability to review the seller's services. 212 Congress declared the use of such provisions an unfair and deceptive act, 213 and the FTC recently showed a willingness to enforce the CRFA vigorously. 214

The stated rationale behind the CRFA is protecting information flow. 215 Congress noted: "The consequences of these non-disparagement clauses are far ranging.... [They] distort public reviews of a business... thus harming consumers who rely on such reviews. 216 The same rationale, we argue, should apply to nudnik-targeting practices. When a seller avoids interacting with a consumer based on the consumer's propensity to complain, or when a seller "bribes" consumers who are more inclined to post negative reviews before they do so (or shortly after, in an attempt to have the review removed), the seller is clearly distorting information flow. From our vantage point, the CRFA reflects Congress's view on the proper balance between freedom of contract and the market for reputation, and regulators at the state and federal levels should view the act as a rallying call to start more strictly regulating practices that impede the information flow.

There is a counterintuitive point at play when discussing the effectiveness of CRFA-like interventions. The CRFA as currently construed contains a loophole. It prohibits gag orders only in *form* contracts.²¹⁷ This reflects the traditional thinking that consumers fare worse in standard form contracts and better in personal contracts.²¹⁸ Yet, as we noted in this Article, the personal, algorithmic tailoring of contracts can actually make things *worse* for consumers as a group. If a

^{212. § 2, 130} Stat. at 1355 (to be codified at 15 U.S.C. § 45b(b)(1)).

^{213. § 2, 130} Stat. at 1357 (to be codified at 15 U.S.C. § 45b(d)(1)).

^{214.} In 2018, for instance, the FTC acted against a seller that sold workshops and asked buyers to sign an agreement limiting their ability to post negative reviews on the workshop. Complaint for Permanent Injunction and Other Equitable Relief, FTC v. Sellers Playbook, Inc., No. 0:18-cv-02207-DWF-TNL (D. Minn. July 7, 2018) https://www.ftc.gov/system/files/documents/cases/sellers_playbook_complaint.pdf [https://perma.cc/W572-3P2P]. The case was later settled, with the company required to pay \$20.8 million and suspend the sales of business coaching. Press Release, Fed. Trade Comm'n, Defendants in Sellers Playbook Get-Rich Scheme Settle with FTC and Minnesota (Dec. 3, 2018), https://www.ftc.gov/news-events/press-releases/2018/12/defendants-sellers-playbook-get-rich-scheme-settle-ftc-minnesota [https://perma.cc/338Z-Z3VW].

^{215.} H.R. REP. No. 114-731, at 5 (2016); see also Eric Goldman, An Assessment of the Consumer Review Freedom Act of 2015 (Santa Clara Univ. Sch. of Law Legal Studies Research Paper Series, Working Paper No. 2-15, 2015), https://srn.com/abstract=2686021 [https://perma.cc/6X88-DQFG] (discussing the reason for and likely impact of the Consumer Review Freedom Act).

^{216.} S. REP. No. 114-175, at 2 (2015).

^{217.} Section (a)(3)(A) to the Act defines "form contract" as "a contract with standardized terms." § 2, 130 Stat. at 1355 (to be codified at 15 U.S.C. § 45b(a)(3)(A)). The legislation in the three states that adopted similar legislation does not contain this restriction. See laws cited supra note 211; see also Goldman, supra note 211, at 10–15 (discussing the gaps left in the CRFA).

^{218.} See, e.g., Karl N. Llewellyn, The Common Law Tradition: Deciding Appeals 370–71 (1960) (discussing the lack of any real specific assent to boiler-plate form contracts).

seller personalizes its contracts to include gag clauses only when selling to nudniks, such personalization may meet the letter of the law, but doing so will manipulate the integrity of information flow and thus violate the spirit of CRFA.

Beyond assuring that sellers do not block consumers from sharing information, regulators can also generate information that would contribute to the development of seller reputation, which will allow the market discipline itself.²¹⁹ The CFPB may have provided a blueprint for such regulation through reputation when it assembled a database that provides relatively fine-grained data, including individual complaints about banks and the consumer's narrative about their negative experiences with the bank.²²⁰ Another step that regulators could take is to investigate consumer complaints more frequently and seriously.²²¹ If sellers can block the most persistent complainers, regulators should compensate by making it easier for less persistent complainers to be heard.

Regulators could also opt to enhance the legal channels of consumer activism to compensate for sellers' growing ability to distort the reputational channels. For example, several state laws employ consumers as private attorneys general, allowing them to bring action against sellers' violations²²² or awarding treble damages and attorney fees to successful plaintiffs.²²³

^{219.} Some private initiatives, such as consumer reports, also create and disseminate reputational information. But they are subject to potential conflicts of interest with advertisers and reviewed firms. See David Adam Friedman, Do We Need Help Using Yelp? Regulating Advertising on Mediated Reputation Systems, 51 U. MICH. J.L. REFORM 97 (2017); Van Loo, supra note 78, at 583-84 (describing the shortcomings of privately run websites for consumer reporting).

^{220.} Consumer Complaint CONSUMER Database, FIN. PROTECTION https://www.consumerfinance.gov/data-research/consumer-complaints/ (last visited May 7, 2020) [https://perma.cc/QN29-A87D]. For criticism of this database, see Patrick Lunsford, Allegations Ain't Facts: CFPB Unleashes Credit Card Complaint Database, FORBES (Jun. 19, 2012, 11:51 AM), https://www.forbes.com/sites/insidearm/2012/06/19/allegations-aint-facts-cfpb-unleashes-creditcard-complaint-database#2436143d461d [https://perma.cc/7SW3-UJZH]. Other examples come from the FTC, Consumer Sentinel Network Data Book, FED. TRADE COMMISSION (2019), https://www.ftc.gov/system/files/documents/reports/consumer-sentinel-network-data-book-2019/consumer_sentinel_network_data_book_2019.pdf [https://perma.cc/89N2-AQT3], and the Department of Transportation, Air Travel Consumer Reports for 2019, U.S. DEP'T TRANSP. (2019). https://cms8.dot.gov/airconsumer/air-travel-consumer-reports-2019 [https://perma.cc/V658-4479].

^{221.} See Van Loo, supra note 78, at 597–98 (proposing two different ways for regulators to improve their investigations—integrating data from various reporting sources to create more comprehensive software and improving methods for investigating complaints submitted to them directly).

^{222.} See, e.g., MICH. COMP. LAWS § 445.911(2) (2019); N.J. STAT. ANN. § 56:8-2.12 (West 2020); OR. REV. STAT. § 646.150 (2019); Henry N. Butler & Joshua D. Wright, Are State Consumer Protection Acts Really Little-FTC Acts?, 63 FLA. L. REV. 163 (2011).

^{223.} See Victor E. Schwartz & Cary Silverman, Common-Sense Construction of Consumer Protection Acts, 54 U. KAN. L. REV. 1, 23–27 (2005) (outlining the different approaches states have taken for awarding treble damages or attorney fees).

2. Lessons for Courts

Judges aware of the dangers of nudnik targeting can reinterpret statutes and doctrines in ways that forestall nudniks' extinction. Our discussion of how regulators' might interpret FTCA or CRFA applies to judges as well. Judges can also strike out gag clauses and other limits on sharing reviews through open-ended doctrines such as unconscionability and public policy.²²⁴ Indeed, Eric Goldman has claimed that the CRFA merely mirrors an organic development that was already underway in state courts, which were using existing doctrinal tools to protect information flows.²²⁵

Armed with a better understanding of serial complainers and their role in the market, courts can also reevaluate longstanding doctrines such as standing and de minimis. To understand how the theory of the nudnik relates to standing, think about the 2016 Supreme Court case of *Spokeo, Inc. v. Robins*. ²²⁶ There, Robins discovered that an online database described him as employed, wealthy, and married, whereas he was actually unemployed, not well-off, and single. ²²⁷ Robins sued under the Fair Credit Reporting Act ("FCRA"), on the ground that the website presented a consumer report without following "reasonable procedures to assure maximum possible accuracy." ²²⁸ The Supreme Court reversed the decision of the U.S. Court of Appeals for the Ninth Circuit, noting that the "bare" procedural violation was not concrete enough to provide Robins with standing. ²²⁹ Other courts quickly followed the *Spokeo* ruling, rejecting numerous consumer actions in the process. ²³⁰

The analysis presented in this Article suggests that the broad application of the *Spokeo* standard to nudniks may be problematic, if only for these two reasons.²³¹ First, for nudniks, being falsely presented

^{224.} Lucille M. Ponte, Protecting Brand Image or Gaming the System? Consumer "Gag" Contracts in an Age of Crowdsourced Ratings and Reviews, 7 WM. & MARY BUS. L. REV. 59, 101–40 (2016).

^{225.} Goldman, supra note 211, at 8-9.

^{226, 136} S. Ct. 1540 (2016).

^{227.} Id. at 1546.

^{228. 15} U.S.C. § 1681e(b) (2012); Spokeo, 136 S. Ct. at 1545-46.

^{229.} Spokeo, 136 S. Ct. at 1549. Spokeo applies to federal courts, while many consumer law disputes arise in state courts. Still, we use it here to illustrate the dynamics in place when courts evaluate nudnik-type litigation.

^{230.} See Attias v. CareFirst, Inc., 199 F. Supp. 3d 193, 197 (D.D.C. 2016), rev'd, 865 F.3d 620 (D.C. Cir. 2017) (denying a privacy claim for lack of particular harm in a breach of an insurance company's database which exposed the records of over one million consumers).

^{231.} Beyond the two specific reasons provided above the line, we note a general flaw in the Spokeo reasoning: to the extent that the treatment a consumer receives depends on the data available about this consumer online, wrong information on the consumer (even if supposedly

as affluent, or being overcharged by \$4, is a concrete injury. In that sense, nudniks are *eggshell consumers*.²³² Second, applying *Spokeo* broadly also blocks an important channel (litigation) through which nudniks effectively warn other consumers about seller misbehavior. By going through the trouble of litigating a \$4 overcharge or a false representation as wealthy, nudniks generate positive externalities: creating a public record of past misconduct and deterring future misconduct (the reputation-through-litigation argument).

One could counter by arguing that denying standing for the "petty claims" of nudniks is necessary to clear the docket for more meaningful, meritorious claims by others. Yet such reasoning misjudges how consumer dynamics work. Most of us would not go through the trouble of comparing prices on the delivery receipt to those on the website and therefore would not even notice the overcharge. Without nudniks voicing their concerns publicly, other consumers would not reach the blaming stage (i.e., they would not notice something amiss with the seller), or they would not reach the claiming stage (i.e., they would notice but not pursue it).

We do not call for a radical departure from standing doctrine. Our proposal is more modest: when assessing the question of standing, courts should be aware of the nudnik's special psychological makeup and the potential for broad market improvements that their seemingly petty claims can generate.²³³ These underappreciated benefits are relevant especially in cases in which the plaintiff fights a seller's practice that affects many other (silent) consumers.

Similar reasoning applies to judicial interpretation of the de minimis doctrine. Again, it is best illustrated by a concrete case of a nudnik in action: *Troester v. Starbucks*.²³⁴ There, a barista sued

favorable) may distort the quality of treatment she receives in opaque ways. Robins v. Spokeo, Inc., 867 F.3d 1108, 1117 (9th Cir. 2017).

^{232.} The facts in *Spokeo* vividly illustrate the point: for many of us, being described as affluent and married is not particularly harmful. *Id.* Yet to the specific nudnik in question, these wrongful misstatements may have actually been harmful.

^{233.} Some courts have already found creative ways to avoid the *Spokeo* ruling. In one case, a consumer complained about robo-calling, in violation of the Telephone Consumer Protection Act, which regulates unwanted calls to consumers. Mey v. Got Warranty, Inc., 193 F. Supp. 3d 641, 643 (N.D.W. Va. 2016); see 47 U.S.C. § 227(b)(1)(A) (2012). The court found that the consumer did suffer a concrete injury, because—beyond any harm to privacy—the calls intruded on his phone "capacity," draining it of electricity and consuming its prepaid minutes. *Mey*, 193 F. Supp. 3d at 644–46.

^{234.} Troester v. Starbucks Corp., 421 P.3d 1114 (2018). Note that this case involves activism in the employment contract context, rather than the consumer context. For similar examples from the consumer context, see, for example, *Skaff v. Meridien North America Beverly Hills, LLC*, 506 F.3d 832 (9th Cir. 2007), ruling that a misleading promise of a usable shower for disabled person staying in a hotel was *de minimis*, and *Harris v. Time, Inc.*, 237 Cal. Rptr. 584 (Cal. Ct. App. 1987), ruling that a misleading promise of a free watch in return for opening an envelope was *de minimis*.

Starbucks under the federal Fair Labor Standards Act for failing to count the roughly four minutes it took him to clock out and finish locking up the store.²³⁵ The district court rejected the lawsuit, reasoning that four minutes is a trifling matter that fails to pass the de minimis threshold.²³⁶

Here as well, recognizing the social benefits of nudnik activism highlights two problems: (1) for nudniks, being systematically underpaid by four minutes is hardly a trifling matter (the "eggshell" point); (2) more importantly, the issue is not the harm done to this particular employee (the nudnik), but the much more consequential harm done to all other (passive) employees. A simple, back-of-theenvelope calculation helps demonstrate this harm: Starbucks employs roughly 209,000 employees in the United States. 237 Say that only one in ten closes the store. This translates to four minutes per night for 20,900 employees, or 508,566 hours annually. Even if all these employees earn minimum wage (\$7.25 hourly), the overall amount implicated in fourminute overcharging would be, conservatively, \$3,687,108 annually. In that sense, a nudnik plaintiff operates similarly to a class action, that is, it draws attention to the harm done to a collective body of similarly injured passivists.²³⁸ By denying nudniks the possibility of publicly fighting firms over four minutes, we reduce the likelihood that others will learn about such corporate misbehavior. Courts should recognize

There is a broader point in play here: the phenomenon of nudniks is not limited to the consumer markets context. It appears in labor markets, as we just saw. Counterintuitively, it also appears in financial markets, as Kastiel and Nili document. Kobi Kastiel & Yaron Nili, *The Giant Shadow of Corporate Gadflies* (Univ. of Wis. Legal Studies Research Paper No. 1523, 2020), https://papers.srn.com/sol3/papers.cfm?abstract_id=3520214 [https://perma.cc/784S-XC4W].

^{235.} Troester, 421 P.3d at 1116-17.

^{236.} *Id.* at 1117. On appeal, the Ninth Circuit referred the issue to the California Supreme Court. *Id.* The California court ultimately found for Troester but based its decision on a state-specific legal issue, namely, that California does not incorporate the *de minimis* doctrine. *Id.* at 1125.

^{237.} Starbucks, Annual Report (Form 10-K) (Nov. 15, 2019), https://s22.q4cdn.com/869488222/files/doc_financials/2019/2019-Annual-Report.pdf [https://perma.cc/23KF-39NF] (stating that in the United States, Starbucks employs approximately 218,000 people, with 209,000 of them working in company-owned stores).

^{238.} One could claim that we do not need nudnik-driven litigation in such cases, as the class action mechanism will be enough to deter firm misbehavior. There are, however, many gaps left by the limitations of class actions. See J. Maria Glover, Disappearing Claims and the Erosion of Substantive Law, 124 Yale L.J. 3052, 3066 (2015) (explaining the inability of arbitration to address class actions); Linda S. Mullenix, Ending Class Actions as We Know Them: Rethinking the American Class Action, 64 EMORY L.J. 399, 413–17 (2014) (discussing the general shortcomings of class action lawsuits). In particular, the wave of mandatory arbitration clauses that ban class actions severely limits the effectiveness of class actions, rendering nudnik-based individual litigation even more important in drawing others' attention to seller misbehavior. Shapira, supra note 160.

these dynamics and apply the de minimis doctrine cautiously when the issue in question involves a practice that is relevant to many others.²³⁹

Finally, and perhaps most contentiously, judges who are aware of the dangers of nudnik targeting should interpret defamation law narrowly. If a small subset of consumers drives the diffusion of damning information on seller behavior, then sellers have incentives and resources to target this small subset by bringing defamation lawsuits.²⁴⁰ In a separate paper, one of us advocated for consumer reviews to enjoy a safe haven from defamation law.²⁴¹ The argument is that even if some reviewers exaggerate or outright lie, the intended audience can account for this possibility when reading reviews.²⁴² In contrast, if a review is never even written (because of the chilling effect of being sued in defamation), audiences cannot evaluate it on the merits.²⁴³ When we add on top of that argument the notions developed here—about how consumers that write detailed negative reviews typically belong to a small group of "serial" complainers, who have personality traits that make them identifiable in advance by companies—the case for protecting reviewers is augmented. Judges should look at consumer reviews as "issues of public interest" worthy of stronger protection under the evolving standard of New York Times Co. v. Sullivan. 244

3. Lessons for Scholars

This Article highlights the need to shift focus from studying consumer reading behavior to studying consumer complaining behavior. Consumer law scholars have traditionally ignored the insights of the CCB literature and dismissed (or sometimes treated with hostility) the phenomenon of serial complainers. Yet in today's world, serial complainers are much more relevant and impactful than serial readers. The first lesson for scholars therefore concerns the need to

^{239.} For a treatment of the potential concern with opening the "floodgates of litigation," see Marin K. Levy, *Judging the Flood of Litigation*, 80 U. CHI. L. REV. 1007 (2013).

^{240.} See Eric Goldman, The Regulation of Reputational Information, in THE NEXT DIGITAL DECADE: ESSAYS ON THE FUTURE OF THE INTERNET 293, 298 (Berin Szoka & Adam Marcus eds., 2010) ("[N]umerous individuals have been sued for posting negative online reviews.").

^{241.} See Arbel, supra note 82, at 1299-1301.

^{242.} For arguments from the other side, namely, on how businesses should be protected from irate consumers who write negative reviews, see Barnes, *supra* note 86, and Lori A. Roberts, *Brawling with the Consumer Review Site Bully*, 84 U. CIN. L. REV. 633 (2016).

^{243.} See Yonathan A. Arbel & Murat Mungan, The Case Against Expanding Defamation Law, 71 ALA. L. REV. 453 (2019) (studying the audience effects of defamation law); see also Daniel Hemel & Ariel Porat, Free Speech and Cheap Talk, 11 J. LEGAL ANALYSIS 46, 61–65 (2019) (analyzing the deterrence effect of defamation law on "speakers who choose not to make true statements because of the extant liability regime").

^{244. 376} U.S. 254 (1964).

study the effects of nudnik behavior: Under what conditions do nudniks generate positive or negative effects on seller behavior? Once we identify the areas where nudniks hold sellers to account (and those where they do not), we can rethink the scope and design of legal intervention.

The second lesson for scholars concerns the promise and perils of personalized contracts. Consumer law scholars have traditionally viewed standard form contracts unfavorably and personalized contracts favorably: the former rest on compulsion with thin consumer consent, while the latter come from mutual negotiations, or so the story goes.²⁴⁵ Against this background, it was intuitive for scholars to view the increasing trend of personalizing contracts favorably.246 Yet our analysis suggests that personalized does not necessarily mean better. Sellers can algorithmically match each consumer with a bespoke combination of price and terms, based not just on the consumer's willingness to pay but also on the consumer's willingness to share damning information about the seller. Such personalized contracts may not feature much negotiation and comprehension, and, critically, may hinder the effectiveness of reputational discipline. In other words, the high levels of tailoring may not lead to better contract terms ex ante and may actually lead to worse enforcement of seller underperformance ex post. Personalization comes with underappreciated risks.

D. On Optimizing (Rather than Maximizing) Nudnik Behavior

The theory of the nudnik also suggests the limits of nudnik-based activism. Some nudniks clearly champion issues of little public interest or merit. When firms respond to such claims, they incur costs (and pass these costs on to other consumers). Dedicating scarce judicial or regulatory resources to frivolous nudnik actions similarly wastes social resources.

Our proposals in this Section should be read with this limitation in mind. Our purpose is not to maximize nudnik action, but rather to optimize it. Some forms of nudnik-based activism are important and critical to market discipline, while others are unhelpful at best. But

^{245.} See LLEWELLYN, supra note 218, at 362–71 (comparing the act of signing a form contract to "lay[ing] [one's] head into the mouth of a lion").

^{246.} See, e.g., Omri Ben-Shahar & Ariel Porat, Personalizing Mandatory Rules in Contract Law, 86 U. CHI. L. REV. 255, 256–57 (2019) (arguing that personalized protections in consumer contracts can be efficient); Christoph Busch, Implementing Personalized Law: Personalized Disclosures in Consumer Law and Data Privacy Law, 86 U. CHI. L. REV. 309 (2019) (highlighting the promise of personalized disclosures in consumer contracts); Porat & Strahilevitz, supra note 127, at 1453–54 (proposing personalized default rules and confronting potential objections to such proposals).

until future research deciphers which is which, allowing sellers to disarm nudnik-based activism wholesale is a bad idea. Regardless of what one thinks about the optimal level of nudnik-based activism, one should not allow sellers to be the judge.

Take for example our discussion of lessons to judges. Our claim here is not that all nudnik-based lawsuits should be welcome; rather it is that judges should resist the natural tendency to look at nudnikbased lawsuits as vexatious. We claim that the current formulations of doctrines such as standing or de minimis make them too crude of a tool to distinguish between positive- and negative-value nudnik actions. As long as the lawsuit implicates a seller behavior that is applicable to many other consumers, courts should be more open to the possibility of letting the lawsuit proceed and screen for frivolous lawsuits in later stages, perhaps with the benefit of discovery. It is instinctive for judges, like the rest of us, to view nudniks as petty and vindictive. It is much less instinctive to consider the positive externalities they provide and the link between nudnik behavior and market discipline. If nudniks disappear, market discipline will suffer, and the vacuum will force courts to delve more deeply into the terms of contracts—a mission many courts and judges have been avoiding. Allowing nudnik lawsuits to proceed would not necessarily increase court congestion; it may actually alleviate it ex ante.

CONCLUSION

Nudniks are an important yet overlooked part of the market ecosystem. They have unique personality traits that make them pursue action whenever sellers underperform. Nudniks notice seller misbehavior that most consumers would not notice. Nudniks publicly confront sellers who underperform when most consumers would not bother. Under certain circumstances, nudniks become the engine of market discipline, solving the consumer collective action problem.

This Article's first contribution is in drawing our attention to the understudied phenomenon of nudniks. Understanding the phenomenon—how nudniks operate and when their actions are more or less likely to generate positive spillovers—is key for understanding consumer governance, especially in a world where consumers do not read or understand contracts.

Yet this form of consumer activism via nudniks is under increasing threat. The Article's second contribution is exploring the trend of sellers increasingly obtaining data and technologies that will eventually allow them to identify nudniks and silence them before they voice their concerns publicly. Such a development can radically change the balance of power between sellers and buyers.

While more empirical work is needed, particularly on the conditions that make nudnik activity most valuable, "leaving things to the market" is a very deliberate policy choice with important consequences. One does not have to believe that all (or even most) nudnik activity is beneficial to see that letting sellers silence nudniks wholesale may result in worse seller performance. One way of making sure that you are not called out for underperforming is investing in the quality of your product; another way is investing in silencing those who may call you out. When sellers find it easier to invest in appearance management than in quality controls, consumers are worse off.

This is where the Article's third contribution comes in: outlining strategies to counter the attack on nudniks and facilitate well-functioning reputation markets. In the process, we get to reevaluate longstanding debates; for example, we discuss why personalized contracts may actually leave consumers worse off than form contracts.

Nudniks also generate costs and big data technologies also come with benefits, but we highlight here the more understudied sides: the benefits that nudniks generate and the costs of big data. Without nudniks, market discipline suffers.

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