CONVERSION OF DIGITAL PROPERTY: PROTECTING CONSUMERS IN THE AGE OF TECHNOLOGY

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Introduction

A high school student recently sued and successfully negotiated a settlement with Amazon.com after the online retailer deleted his homework.\(^2\) In July 2009, Amazon unilaterally removed ebook\(^3\) publications of George Orwell’s *Animal Farm* and *1984* from all of their customers’ Kindles\(^4\) without notice and without consent.\(^5\) Users could no longer

\(^1\) J. D. Candidate, Boston College Law School, May 2011; A.B. Princeton University, 2006. Many thanks to Fred Yen for his generous comments.


\(^3\) Random House, Inc. v. Rosetta Books LLC, 150 F. Supp. 2d 613, 614-15 (S.D.N.Y. 2001) (ebooks are digital books that users can read using an electronic device, and are “created by converting digitized text into a format readable by computer software”).

\(^4\) The Kindle is an eReader; an electronic device on which customers may read ebooks. See Amazon.com: Kindle Wireless Reading Device, http://www.amazon.com/dp/B002Y27P3M/ref=kindlesu-2 [hereinafter Amazon Kindle Homepage]. The Kindle is manufactured and distributed by Amazon.com. *Id.* Since Amazon first introduced the Kindle eReader, multiple new versions of the device have been released, including the “Kindle 2” and “Kindle DX,” which this Note will refer to generically as the “Kindle.” *See id.* Although other companies have released eReaders for digital books, and some like the Sony Reader have been quite successful, Amazon’s Kindle has emerged in the field as the standout market leader. *See Nicholson Baker, A New Page; Can the Kindle Really Improve on the Book?,* THE NEW YORKER, Aug. 3, 2009, at 24; Alexandra Zendrian, *A Kindle, Gentler Nation*, FORBES.COM (Nov. 23, 2009), http://www.forbes.com/2009/11/22/kindle-ereader-amazon-intelligent-investing-microsoft.html.

\(^5\) Brad Stone, *Amazon Erases Two Classics From Kindle. (One Is ‘1984.’)*, N.Y. TIMES, July 18, 2009, at B1. Apparently this was not the first time that
access texts they had purchased and any personal notes customers had added to their ebooks were rendered useless. The personal notes that the plaintiff took on his version of 1984 for a school project were effectually deleted along with his ebook file.

The ironic Orwellian overtones of Amazon’s behavior were highly publicized, and uniformly decried in the media and blogosphere. One victim noted, “it’s like Barnes & Noble sneaking into our homes in the middle of the night, taking some books that we’ve been reading off our nightstands, and leaving us a check on the coffee table.”

Kindle owners everywhere with these titles in their digital libraries experienced the same thing, illustrating how modern digital product providers retain substantial power over their products even after a sale to a customer is completed. While Amazon deleted books from users’ devices; according to the article Amazon reportedly removed Ayn Rand novels and Harry Potter books on prior occasions. See id.


7 See id.


9 Pogue, supra note 8 (quoting anonymous source).

10 This Note will use the term “digital” to reference any intangible property that might otherwise be referred to as “virtual,” “electronic,” “digital,” “intangible,” or “cyber”; the term references goods or assets that exist in a form only perceptible to humans with the aid of a machine, that show rivalrousness, and that are commonly sold over the Internet, including ebooks, ringtones, movies, music, television shows, fonts and clipart, computer programs, etc. See Joshua A.T. Fairfield, Virtual Property, 85 B.U. L. REV. 1047, 1049-50 (2005).

11 See Pogue, supra note 8. The category of digital product could be extended as far as the items created, sold, and traded on virtual life websites. Andrea Vanina Arias, Note, Life, Liberty, and the Pursuit of Swords and Armor: Regulating Theft of Virtual Goods, 57 EMORY L.J. 1301, 1303 (2008). Because these products have already been addressed by a host of scholarship, this Note will not address such goods. See generally, Patricia L. Bellia, Defending Cyberproperty, 79 N.Y.U. L. REV. 2164 (Dec. 2004) (discussing legal claims related to injunctions against unwanted computer system use); Michael A. Carrier & Greg Lastowka, Against Cyberproperty, 22 BERKELEY TECH. L.J. 1485, (2007) (arguing against broad classification of cyberproperty); Fairfield, supra note 10 (addressing legal issues related to emerging forms of property); Charles Blazer, Note, The Five Indicia of Virtual Property, 5 PIERCE L. REV.
surprise deletions had occurred before, this was the first time a user sued. The plaintiff reached a settlement granting monetary damages and enjoining future deletions from Kindles. Despite the lawsuit’s success, Amazon’s technological capability to interfere with digital customer products after they are purchased has not changed. At the heart of it, Amazon electronically

137 (2007) (discussing approach for defining virtual property); and Molly Stephens, Note, Sales of In-Game Assets: An Illustration of the Continuing Failure of Intellectual Property Law to Protect Digital-Content Creators, 80 TEX. L. REV. 1513 (2002) (addressing the failures of the current system to protect intellectual property). Instead, this Note will focus on products like ebooks and music downloads that are digital analogues to ubiquitous products in the non-digital world. See Baker, supra note 4.

12 Complaint, supra note 6; Stone, supra note 5.

13 Fowler, supra note 2. See also Stipulation of Settlement at 5, Gawronski v. Amazon.com, Inc., No. 09-CV-01084-JCC (W.D. Wash. Sept. 25, 2009), available at http://assets.bizjournals.com/cms_media/pdf/KindleCase1.pdf?site=techflash.com [hereinafter Settlement]. While not explicitly laid out, the language of the agreement indicates that Amazon is enjoined from deleting items from any Kindles, not just those of the Plaintiffs, since the initial lawsuit was brought on behalf of three certified classes, one of which was all Kindle users. Id.

14 See Nilay Patel, Amazon Clarifies Kindle Book-Deletion Policy, Can Still Delete Books, ENGADGET (Oct. 1, 2009), http://www.engadget.com/2009/10/01/amazon-clarifies-kindle-book-deletion-policy-can-still-delete-b/. In the wake of the deletions, for example, Amazon CEO Jeff Bezos claimed that in looking ahead, “[w]e will use the scar tissue from this painful mistake to help make better decisions going forward, ones that match our mission.” Eric Engleman, Bezos Apologizes for Removal of Classic Orwell Titles from Kindle, TECHFLASH (July 23, 2009), http://www.techflash.com/seattle/2009/07/Bezos_apologizes_for_removal_of_classic_Orwell_titles_from_Kindle_51519642.html. Amazon also apologized profusely, calling the deletions "stupid, thoughtless, and painfully out of line with our principles." Id. Although Amazon’s intentions may have changed, their capacity to delete remains the same. See Patel, supra. Amazon has subsequently explained that a third party, who did not possess rights to the books 1984 or Animal Farm, uploaded them to the Kindle Store via Amazon’s self-service upload tool. See Stone, supra note 5. The company attempted to excuse its behavior by explaining that the ebooks removed had been sold in the Kindle Store in violation of copyright law, and that Amazon was simply trying to provide a remedy for the oversight. See Fowler, supra note 8. Understandably, the apologies and excuses have not fully allayed users’ anger or uncertainty about future actions, because the technological sophistication that enabled Amazon to delete the ebooks remains functional. See Ina Fried, Amazon Says It Won’t Repeat Kindle Book Recall, CNET NEWS (July 17, 2009), http://news.cnet.com/8301-13860_3-10290047-56.html?tag=mcncol;1n; Farhad Manjoo, Why 2024 Will be Like Nineteen Eighty-Four, SLATE (July 20, 2009), http://www.slate.com/id/2223214; Patel, supra. One can certainly
“stole” Kindle users’ books and notes with impunity.\textsuperscript{15}

The Orwell deletions also call attention to the changing nature of consumer transactions, as high quality Internet-based services and digital products with sophisticated technological platforms become available.\textsuperscript{16} Several factors create a distinct power imbalance between the modern Internet customer and the digital product provider.\textsuperscript{17} First, and most importantly, there is a technological imbalance that allows providers to invade users’ privacy and reach into their homes in unprecedented ways.\textsuperscript{18} Second, there is an information imbalance: customers’ expectations regarding the true nature and legal status of their purchases are frequently inaccurate.\textsuperscript{19} Third, there is a bargaining imbalance where even the informed customer has little say over any of the terms and conditions they agree to during online transactions.\textsuperscript{20} Often, these end-user license agreements (“EULAs”) resemble contracts of adhesion with terms that strongly favor the provider.\textsuperscript{21}

Imagine scenarios in which corporations might suddenly find incentives to delete ebook files that outweigh the deterrent factor of their settlements. \textit{See} Manjoo \textit{supra}; Patel \textit{supra}.\textsuperscript{15} See Patel, \textit{supra} note 14; Pogue, \textit{supra} note 8.\textsuperscript{16} See \textit{Jonathan Zittrain, The Future of the Internet and How to Stop It} 4 (Yale University Press 2008); David Barnhizer, \textit{Propertization, Contract, Competition, and Communication: Law’s Struggle to Adapt to the Transformative Powers of the Internet}, 54 CLEV. ST. L. REV. 1, 7 (2006).\textsuperscript{17} See infra notes 18-21 and accompanying text.\textsuperscript{18} See ZITTRAIN, \textit{supra} note 16, at 113; Fairfield, \textit{supra} note 10, at 1065-67; Manjoo, \textit{supra} note 14.\textsuperscript{19} See ZITTRAIN, \textit{supra} note 16, at 177; Tal Z. Zarsky, \textit{Law and Online Social Networks: Mapping the Challenges and Promises of User-Generated Information Flows}, FORDHAM INTELL. PROP., MEDIA AND ENT. L.J. 741, 763 (2008). Many customers, for example, believe that when they are buying an ebook, they are purchasing legal title, rather than just a license. \textit{See} Manjoo, \textit{supra} note 14.\textsuperscript{20} See Daniel D. Barnhizer, \textit{Propertization Metaphors for Bargaining Power and Control of the Self in the Information Age}, 54 CLEV. ST. L. REV. 69, 71-72 (2006). A contract of adhesion is essentially one of procedural unconscionability. \textit{See} Flores v. Transamericia Homefirst, Inc., 113 Cal. Rptr. 2d 376, 381-82 (Cal. Dist. Ct. App. 2001) (addressing arbitration clause in reverse mortgage); Aguillard v. Auction Mgmt. Corp., 908 So. 2d 1, 8-9 (La. 2005) (defining contracts of adhesion as “standard contract[s], usually in printed form, prepared by a party of superior bargaining power for adherence or rejection of the weaker party.”).\textsuperscript{21} See Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91, 104-106 (3d Cir. 1991) (holding that shrinkwrap terms as elements of bargained-for transactions are not enforceable); Arizona Retail Sys., Inc. v. Software Link,
This Note will explore the threat of the growing power of Internet-based product and service providers over digital property, and how tort actions, specifically conversion, can help restore the balance of power. Part I discusses the growing consolidation of Internet-based provider power, and how providers exert control over their products after the sale through technological controls and EULAs, as illustrated by the Kindle case. Part II describes the practical details of the Orwell deletion litigation, revealing the best methods for protecting customers’ digital property going forward. Part III presents the history of conversion and an analysis of modern conversion actions, detailing recent court inclusions or exclusions of digital property in conversion charges, and demonstrates how technology changes in digital property can be legitimate forces for legal change. Finally, Part IV argues that tort litigation in the form of conversion is the best way to curb provider control over post-sale digital property.

I. Background

A. Kindle Mechanics

In addition to the Kindle, Amazon sells digital books, magazines, and other texts, which are downloaded through a wireless radio network. Users may modify and annotate their
downloaded publications by entering written notes with a full keyboard, dog-earring pages, placing bookmarks, and saving segments as “clippings.”

All of these modifications are saved both on the user’s device itself and on Amazon’s servers during routinely conducted uploads.

Despite efforts to make the Kindle resemble a traditional book, there are important differences between this digital format and print publications. Contrary to the popular conception that users buy a digital book when they purchase a publication for the Kindle, users only receive a license to view the purchased title on their Kindle device. The device communicates with the Amazon servers, where the source copies of each publication are stored, and the device temporarily saves each publication on users’ Kindles. Thus, Amazon retains and controls the full copy of the purchased content, which is stored alongside user notes on the company’s server.

B. The Consolidating Control of Internet Product Providers

Internet-based service and product providers frequently enlarge their power vis-à-vis consumers, and exploit the resultant power imbalance they hold over customers. Operating their websites, products, and transactions in an essentially unrestricted

27 Amazon Kindle Homepage, supra note 4.
29 See Baker, supra note 4.
30 See Kindle License Agreement, supra note 28; Manjoo, supra note 14.
31 Amazon Kindle Homepage, supra note 4.
32 See id. Amazon posits this setup is a benefit, allowing a customer who loses his Kindle to have full content restored upon receipt of a new device. Id. The ability to provide this consumer benefit comes at the expense of retaining control over the publications and user modifications long after the initial sale. Id. The only way to prevent this communication is to disable the wireless radio function by flipping off the device’s radio switch. Id. But because this solution only lasts as long as the radio connection is disabled, a user who chooses this option can never purchase new books, which are delivered via the radio function. Id. Essentially, a customer’s only weapon to fight automatic updates cripples the device permanently. Id.
manner, digital product providers are aptly positioned by their sophisticated technological infrastructure to gain the upper hand over consumers who enter into contractual relationships with them.34 Future harms of this imbalance could include entrenchment of the acceptability of Internet-based providers interfering with products after they are sold.35 Acceptance of such interference could eviscerate the privacy of one’s home, diminish one’s autonomy in controlling purchased goods, or interfere with commerce by weakening consumer trust and willingness to engage in online transactions.36

1. Technological Controls Used on Customers

Licensed electronic books differ from printed books in part because the historical use and sale of intellectual property over the Internet has encouraged aggressive protectionist behavior from copyright protected digital product providers.37 Providers of digital music attempted to prevent widespread illegal downloads on file sharing websites by bringing major lawsuits.38 As centralized music sharing services were taken down, however, unauthorized music trading activity migrated to Peer-to-Peer (“P2P”) file sharing, which was harder to track, rendering litigation more difficult.39

Product providers, therefore, turned to powerful digital rights management (“DRM”) technologies to help control the use of their products.40 DRM helps limit unauthorized uses of copyrighted materials by adding sophisticated security programs to digital products, making it difficult for users to create copies or

35 See ZITTRAIN, supra note 16, at 4, 113; Manjoo, supra note 14.
37 Matthew Amedo, Shifting the Burden: The Unconstitutionality of Section 512(H) of the Digital Millennium Copyright Act and Its Impact on Internet Service Providers, 11 COMMLAW CONSPECTUS 311, 312 (2003); Candidus Dougherty & Greg Lastowka, Virtual Trademarks, 24 SANTA CLARA COMPUTER & HIGH TECH. L.J. 749, 774 (2008); Fairfield, supra note 10, at 1065-66.
38 See Amedo, supra note 37, at 311-13. The ease of copying these products and the rise of file sharing websites led to numerous lawsuits. Id.
39 See id.
use the product on competitors’ devices. But protecting against copyright infringement by strengthening DRM exponentially increases providers’ power over digital products post-sale. Further, bolstering DRM technology has created an escalating “arms race” between product providers and consumers or hackers. Every DRM advance causes hackers to respond with their own technological solution, which in turn prompts providers to create even stronger, more sophisticated controls. Thus, DRM technologies have significantly amplified the power of digital content providers without delivering absolute protection against copyright infringement.

The prominent control of Internet-based providers has become a part of users’ lives in other ways. As electronic devices rise in popularity, and users increasingly access the Internet through those devices, the ability to regulate what users can do through the Internet vests more and more in the producers of those devices. Email service providers also retain access to consumer information after customers engage in an initial service agreement. These providers have access to customers’ email accounts, which are becoming repositories of personal and sensitive information as entities like Google increase storage limits and encourage users not to delete anything. Not only does this raise privacy issues, but these providers are contractually empowered to delete users’ information under certain

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41 See ZITTRAIN, supra note 16, at 105-07; Bechtold, supra note 40, at 325.
43 See id. at 61.
44 See id.
45 See id. at 60-61; Bechtold, supra note 40, at 331.
46 See Barnhizer, supra note 20, at 70-71. The information gathered about consumers includes, “the Internet searches a consumer performed, web sites visited, items viewed, purchases made, as well as any personal data surrendered by the consumer in the course of his or her shopping. . . .In the information era, consumer activities are transparent and known by those who can pay for that knowledge, and in most cases consumers have no control over how others use their personal information.” See id. at 77-78.
47 See ZITTRAIN, supra note 16, at 8-9, 105-07.
48 See Schwartz et al., supra note 36, at 598-99. Another example of such service provider control and court tolerance is illustrated by the Flickr EULA and concomitant litigation in Chang v. Virgin Mobile USA. See 2009 WL 111570, at *1 (N.D. Tex. 2009) (holding defendant Virgin Mobile not liable for using Plaintiff’s photo, without Plaintiff’s knowledge, as part of advertising campaign, in part because Flickr’s EULA allowed such use).
49 See Schwartz et al., supra note 36, at 600-01.
conditions.50

2. The Use of End-User License Agreements

Many Internet-based providers use EULAs, which are contracts specifying the services and functionalities customers may expect from the provider.51 EULAs are often required at the point of sale, creating contract-based restraints on customers’ activity.52 Apple, Inc., for example, has admitted that it regularly conducts sweeps of all iPhones, checking to see if any unapproved applications (“apps”) exist.53 Further, Apple’s EULA for the iPhone gives Apple the right to eliminate any apps at any time.54 This use of a EULA comes remarkably close to permitting Apple to undertake activity similar to Amazon’s Orwell deletion.55 The Apple EULA demonstrates how providers control their post-sale products by creating contracts to reserve power and lay out specific, limited consumer uses.56

Amazon, like virtually every modern Internet provider, uses EULAs. Unlike the EULAs used for most online transactions, though, the Amazon Kindle: License Agreement and

50 See id. In his Complaint, the plaintiff noted that the “power to delete your books, movies, and music remotely is a power no one should have. . . .” See Complaint, supra note 6, at 2 (quoting Manjoo, supra note 14). This sentiment could arguably extend beyond the digital product realm and across all Internet transactions and standing relationships, including email. See Manjoo, supra note 14.

51 See Richard Warner, Turned on its Head?: Norms, Freedom, and Acceptable Terms in Internet Contracting, 11 TUL. J. TECH. & INTEL. PROP. 1, 3-4 (2008).

52 Id. at 22-24.

53 Manjoo, supra note 14. The iPhone is one of Apple’s premier devices, which combines the functionality of a cellular phone, digital music player, and internet browser. See Apple iPhone Homepage, http://www.apple.com/iphone/ (last visited Apr 14, 2010). Apps are application programs, developed by users or Apple, that are designed to enhance some element of the device’s functionality. See id. Popular apps display maps and routes for users, provide games, or perform calculator functions. See id.

54 Fred von Lohman, All Your Apps Are Belong to Apple: The iPhone Developer Program License Agreement, ELECTRONIC FRONTIER FOUNDATION (Mar. 9, 2010) http://www.eff.org/deeplinks/2010/03/iphone-developer-program-license-agreement-all; Manjoo, supra note 14.

55 See von Lohman, supra note 54; Manjoo, supra note 14.

56 See Barnhizer, supra note 20, at 70-71; Maureen A. O’Rourke, Fencing Cyberspace: Drawing Borders in a Virtual World, 82 MINN. L. REV. 609, 687-90 (1998); see also supra note 21 and accompanying materials.
Terms of Use takes the form of a classic shrinkwrap agreement ("shrinkwrap"). A shrinkwrap is delivered enclosed in a physical product’s packaging, either visible through the packaging’s plastic wrapper, or buried inside, with labeling or stickers on the outer packaging notifying consumers of the license within. The customer’s act of opening the wrapping signifies his assent to the terms of the shrinkwrap license, even though the agreement and its terms are inside the wrapping. The only way to express lack of assent to the agreement is to return the product. However, retailers often reject returns despite language to the contrary included in the shrinkwrap.

Nonetheless, courts have upheld shrinkwraps over the last two decades. In 1996, the Seventh Circuit decided the tide-changing case on shrinkwrap approval, ProCD, Inc. v. Zeidenberg, in which a court held a shrinkwrap enforceable for the first time. Although the case history following ProCD’s approval of shrinkwraps has been mixed, the majority of courts have come to recognize and uphold shrinkwraps. ProCD’s

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57 See ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449 (7th Cir. 1996) ("The ‘shrinkwrap license’ gets its name from the fact that retail software packages are covered in plastic or cellophane 'shrinkwrap,' and some vendors . . . have written licenses that become effective as soon as the customer tears the wrapping from the package."); Mark A. Lemley, Terms of Use, 91 MINN. L. REV. 459, 467 (2006); Amazon Kindle: License Agreement and Terms of Use, amazon.com (Feb. 9, 2009) http://www.amazon.com/gp/help/customer/display.html?nodeId=200144530. Technically, the Kindle EULA arrives in digital form, loaded onto the user’s Kindle, but in the sense that it may only be read after opening the device packaging, it should be approached as a shrinkwrap. See Kindle License Agreement, supra note 28.


59 Id.

60 Id., supra note 57, at 467-68.

61 Id.

62 ProCD, 86 F.3d at 1449, 1455 (7th Cir. 1996). ProCD was the first case to recognize the validity of a shrinkwrap, and it set the stage for enforcement of agreements that could only be read after a customer had paid for and opened the packaging of the product containing the agreement. Id.

63 Lemley, supra note 57, at 468-69. See, e.g., Hill v. Gateway 2000, Inc., 105 F.3d 1147, 1150-51 (7th Cir. 1997) (holding mail-order computer purchase's shrinkwrap constituted the effective contract for the transaction, and therefore was enforceable); Specht v. Netscape Comm. Corp., 150 F. Supp. 2d 585, 592-93 (S.D.N.Y. 2001) (holding online EULA not binding due to greater similarity to browsewrap agreement than otherwise acceptable shrinkwrap, which is unenforceable because of lack of consumer consent). But
acceptance of binding consumers at an early stage in the transaction process also paved the way for later judicial acceptance of clickwrap\(^4\) and browsewrap\(^5\) agreements, which are alternative forms of EULAs that occur in the context of online transactions and web-browsing, respectively.\(^6\)

As a category, these EULAs are one-sided contracts and are often not bargained-for, whether they come physically as paper inserts in packaging or appear digitally during an online transaction.\(^7\) These agreements have empowered online providers by entrenching their practice of setting EULA terms, which are often very favorable to the online provider.\(^8\) One commentator argues that court recognition and enforcement of shrinkwraps has “undermined classical notions of assent” because consumer rights and power are curtailed by the requirement to accept any and all terms produced by the product provider.\(^9\)

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\(^5\) Clickwraps are standardized contracts displayed on a flash screen during an online transaction or download, requiring the user to click on a box (sometimes with accompanying text “I accept” to signify their assent to the terms). Specht, 150 F. Supp. 2d at 593-94.

\(^6\) Browsewraps, similar to clickwraps, are agreements internet users enter into while using the Internet. Id. at 594. They are more specific than clickwraps in that assent is implied by a user’s simple act of accessing a provider’s website. Id. at 594-95. A link at the bottom of a webpage will usually say “Terms and Conditions” or “Terms of Use,” and upon clicking the link, an Internet user will be able to view all of the terms they have “agreed” to by logging on to a website and continuing to use it. Id. Browsewraps and clickwraps pose complicated issues that go well beyond the scope of this Note. See Ty Tasker & Daryn Pakcyk, Cyber-Surfing on the High Seas of Legalese: Law and Technology of Internet Agreements, 18 ALB. L.J. SCI. & TECH. 79, 95-96 (2008) (discussing generally modern developments in online contracting).

\(^7\) Warner, supra note 51, at 3-4.

\(^8\) See Lemley, supra note 57, at 459-61. However, the court also reasoned in ProCD that customers were not totally deprived of reasonable opportunity to assent, given that their assent was not demanded at any one time, but rather took place on their own time table. ProCD, 86 F.3d at 1452-53.

C. The Kindle’s Own EULA

In addition to Amazon’s implementation of Kindle DRM, its collection of consumer information, and its ability to remove information from Kindles, Amazon also uses EULAs as a control device. As soon as customers use their new Kindles, they agree to all provisions of the EULA, as well as any contained in the content provided on Amazon.com, the Kindle Store, or in Amazon.com’s privacy notice. In this way, when they ‘agree’ to the EULA, Kindle users theoretically agree to not only read materials initially, but to continue monitoring the Amazon website for updates or changes to their terms of service.

The Amazon EULA suggests in obscure provisions that buying an ebook only gives users a license to access and read a text file, not to own a distinct, though digital, piece of property. Possessing a mere license restricts the product uses to those outlined by the provider or rights holder, whereas an outright product owner’s uses are unfettered. So, unlike the title holder of a regular book, a Kindle user may not lend his files to a friend, tear out pages for other uses, or do any of the other acts

relates to intellectual property law); Melissa Robertson, Is Assent Still a Prerequisite for Contract Formation in Today’s E-conomy?, 78 WASH. L. REV. 265, 290-93 (2003) (arguing browsewraps should be deemed unenforceable due to lack of assent).


Amazon Kindle: License Agreement and Terms of Use, supra note 57. See id.

RAYMOND NIMMER & JEFF DODD, MODERN LICENSING LAW § 1:2 (2009); Amazon Kindle: License Agreement and Terms of Use, supra note 57.

Nimmer and Dodd offer a definition for a license:

A license is an agreement that deals with, and grants or restricts, a licensee's contractual right, power privilege or immunity with respect to uses (including allowing access to) information or rights in information made available by a licensor. The agreement includes a focus on what rights, immunities, or uses are given or withheld in reference to use of the information as well as what the licensee has agreed to do or not to do with respect to the information.

NIMMER & DODD, supra note 73.

Id. Whether a purchaser has title to digital property otherwise protected by copyright generally depends on the amount of restriction placed on the licensee. Id.
associated with full property ownership.\textsuperscript{76} Thus, in legal and practical terms, a license to view gives users fewer rights than a full title of ownership.\textsuperscript{77}

Though the license granted is quite restrictive, it does not contain an express provision authorizing Amazon to remotely delete Kindle documents, or give notice that such an action is possible.\textsuperscript{78} One might argue that Amazon has harmed its customers by failing to either explicitly notify them about this potential harm or add an express permission for the action.\textsuperscript{79} Further, Amazon’s EULA “grants [users] the non-exclusive right to keep a permanent copy of the applicable Digital Content and to view, use, and display such Digital content an unlimited number of times...”\textsuperscript{80} Interfering with a right granted permanently for unlimited viewings is a breach of that right.\textsuperscript{81} Amazon’s termination of Kindle users’ rights to access their ebooks appears to violate Amazon’s own EULA.\textsuperscript{82}

\section*{II. One User’s Attempt to Right the Power Imbalance}

Plaintiff Justin Gawronski, along with Antoine Bruguier, filed a class action lawsuit in the Western District Court of Washington against Amazon.com, Inc. and Amazon Digital Services, Inc. on behalf of all customers impacted by the Orwell deletions.\textsuperscript{83} The complaint alleged that “remotely deleting digital content” from customers’ Kindles was wrongful.\textsuperscript{84} The plaintiffs alleged harm against three classes: general Kindle owners, whose confidence in their devices was shaken; the class of users whose digital books were removed; and finally the users whose personal notes recorded on the deleted books were rendered useless.\textsuperscript{85} On behalf of these classes, the plaintiffs brought a violation of terms of use agreement claim, a conversion claim, and a breach of contract claim that cited the Kindle Terms of Use Policy.\textsuperscript{86} The

\textsuperscript{76} See id.; Amazon Kindle: License Agreement and Terms of Use, supra note 57.
\textsuperscript{77} See NIMMER & DODD, supra note 73.
\textsuperscript{78} See Amazon Kindle: License Agreement and Terms of Use, supra note 57.
\textsuperscript{79} See id.
\textsuperscript{80} Id.
\textsuperscript{81} See id.
\textsuperscript{82} See id.
\textsuperscript{83} Complaint, supra note 6, at 1.
\textsuperscript{84} Id. at 2.
\textsuperscript{85} Id. at 8.
\textsuperscript{86} Id. at 10-16. Plaintiffs also brought a federal computer fraud claim, a
plaintiffs sought a declaratory judgment that Amazon acted wrongly and without justification, and prayed for damages, litigation expenses, and injunctive or declaratory relief from the same type of behavior in the future.\textsuperscript{87}

In early September 2009, while the litigation was pending, Amazon offered its customers either $30 or a new version of the deleted books.\textsuperscript{88} While this offer might have satisfied some consumers, it came almost two months after the deletions, and much of the injury suffered by customers was irreparable.\textsuperscript{89}

On September 25, 2009, just weeks after Amazon’s reimbursement offer, the parties settled the lawsuit out of court.\textsuperscript{90} The settlement awarded $150,000 to the plaintiff’s attorney, with a stipulation that part of it go to charity, and enjoined Amazon from remotely deleting or modifying Kindle users’ ebooks or notes unless requirements such as obtaining a judicial order or consumer consent are met.\textsuperscript{91} Thus, a formal legal agreement now exists, requiring Amazon to uphold its promise not to haphazardly make any deletions from users’ Kindles.\textsuperscript{92}

Although the suit has been settled, and Amazon theoretically has less incentive to pursue a future deletion, since doing so will mean disobeying a court order, many of the issues the Orwell deletions laid bare remain.\textsuperscript{93} In the future, Amazon simply could contract for consumer assent to deletions by using shrinkwrap EULAs, or deviate from promised service when ordered by a court or other higher authority to do so.\textsuperscript{94} Despite trespass to chattels claim, and a state law consumer protection claim. \textit{Id.}

\textsuperscript{87} \textit{Id.} at 17-18.

\textsuperscript{88} Fowler, \textit{supra} note 2.

\textsuperscript{89} \textit{Id.}

\textsuperscript{90} \textit{Id.}

\textsuperscript{91} Settlement, \textit{supra} note 13, at 5. Although awards typically go to the plaintiffs themselves, in this case, for reasons that are not evident from the settlement agreement, the award went to the plaintiff’s counsel, at least in part as a payment of fees. \textit{See} Simon Usborne, \textit{No Sense of Belonging}, INDEPENDENT (Jan. 6, 2010) \textit{available at} http://www.independent.co.uk/lifestyle/gadgets-and-tech/features/who-owns-your-ebook-1858785.html (quoting Harvard Law Professor Jonathan Zittrain).

\textsuperscript{92} \textit{See} Settlement, \textit{supra} note 13, at 4.

\textsuperscript{93} \textit{See id.}

\textsuperscript{94} See Lemley, \textit{supra} note 57, at 459-61. One commentator argues that “the law needs to catch up with the technology to prevent a scenario in which ‘a court-ordered change at Google could affect every participating library and consumer’s version of the book’... Devices like the Kindle ... ought to be designed so that people can back up a copy of a work that places it beyond the reach of the vendor, and anyone who might order the vendor around.” \textit{Id.}
the publicity of the Orwell deletions, consumers may remain unaware of the nature of the item they are “buying.” In addition, the fact that the users affected were offered full refunds may not truly repair customers’ sense of betrayal by a trusted business provider. Finally, Amazon is only one of hundreds of major online retailers large and powerful enough to wield this type of control over customers in their homes, so this settlement hardly marks an end to such conduct.

Applicable litigation-based solutions addressing the growing power imbalance between consumers and providers are limited. Although current contract remedies might seemingly provide a solution, EULAs are standard in most transactions and have been routinely upheld by courts. Eliminating their use would completely disrupt the form of modern online transactions. Eliminating the types of one-sided provisions providers often include in EULAs would require exceptional, and therefore inefficient, court oversight of private business transactions. Beyond these practical and theoretical problems, encouraging contract remedies would not elicit any moral condemnation or disincentives the way punitive damages would for providers’ egregious actions.

95 See Manjoo, supra note 14.
96 See Settlement, supra note 13, at 5.
97 See Manjoo, supra note 14.
98 See Barnhizer, supra note 16, at 1-2. Criminal law and crimes akin to theft or burglary are beyond the scope of this Note. See Arias, supra note 11, at 1308. Privacy violations are also beyond the scope of this Note (considering privacy issues in the context of the non-physical world). See generally Patricia Sánchez Abril, Recasting Privacy Torts in a Spaceless World, 21 HARV. J.L. & TECH. 1, 3 (2007); Daniel Benoliel, Law, Geography and Cyberspace: The Case of On-line Territorial Privacy, 23 CARDOZO ARTS & ENT. L.J. 125, 126 (2005) (discussing the meaning of “territorial privacy” in cyberspace); Brain Kane & Brett T. Delange, A Tale of Two Internets: Web 2.0 Slices, Dices, and is Privacy Resistant, 45 IDAHO L. REV. 317, 318 (2009) (analyzing various ways Internet transactions infringe on user privacy); Dierdre K. Mulligan, Reasonable Expectations in Electronic Communications: A Critical Perspective on the Electronic Communications Privacy Act, 72 GEO. WASH. L. REV. 1557 (2004) (questioning the adequacy of the Electronic Communications Privacy Act to protect consumer privacy).
99 See Tasker & Packyk, supra note 65, at 148-49.
100 See Streeter, supra note 58, at 1387.
Tort actions, on the other hand, do include elements of moral condemnation.\(^{102}\) Although only acts undertaken with intent or malice generally meet the standard required for a court to impose punitive damages, the idea of implicit wrongdoing is inherent in all tort actions.\(^{103}\) Within tort law, conversion is the best forum for addressing Internet-based provider deletions or control issues.\(^{104}\)

The remainder of this Note will examine the applicability of tort, specifically conversion, to digital products.\(^{105}\) Then, it examines and defends the rationale for judicial adoption of digital products into this cause of action to respond to highly empowered Internet-based digital property providers.\(^{106}\)

### III. Conversion & Digital Property: A Foundation

#### A. A Short History of Conversion

One solution for counterbalancing the immense power of digital product and service providers is the common law tort of conversion.\(^{107}\) Conversion is the unauthorized or wrongful use of even involve the kind of moral condemnation associated with tort law, much less with criminal law. Contract law has strict liability and is unconcerned with assigning moral judgment to breach, either by allowing defenses or by awarding punitive damages.\(^{109}\) Id.


\(^{103}\) See *RESTATEMENT (SECOND) OF TORTS* § 908 (1979). With specific reference to conversion, “punitive damages may be allowed in a conversion action when the conversion involves elements of fraud, ill will, malice, recklessness, wantonness, oppression, insult, willful or conscious disregard of the plaintiff’s rights, or other aggravating circumstances.” 18 AM. JUR. 2D *Conversion* § 125 (2010) (footnotes omitted); see also Crowd Mgmt. Servs. v. Finley, 784 P.2d 104, 106-07 (Or. Ct. App. 1989) (awarding punitive damages on theory of deterrence when defendant showed willful disregard for plaintiff’s rights and converted plaintiff’s money); Murray v. J & B Int’l Trucks, 508 A.2d 1351, 1355-56 (Vt. 1986) (awarding punitive damages when reckless disregard for plaintiff’s rights led truck financing company to repossess plaintiff’s truck).

\(^{104}\) See *RESTATEMENT (SECOND) OF TORTS* § 223 (1979).

\(^{105}\) See *infra*, notes 107-158 and accompanying text.

\(^{106}\) See *infra*, notes 159-259 and accompanying text.

another’s property.\textsuperscript{108} Traditionally the tort was limited to chattels, which are tangible personal property.\textsuperscript{109} The historical anchoring of conversion in chattels is important because it means that conversion traditionally would not apply to intangible property.\textsuperscript{110}

Conversion evolved out of trover, an action to compensate plaintiffs for lost chattels found by another person who refused to return them.\textsuperscript{111} Over the centuries the tort “became encrusted . . . with legal rules that assumed that the property taken was tangible.”\textsuperscript{112} The Restatement (Second) of Torts refers to conversion as dispossessing another of a chattel through “intentional exercise of dominion or control” and “seriously interferes with the right of another to control it.”\textsuperscript{113}

A chattel-taker’s intentional conduct, rather than his good or bad faith, is the key aspect to conversion liability.\textsuperscript{114} Dispossession of one’s property is committed intentionally when one takes “a chattel from the possession of another without the other’s consent” or bars “the possessor’s access to a chattel,” among other methods.\textsuperscript{115} Thus, a small element of scienter is inherent in conversion, because liability requires understanding that the property belongs to another.\textsuperscript{116}

The traditional conception of conversion began fading in use products after purchasing them from online providers. See Armstrong, \textit{supra} note 42, at 60-61. However, the issues examined in this Note take almost the opposite approach, and examine products that have already been sold, which are subsequently interfered with or taken back by the original seller. See \textit{id}. In this sense, this Note departs from one of the most traditional legal approaches, copyright protections and intellectual property regulation. See Dougherty & Lastowka, \textit{supra} note 37, at 774.

\textsuperscript{108} \textsc{Restatement (Second) of Torts} § 223 (1965); \textsc{Restatement (Second) of Torts} § 227 (1965).

\textsuperscript{109} See Buckman, \textit{supra} note 102, at § 2.

\textsuperscript{110} \textit{Id}.

\textsuperscript{111} W. Page Keeton et al., \textsc{Prosser and Keeton on the Law of Torts} 89 (W. Page Keeton et al. eds., West 5th ed. 1984); Val D. Ricks, Comment, \textit{The Conversion of Intangible Property: Bursting the Ancient Trover Bottle with New Wine}, 1991 BYU L. Rev. 1681, 1683 (1991).

\textsuperscript{112} Ricks, \textit{supra} note 111, at 1685.

\textsuperscript{113} \textsc{Restatement (Second) of Torts} §§ 223(a) (1965); \textsc{Restatement (Second) of Torts} §§ 222A (1965).

\textsuperscript{114} See 18 AM. JUR. 2d Conversion § 3 (2010).

\textsuperscript{115} \textsc{Restatement (Second) of Torts} § 221 (1965).

\textsuperscript{116} \textit{Id}., § 222 cmt. b. Courts will end their inquiry, though, upon establishing intentionality and ignore any elements of good or bad faith the tortfeasor may possess. See \textit{id}.
the last century when wealth started shifting toward intangible assets such as securities. Courts began to recognize conversion of intangible assets or other property embodied in physical documents, like stock certificates, leading to a doctrine called “merger.” Under this doctrine, when intangible rights are merged, or represented, in a document that is then converted, the original owner may receive the value of the embodied intangible right in a successful conversion action.

Some courts have begun to waive the formal requirement that an asset or chattel be manifested in a physical document in certain circumstances, while other courts cling to the physical document element. More liberal treatments of the merger

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117 See Buckman, supra note 102, at § 2.
118 See H. D. Warren, Annotation, Nature of Property or Rights Other Than Tangible Chattels Which May Be Subject of Conversion, 44 A.L.R. 2d 927 (1955); see also RESTATEMENT (SECOND) OF TORTS § 242 (1965):

(1) Where there is conversion of a document in which intangible rights are merged, the damages include the value of such rights.

(2) One who effectively prevents the exercise of intangible rights of the kind customarily merged in a document is subject to a liability similar to that for conversion, even though the document is not itself converted.

Id.

119 RESTATEMENT (SECOND) OF TORTS § 242 (1965). Though a stretch from the original conception of tangible chattel, the doctrine of merger makes sense because when a tortfeasor interferes with or takes a document that embodies intangible rights, he also takes those intangible rights away from the original possessor. See id. Those intangible rights are what make the document valuable; without them, any given document may not be worth more than the value paper and ink on it. See id. Courts have upheld conversion suits for all types of intangibles merged with physical documents over the years. See Pickford Corp. v. De Luxe Labs., Inc., 169 F. Supp. 118, 120 (S.D. Cal. 1958) (literary property inherent in motion picture film); Simon v. Reilly, 151 N.E. 884, 885 (Ill. 1926) (bonds); Iavazzo v. R.I. Hosp. Trust Co., 155 A. 407, 408 (R.I. 1931) (savings bank books). Incorporating merger into the modern notion of conversion empowers many to recover the value of intangible goods taken from them. See RESTATEMENT (SECOND) OF TORTS § 242 (1965).

120 See Franks, supra note 107, at 517. Although New York and California have waived the requirement, other states have taken a relaxed approach to the doctrine of merger: Alabama, Arkansas, Florida, Indiana, Maine, Massachusetts, Nebraska, and Pennsylvania. See id. at 517, & n. 197.

121 See Arias, supra note 11, at 1311-12. States that have refused to depart from the requirement of physical merged documents include Nevada, Oklahoma, Tennessee, and Texas. See id.; Franks, supra note 107, at 522, & n. 233. In between the two extremes of this type of treatment and more liberal treatment from jurisdictions doing away with merger requirements for intangible property are a number of other middle-of-the-road approaches
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doctrine will allow any type of media to effect a merger, while more restrictive approaches require an actual document as the embodiment of the intangible right, effectively barring many types of digital property from recovery.  

B. Applying the Historical Law of Conversion to Technology of the Digital Era

By slightly expanding the doctrine of conversion, it could apply equally to digital property that is not embodied in a physical document. This tort could become critical in our era of hacking, firewalls, and encryption, where many important documents exist solely in digital format, reachable from any location. The average hacker might have little trouble interfering with owners’ personal documents. Their actions would be takings or manipulations of the intangible documents themselves, rather than the merged physical documents.

1. Kremen v. Cohen Sets an Agenda

Conversion of digital property has been successfully pled in some jurisdictions for decades. Certain states, notably California and New York, have repeatedly recognized conversion of digital property. Kremen v. Cohen, decided in 2003 by the Ninth Circuit, is a seminal decision in this trend. The plaintiff sued Network Solutions, a domain name registry corporation, for giving away plaintiff’s properly registered Internet domain name cobbled together by courts. See Franks, supra note 107, at 518-19.

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122 See Arias, supra note 11, at 1311. Thus, digital property like ebooks, which are not merged with any type of unique physical document, would not be treated as fitting in the merger doctrine. See id.
123 See Restatement (Second) of Torts § 242 (1965).
124 See Buckman supra note 102, at § 2
125 See Restatement (Second) of Torts § 242 (1965); Buckman supra note 102, at § 2.
128 Kremen, 337 F.3d at 1036.
to a third party.\textsuperscript{129} This third party fraudulently persuaded defendant Network Solutions to transfer the registration and began using the domain name for personal profit.\textsuperscript{130} Kremen sued Network Solutions asserting conversion among other claims.\textsuperscript{131} The Ninth Circuit upheld plaintiff’s conversion claim for his Internet domain name.\textsuperscript{132}

The court noted that California law had begun disposing of the strict requirement that property be merged with a tangible document over a century earlier.\textsuperscript{133} In 1880, the California Supreme Court resolved that the common law notion of conversion had “developed into a remedy for the conversion of every species of personal property.”\textsuperscript{134} In Kremen, the Ninth Circuit noted that California at various stages in time continually rejected strict merger requirements.\textsuperscript{135}

The Ninth Circuit continued by reasoning that regardless of California’s stance on merger, an electronic registry containing plaintiff’s domain name absolutely counted as a document, based on the fact “that it is stored in electronic form rather than on ink and paper is immaterial.”\textsuperscript{136} Describing the standard for identifying property rights in any context, the court applied a three-pronged analysis.\textsuperscript{137} First, it recognized that the intangible property must be sufficiently well defined to give others notice of the property right.\textsuperscript{138} Second, exclusivity in the property right is necessary for any relevant harm to accrue.\textsuperscript{139} Otherwise the possessor would not truly be deprived or harmed by the conversion.\textsuperscript{140} Finally, that claim of exclusivity must be vested in

\textsuperscript{129} Id. at 1026-27.
\textsuperscript{130} Id.
\textsuperscript{131} Id. at 1027-28.
\textsuperscript{132} Id. at 1033-36.
\textsuperscript{133} Id. at 1031.
\textsuperscript{134} Payne, 54 Cal. at 341.
\textsuperscript{135} Kremen, 337 F.3d at 1032.
\textsuperscript{136} Id. at 1033-34. The court explained that “the existence of a paper document rather than an electronic one” was irrelevant. Id. at 1034 (emphasis in original). Otherwise “[t]orching a company’s file room would then be conversion while hacking into its mainframe and deleting its data would not.” Id. The court found it sufficient that the intangible asset bore some relation to a database or depository of information that simply existed somewhere. See id. at 1034, 1036.
\textsuperscript{137} Id. at 1030 (citing G.S. Rasmussen & Assoc. v. Kalitta Flying Services, 958 F.2d 896, 902-03 (9th Cir. 1992)).
\textsuperscript{138} See id.
\textsuperscript{139} See id.
\textsuperscript{140} See id.
the purported owner.\footnote{See \textit{id}.}

2. New York Adopts the Trend

A few years after \textit{Kremen}, in 2007, the New York Court of Appeals similarly recognized virtual property in \textit{Thyroff v. Nationwide Mutual Insurance Co.}, accepting a certified question as to whether the common law action of conversion could be applied to electronic computer records and data.\footnote{See \textit{id}.} The plaintiff in that case was a long-time employee of the defendant insurance company and used a loaned company computer to record client information as one of her duties.\footnote{See \textit{id}.} After firing the plaintiff, the defendant company appropriated the computer, complete with all of the information contained in its files, including her client lists, and plaintiff brought suit to recover the information.\footnote{See \textit{id}.} The court took a functional approach, determining that the computer and electronic documentation are a way of life and should not be “treated any differently from production by pen on paper.”\footnote{See \textit{id}.}

In its discussion, the court listed four reasons why the digital chattel at issue should be recognized for the purposes of conversion.\footnote{See \textit{id}.} First, there must be a civil remedy to accompany the criminal charge of theft in some cases.\footnote{See \textit{id}.} Second, virtual documents are only a button push away from being printed and manifested as tangible chattels.\footnote{See \textit{id}.} Third, in a philosophical sense, writing is writing, no matter what form it takes; and writing is a form of property.\footnote{See \textit{id}.} Fourth, there must be a way to recoup the expenses of creating digitized possessions.\footnote{See \textit{id}.} Elaborating on the practical realities of virtual documents, the court also concluded that it is not a document’s or idea’s physical manifestation that determines its worth, but the value of its content.\footnote{See \textit{id}.}
3. Application to Digital Property is Not Universal

The wave of court acceptance of intangible property or rejection of the strict merger doctrine has not been universal.\(^{152}\) The District Court of Massachusetts, having recognized in 1986 in *Quincy Cablesystems, Inc. v. Sully's Bar, Inc.* that intangibles like cable signals were capable of being converted, recently backpedaled from this position.\(^{153}\) In the 2007 decision, *In re TJX Companies Retail Security Breach Litigation*, the court formally overruled *Quincy* and insisted on adhering to the traditional perspective on conversion, rejecting incorporation of digital property claims into the tort.\(^{154}\) Banks and creditors of TJX Companies sued when a breach in TJX’s secure computer system led to the theft of thousands of digital customer files, including credit card numbers.\(^{155}\) Stating outright that “a claim for conversion based on the type of intangible property at issue here likely is not cognizable in Massachusetts,” the court declined to follow the recent judicial trends in California and New York, as well as the precedent of *Quincy*.\(^{156}\)

The court explicitly insisted that *In re TJX* could be distinguished from *Thyroff* because, unlike the typed electronic document in *Thyroff*, TJX’s computer system was not able to easily print out the converted information.\(^{157}\) Therefore, it seems the lack of physical-world analogues to TJX’s information system was at least partially determinative in the ruling.\(^ {158}\)

C. Technology as a Game-Changer

Technological progress can challenge legal assumptions and precedent with the invention of a single machine or innovation.\(^ {159}\) Discerning the consequential effects of

\(^{152}\) See Arias, *supra* note 11, at 1311-12.

\(^{153}\) See *Quincy Cablesystems*, 650 F. Supp. at 840.


\(^{155}\) See *id.* at 211.

\(^{156}\) See *id.* at 212-213.

\(^{157}\) See *id.* at 213. The court distinguished the case from *Thyroff* because the information on the TJX computer could not be printed easily. See *id.*

\(^{158}\) See *id.* at 212-13.

\(^{159}\) See Greg Lastowka, *Decoding Cyberproperty*, 40 IND. L. REV. 23, 60-61 (2007). Of course the mere fact that new technologies challenge the existing legal structure does not mean there is a de facto mandate to change the law. See *id.* Rather, such challenges should compel reflection on the purposes of
technological change on legal rules is not a problem unique to the age of the computer.160

When the airplane was invented at the turn of the twentieth century, the property ownership adage *cuius est solum eius est usque ad caelum et ad inferos* was well ingrained into legal and social thought.161 Yet by 1946, following a turbulent few decades for aviation law, the United States Supreme Court formally overruled the common law *“usque ad caelum”* adage, pragmatically allowing airplanes to fly over private property above a certain altitude to accommodate the flood of aviation and its critical tie to American commercial and economic interests.162 After decades of emerging aviation technology and ongoing policy debates, one commentator writes, we eventually “changed our property law because of the airplane.”163

Just as the airplane brought critical societal change, online transactions are shaping many aspects of the modern consumer experience, especially with respect to digital media and digital property.164 Indeed, intangible assets or properties are not new, but their accessibility and widespread acceptance in the average person’s life has skyrocketed.165 Now that iTunes is ubiquitous, Amazon has hit seven figure sales tallies, and cloud computing draws nearer, digital property will continue to grow in importance.166

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161 Id. at 16. Roughly translated, the owner of land owns infinitely up to the heavens and down through the underworld.

162 See id. at 247-50, 253 (citing U.S. v. Causby, 328 U.S. 256 (1946)).

163 See id. at 3. Another commentator notes about Causby that the airplane rewrote the law of trespass, and “[w]hat was formerly understood as trespassory is now, with the adoption of new technology, understood as non-trespassory.” See Lastowka, *supra* note 159, at 64.


165 See Streeter, *supra* note 58, at 1386.

166 Mitch Ratcliffe, *Updating Kindles Sold Estimate: 1.49 Million*, RATIONAL RANTS (Dec. 26, 2009), http://blogs.zdnet.com/Ratcliffe/?p=486. Cloud computing is generally defined as the practice of accessing software, programs, and other interfaces that are stored by an unknown third party, whether on the third party’s hardware or as part of the third party’s software system, and which enable users to access their information from any internet connection. Heinan Landa, *Silver Linings: Cloud Computing Changes the*
For the law to be effective in restraining the Internet-based providers’ unfettered control of digital property, it must actively protect customers by establishing equilibrium of control over digital property transactions.\textsuperscript{167} Enlarging the scope of conversion actions to include deleted, hidden, or overtly-controlled digital property would be a critical step forward for courts across the nation.\textsuperscript{168}

IV. The Case for Digital Property Conversion

A. The Inapplicability of Other Solutions

Although legislation is often imperative in furthering consumer protections, formal regulation is seen by many as anathema to the creative spirit and ever-developing nature of Internet technology.\textsuperscript{169} Legislating prematurely, before all the potential harms of consolidating provider control are pinpointed, could also result in laws that do not completely protect consumers, restore the true balance of online transactions, or last beyond the next generation of technology.\textsuperscript{170}

Past efforts to restore balance to the system have also failed.\textsuperscript{171} For example, courts have not been receptive to legal challenges to EULAs based on contract principles.\textsuperscript{172} Courts rule this way in spite of the way EULAs nearly eliminate consumer consent, fail to fulfill true business needs of providers, and resemble contracts of adhesion.\textsuperscript{173}

Applying contract principles to the Kindle EULA, for

\textit{Landscape of IT Services}, 28 no. 5 LEGAL MGMT. 70, 70 (2009); Diane Murley, \textit{Law Libraries in the Cloud}, 101 LAW LIBR. J. 249, 249-50 (2009). Cloud computing could erode consumers’ ownership of their digital property even further by entrenching in society the idea that one’s digital property is not even stored on a personal device, but is kept in some unknown remote location on the internet. \textit{See} Landa, \textit{supra}, at 70. It’s not clear whether the control wielded by digital property providers suggests enough negative consequences that the law should adapt to meet the technology. \textit{See} BANNE\texttt{r}, \textit{supra} note 160, at 247-50.

\textsuperscript{163} \textit{See} Lastowka, \textit{supra} note 159, at 64-65.

\textsuperscript{164} \textit{See} Causby, 328 U.S. at 268; Kremen, 337 F.3d at 1036.

\textsuperscript{165} \textit{See} ZITTRAIN, \textit{supra} note 16, at 105, 111.

\textsuperscript{170} \textit{See id.}, at 4; Donald Labriola, \textit{Dissonant Paradigms and Unintended Consequences: Can (and Should) the Law Save Us from Technology?}, 16 RICH. J.L. & TECH. 1, 7 (2009).

\textsuperscript{171} \textit{See supra} notes 145-62 and accompanying text.

\textsuperscript{172} \textit{See supra} notes 145-62 and accompanying text.

\textsuperscript{173} \textit{See Arias, supra} note 11, at 1332; Lemley, \textit{supra} note 57, at 467.
example, is also more difficult in practice than in theory. On one hand, users generally do not understand what the EULA actually promises, and those users who do read it could be confused by its contradictory terms and legal jargon, potentially signaling lack of assent. On the other hand, permanent license or not, the agreement clearly states that ebooks are subject to suspension of service.

Thus, even absent unfavorable court precedent, contract litigation does not clearly protect customers’ rights. Ideally, though, there should be a legal solution favorable to customers, since most hold mistaken beliefs about what they have agreed to, and in the case of Kindle customers, it is a stretch to argue they ever truly assented to the deletion of their ebooks and notes.

Innovative responses to restrictive DRM have also generally failed to keep pace or provide powerful enough solutions to restore consumers to an equal plane with producers. Without the funding or sophistication to fully trump providers’ DRM, customer efforts to push back only prompt providers to strengthen their DRM, making the technology much more harmful and invasive than it was originally designed to be.

There is a significant and latent threat in innocuous technologies unexpectedly taking on more detrimental features. Another example is the two-way radio feature on the Kindle,

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174 RESTATEMENT (SECOND) OF CONTRACTS § 178(2)(a) cmt. e (1981); O’Rourke, supra note 56, at 692; see Kindle License Agreement, supra note 28. One telling provision states, “Amazon grants [the user] the non-exclusive right to keep a permanent copy of the applicable Digital Content and to view, use, and display such Digital Content an unlimited number of times....” Kindle License Agreement, supra note 28 (emphasis added).

175 See Kindle License Agreement, supra note 28. One article noted, “The contract also states, ‘Amazon reserves the right to modify, suspend, or discontinue the Service at any time, and Amazon will not be liable to you should it exercise such right.’ It defines ‘the Service’ to include ‘provision of digital content.’” Thomas Claburn, INFORMATIONWEEK (July 17, 2009), http://www.informationweek.com/news/personal_tech/drm/showArticle.jhtml?articleID=218501227.

176 See Lemley, supra note 57, at 467; Usborne, supra note 91.

177 See Armstrong, supra note 42, at 61. Ironically, devices are often hacked anyway, given enough time on the market and resources, although these limitations can make the hack impractical for the average user. See id.

178 See Armstrong, supra note 42, at 61. It is important to keep in mind, however, that the mere ability to enforce particular kinds of consumer behavior through DRM implementation does not confer on providers the legal right to such control. See Lastowka, supra note 159, at 66.
which was initially designed to merely perform helpful data backups; its operational scope has since been expanded in problematic ways to delete Kindle files.\textsuperscript{179} The amount of information handled or controlled by Internet-based providers is massive and even providers who develop DRM technology in good faith could eventually encounter business incentives or legal mandates to collect or destroy a great deal of customer data no matter what technological protections consumers employ.\textsuperscript{180}

Inducing corporations to voluntarily remove their capacity to interfere could be achieved by relying on competitive markets.\textsuperscript{181} Perhaps the provider who guarantees that they will never interfere with post-sale products, and eliminates their capacity to do so, will gain enough market share to drive competitors out of business.\textsuperscript{182} The competitive market might reward the provider who is able to offer the most attractive post-sale warranties to customers.\textsuperscript{183} If, however, the free market fails to cooperate in this way, turning to private litigation seems the best legal solution.\textsuperscript{184}

B. The Applicability of Private Tort Litigation

A legal remedy that expresses moral condemnation and disincentivizes future harmful action is desirable, making tort

\textsuperscript{179} See Amazon Kindle Homepage, supra note 4.

\textsuperscript{180} See Barnhizer, supra note 20, at 78; Fairfield, supra note 10, at 1065-67. “Commerce between producers and consumers now compromises ‘an exchange of goods or services for money and information.’” Barnhizer, supra note 20, at 78 (quoting Richard S. Murphy, Property Rights in Personal Information: An Economic Defense of Privacy, 84 GEO. L.J. 2381, 2402 (1996)). However, it makes intuitive moral sense that the “power to delete your books, movies, and music remotely is a power no one should have... [Amazon] ought to remove the technical capability to do so, making such a mass evisceration impossible in the event that a government compels it.” Complaint, supra note 6, at 2 (quoting Manjoo, supra note 14).

\textsuperscript{181} See Kesan & Gallo, supra note 34, at 1500; Labriola, supra note 170, at 5.

\textsuperscript{182} See Sony Corp. of Am. v. Univ. City Studios, 464 U.S. 417, 427-28 (9th Cir. 1983). For example, Sony has publicly announced in the wake of the Orwell deletions that Sony does not possess the capability to delete files from its users’ eReaders, and if that promise is important enough to the public, market forces will increase Sony’s share compared to Amazon’s. See Usborne, supra note 91.

\textsuperscript{183} See Sony Corp 464 U.S. at 427-28; ZITTRAIN, supra note 16, at 178.

\textsuperscript{184} Id.
litigation the ideal solution since it encompasses both. In addition to remunerating consumers for the injuries they sustain, the potential for punitive damages in tort actions could also disincentivize Internet-based providers’ harmful behavior. Emphasizing the disadvantages to customers by recognizing digital property conversion would help reinforce the element of moral condemnation inherent in tort actions, for, “it is through law, legal institutions, and legal processes that customs and ideas take on a more permanent, rigid form. . .It affects ways of thinking.”

In the case of the Orwell deletions, Kindle users lost not only their ebooks, but also the use of their important personal notes. These notes could have value far beyond that of the ebook’s value and may even be irreplaceable. If a customer was taking notes to gather ideas for his own upcoming publication, to professionally review the ebook, or to take notes of a spiritual or intensely personal nature, punitive damages could be the most adequate way to address the loss.

In addition to the possibility of punitive damages, tort litigation is applicable due to the intentional nature of Amazon’s conduct. Amazon promoted the note-taking features on the Kindle and knew customers were utilizing them. Further, when Amazon deleted ebooks, it was more than likely aware that users’ coordinated notes attached to those ebooks would be useless. Thus, punitive damages in tort would be applicable because Amazon was substantially certain that the value and future utility of users’ notes would be effectually destroyed.

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186 See Barnhizer, supra note 20, at 18 (quoting LAWRENCE FRIEDMAN, AMERICAN LAW 257 (1984)).
187 See Stone, supra note 5.
188 See ZITTRAIN, supra note 16, at 233. The fleeting nature of momentary genius cannot always be reproduced. See id.
189 See RESTATEMENT (SECOND) OF TORTS § 908 (1979); ZITTRAIN, supra note 16, at 233.
190 See RESTATEMENT (SECOND) OF TORTS §8A (1965).
191 See Amazon Kindle Homepage, supra note 4.
192 See Stone, supra note 5; Amazon Kindle Homepage, supra note 4.
193 See RESTATEMENT (SECOND) OF TORTS §8A (1965); see also Comcast of Ill. X v. Multi-Vision Elec., Inc., 491 F.3d 938, 944-45 (8th Cir. 2007) (discussing whether appellants knew it was substantially certain they would intercept cable service); In re Manhattan Inv. Fund Ltd., 397 B.R. 1, 13 n.16 (S.D.N.Y. 2007) (“[k]nowledge to a substantial certainty constitutes intent in the eyes of the law. . .”); McMillin v. Mueller, 695 N.W.2d 217, 226 (S.D. 2005) (adopting substantial certainty test). Acting with substantial certainty that
Framing the deletion as an intentional tort thus opens the door to punitive damages.\footnote{See Restatement (Second) of Torts §§ 8A (1965); Restatement (Second) of Torts § 908 (1979). While it may be up for debate whether Amazon currently owes a duty to its customers not to interfere with products post-sale, courts create legal duties, a required element of tort liability, all the time in order to make society better off. See W. Page Keeton et al., supra note 111, at 358; Leon Green, Duties, Risks, Causation Doctrines, 41 Tex. L. Rev. 42, 45 (1962) (explaining that duties are not sacrosanct but are attempts to invigorate beneficial social policies).}

Finally, a tort remedy is applicable because most defenses available to Amazon would likely be futile. Customer assent through the Kindle EULA, or waiver of liability, would be no defense to conversion, since the agreement did not mention or even reference this specific harm.\footnote{See Kindle License Agreement, supra note 28. Consent is generally a full defense to conversion or tort claims. See 18 Am. Jur. Conversion § 104, (2010) (Westlaw).} Since many customers are unaware that their notes could be removed at any time, Amazon’s promotion of the feature could almost approach the realm of fraud, and certainly does not constitute express waiver of liability.\footnote{See 1A C.J.S. Actions § 160 (2009) (Westlaw); Claburn, supra note 175; Manjoo, supra note 14; Amazon Kindle Homepage, supra note 4; Kindle License Agreement, supra note 28.} Further, even if the Kindle EULA were construed to somehow specifically cover deletion of user notes, the fact that the average Kindle customer does not truly consent to the agreement deflates the waiver of liability defense.\footnote{See Lemley, supra note 57, at 467; Kindle License Agreement, supra note 28.} Where consumer consent is based on a fundamental misunderstanding, true assent to the EULA and waiver of the terms within it is absent.\footnote{See 1A C.J.S. § 160, supra note 199; Restatement (Second) of Contracts § 178(2)(a) cmt. e (1981).} Release from liability for intentional harms therefore would not extend to such provider actions.\footnote{See In re Worldcom, 2010 WL 334980, at *5 (S.D.N.Y. 2010) (holding that Plaintiff assented to defendant’s action and Plaintiff’s claim fails); City of Dillingham v. CH2M Hill Northwest, 873 P.2d 1271, 1275 (Alaska 1994) (“release of liability for negligence does not encompass a release of liability for intentional wrongdoing” (emphasis in original)); 1A CJS § 160, supra note 199; 17A Am. Jur. 2d Contracts § 286 (2010).}
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C. Conversion’s Increasing Favor and Applicability

As a more specific cause of action, conversion could be a convenient remedy since it has already been recognized by a number of courts. Despite these inroads, this cause of action will not truly help diminish the power of Internet-based providers unless more courts begin approaching digital property as a chattel. Recently, courts have upheld trespass to chattel claims involving digital property, recognizing computer hard drives, electronic databases, server capacity, e-mail systems, and computer networks as chattels. All of these are arguably less tangible than ebooks, which are analogous in their physical display to print books.

Some courts have already taken important steps recognizing virtual or digital property as appropriate for conversion actions. The arguments in Kremen and Thyroff were greeted enthusiastically by commentators as powerful precedent for courts to acknowledge the modern reality of virtual property, as well as the flexible nature of the common law to adapt.

Being issues of state law, however, these decisions represent persuasive, rather than binding, precedent in other jurisdictions. Additionally, many of these decisions, such as Thyroff, offer analysis restricted to the distinct fact patterns they addressed. Such jurisprudence does not leave much room for analogy to new or different types of existing digital property. This could stymie other courts’ adoption of the reasoning from these decisions.

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202 See Kremen, 337 F.3d at 1036; Thyroff, 864 N.E.2d at 1273.
204 See supra note 203 and accompanying text.
205 See Thyroff, 864 N.E.2d at 1277-78.
207 See Thyroff, 864 N.E.2d at 1278.
important decisions and inhibit the growth of judicial recognition of conversion of digital property.209

Even courts that are resisting this expanding conception of conversion, like the District Court of Massachusetts, nonetheless seem to recognize the validity of Kremen and Thyroff.210 The District Court of Massachusetts itself ruled along similar lines as Thyroff in prior cases.211 But by choosing instead to defer to traditional understandings of property in In re TJX, perhaps the court is ignoring the presence of modern technology and how technological progress can be a legitimate factor in legal change.212

1. Digital Property as a Chattel for Conversion?

The digitized client lists and website domain name of Thyroff and Kremen that were upheld as convertible chattels intuitively seem less tangible than an ebook.213 If one conceives of a chattel as any type of object or asset that an individual expects to use personally and possess, then digital media like ebooks fit the idea well.214 Simply because humans need a machine to be able to see their purchased assets does not mean that those assets are any less real or the user is harmed any less when their assets are converted.215

Since the copy cost to quality ratio is quite different for digital property versus that of the visible world, some might argue that digital property is inherently different than tangible chattels.216 Technological ease of replication, though, is no reason to suggest that digital objects are any less subject to ownership or

209 See Thyroff, 864 N.E.2d at 1277-78; Moringiello, supra note 208, at 143.
211 See id.
212 See id; BANNER, supra note 160, at 247-50.
213 See Kremen, 337 F.3d at 1036; Thyroff, 864 N.E.2d at 1273.
214 See Franks, supra note 107, at 505.
215 See Apple v. Franklin, 714 F.2d 1240, 1253-54 (3d Cir. 1983). Copyright law does not require people to be able to read copyrighted material with the naked eye, and avers the legitimacy of protecting even unseen, yet present material. See id.
216 See I. Trotter Hardy, Not So Different: Tangible, Intangible, Digital, and Analog Works and Their Comparison For Copyright Purposes, 26 U. DAYTON L. REV. 211, 236-37 (2001). That the click of a button can reproduce perfect copies of digital files indicates, perhaps that such a digital good is inherently different from a physical object like a book, which must be copied by hand or photocopier page by page with a final product quite distinguishable from the original. See id.
that their deletion is any less of an interference with the possessor’s property. Furthermore, differences between digital and tangible goods may not even be material, given the rapid pace of technological change.

Technology, arguably, has merely transformed a book’s tangibility from paper and ink to magnetic charges. Thus, the particles that comprise an ebook or user note constitute more than an idea or theoretical concept and are convertible. Further, scholars argue that intangible forms of property should nonetheless be treated as full personal property. While “[a]ll privately created value does not merit the label of property,” user-created files that contain valuable information, like notes attached to ebooks, should be considered chattels for the purposes of conversion, even if valuable only to the creator. Indeed, no harm would accrue if these notes were not particularly valuable to the users who created them.

One element working against this classification of digital property is that the Kindle copies of 1984 and Animal Farm were only licensed to users, rather than sold with full title. However, in the sense that digital property ownership could be partly defined as the ability to exclude others, ebooks like those bought at the Kindle store, even though only licensed, nevertheless fit the definition. For example, the basic elements of the traditional “bundle of [property] rights” seem present in the digital property

217 See id.

218 See id. As technology progresses, old tangible chattels are quickly digitized, and digitized chattels are upgraded in sophistication until they appear and behave almost exactly like tangible chattels again. See id.


220 See Seringhaus, supra note 219, at 154.

221 See Arias, supra note 11, at 1302-03; Hardy, supra note 216, at 221-22.

222 See Lastowka, supra note 159, at 54.

223 See ZITTRAIN, supra note 16, at 233; Hardy, supra note 216, at 222.

224 See Buckman, supra note 102, at § 2.

225 See Kindle License Agreement, supra note 28. Of course this problem does not apply to the user-generated work products like margin notes, since the individual user-creators indisputably hold the rights to their own creations and the EULA makes no mention of user note ownership. See id.

license granted by Amazon.  Although the right to possess an ebook is weak, users’ rights to access their goods are firmly established: the right to use is granted permanently, the right to exclude others is practically mandated by Amazon’s DRM, and the right to dispose of the property is granted in that users may delete the files from their devices freely.

Moreover, while a buyer owns the title to his print copy of 1984 but only has a license to read a remote file of 1984 on his Kindle, the average customer is likely unaware of this difference. Consumers’ lack of information about their ebooks, and inaccurate media portrayals have established the popular presumption that ebooks are fully-owned chattels.

This popular presumption is important in considering legal solutions since public opinion influences legislative action. Further, popular conceptions of what it means to buy an ebook may be powerful in breaking down the barriers many judges have erected by refusing to acknowledge conversion of digital property. The pervasive social understanding that books are “owned” upon purchase could potentially influence judges’ own perceptions of digital property or provide further reason to follow the precedents of New York and California.

Philosophically, there is only a small step between recognizing tangible property, like physical documents, as chattels and recognizing intangible digital property, like ebooks, as chattels. Unlike the computer programs that courts began scrutinizing decades ago, sophisticated digital property today has evolved to behave almost like tangible property when used with associated devices. Whereas computer programs, if they were

227 See Franks, supra note 107, at 505.
228 See id.; Kindle License Agreement, supra note 28.
229 See Manjoo, supra note 14. Furthermore, one might argue that Amazon’s designation of the property as a license does not necessarily mean that it is not more similar to an outright sale. See Seringhaus, supra note 219, at 154; Matt Buchanan, Amazon Kindle and Sony Reader Locked Up: Why Your Books Are No Longer Yours, GIZMODO (Mar. 21, 2008), http://gizmodo.com/369235/.
230 See id., Claburn, supra note 175.
231 See Barnhizer, supra note 16, 18-19. It is interesting to note how judicial adoption of particular viewpoints can help reinforce theories and ideas in society. Whether judicial adoption is the cause or effect of social ideas is another question entirely. See id.
232 See Kremen, 337 F.3d at 1036; In re TJX, 527 F. Supp. 2d at 212-13; Thyroff, 864 N.E.2d at 1273.
233 See Buckman, supra note 102, at § 2.
234 See Apple, 714 F.2d at 1253-54. Whereas some digitized information
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visible at all to the average Internet consumer, would look like strings of numeric characters, digital media like ebooks appear almost in the same form as a regular book when activated on a mobile device. The primary difference between reading 1984 in a print copy as opposed to on an eReader is that the process of delivering the words to the reader’s eyes is different, and happens to be digital.

2. Application of Court Reasoning to Ebooks

Having established that provider-created and user-created digital property fits within a workable concept of chattels, it is clear that recovery for the intentional deletion of such property may be possible through a conversion action. Amazon interfered with its customers’ rights to control their ebooks and notes. This interference was intentional, given that they offered a rationale and presumptive justification for the removal. It also completely deprived Kindle customers of their purchases, constituting dispossession without advance notice and precluded them from accessing their own content. Those notes might as well have been deleted, since their utility was contingent on continued reference and access to the source ebook.

like computer code is quite shareable, meaning copies may be made and distributed by end-users without diluting their own use, ebooks are loaded with so much DRM that only sophisticated hackers could copy the book text. Consequently, the average user could only share his Kindle copy of 1984 with a neighbor by physically lending the Kindle device. In this way, ebooks actually function like a tangible chattel much more than other types of digital property. See Apple, 714 F.2d at 1253-54; Hardy, supra note 216, at 215.

235 See Fairfield, supra note 10, at 1048, 1066.
236 See id.
237 See RESTATEMENT (SECOND) OF TORTS § 223 (1965).
238 See id.; Manjoo, supra note 14.
239 See RESTATEMENT (Second) of Torts §§ 222A, 224 (1965).
241 See RESTATEMENT (SECOND) OF TORTS §§ 222A, 224 (1965). It would be hard to make the argument that user-generated notes were actually taken from users’ possession because the note files were not formally deleted. See Fowler, supra note 2. Rather, their value was lost, as the notes no longer referred to anything once the base text was removed. See Complaint, supra
Utilizing the factors set out by the courts that recognize digital property for conversion, Kindle ebooks and user work products appear to meet the requirements for conversion suits. Following the relevant Thyroff elements, conversion is a fitting remedy to recoup the expense of a deleted digital book purchase, as well as to recover for deleted writing. Moreover, although the digital chattels involved could not be printed at the push of a button, they did exist on a physical display designed to look and act like a physical book.

Further, according to Kremen’s three-prong test, the property affected by the Orwell deletions was well-defined enough to objectively display its inherent capacity to be owned. The digital books and notes were also exclusive, harming users when the property was converted. The owners certainly had legitimate claims of exclusive ownership, backed by the Kindle EULA language itself.

D. Advantages and Disadvantages of Promoting Conversion

Advantages and disadvantages to consumers may arise with the judicial recognition of converted digital property. Recognition would advantageously distinguish conversion liability from the tort of trespass to chattels. Digital trespass discussions in recent years have generally involved issues like spy-bots, unwanted spam, and cookies. Addressing power

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243 See Thyroff, 864 N.E.2d at 1277.
244 See id.
245 See Kremen, 337 F.3d at 1030.
246 See id.; Complaint, supra note 6, at 4.
247 See Complaint, supra note 6, at 4; Kindle License Agreement, supra note 28.
248 See Franks, supra note 107, at 505.
250 See Keith N. Hylton, Property Rules, Liability Rules, and Immunity: An Application to Cyberspace, 87 B.U. L. REV. 1, 2 (2007) (addressing cyberspace torts); Daniel Kearney, Network Effects and the Emerging
imbalances through conversion provides clear theoretical separation from today’s trespass-oriented digital property scholarship debates, and lets conversion address the most egregious conduct of digital property providers.\textsuperscript{251} Conversion is more congruent with the serious nature of the permanent deletion of digital property than trespass because conversion is a more serious tort, leading to social disapproval and greater monetary compensation when liability is assigned.\textsuperscript{252}

On the other hand, remedial conversion theories could disadvantage customers who do not actually hold a license to a given product.\textsuperscript{253} Assuming, for the sake of illustration, that Amazon was not able to grant a true ebook license because its own authorization to distribute them was faulty, then users would be left with no real digital property right in the ebook.\textsuperscript{254} Therefore, customers would have difficulty litigating their rights through conversion actions. Indeed, their only chance to regain some of their lost value would be through conversion suits related to their own user notes; suits of this nature may be cost prohibitive to many customers whose notes are not objectively valuable.\textsuperscript{255} Approaching digital property as a chattel, though, could allow bona fide purchasers to estop infringement of their post-sale digital property rights.\textsuperscript{256}


\textsuperscript{251} \textit{See} Arora, 860 F. Supp. at 1097; Complaint, supra note 6, at 13-14. Section 222 of the Restatement (Second) of Torts points out that while dispossessing another of his chattel is grounds for trespass liability, a dispossession that seriously interferes with the right of the owner to control the chattel shifts liability to conversion. \textit{See} \textsc{Restatement (Second) of Torts} \textsuperscript{222} (1965). Section 218(b) notes that in trespass, “the chattel is impaired as to its condition, quality, or value…” \textit{Restatement (Second) of Torts} \textsuperscript{218(b)} (1965). Mere impairment or diminution in value is not the same as serious interference, like complete deletion. \textit{See id.}

\textsuperscript{252} \textit{See} Arora, 860 F. Supp. at 1097-98.

\textsuperscript{253} \textit{See} Buckman, supra note 102, at \S2. The possession of a property right is essential to establish conversion. \textit{Id.}

\textsuperscript{254} \textit{See} Buchanan, supra note 229.

\textsuperscript{255} \textit{See} Complaint, supra note 6, at 8; Zittrain, supra note 16, at 233.

\textsuperscript{256} \textit{See} Estoppel of Chattel Owner After Sale by Unauthorized Vendor, 53 \textsc{Colum. L. Rev.} 1163, 1164 (1953). \textit{See also} Blount v. Bainbridge, 53 S.E.2d 122, 125 (Ga. Ct. App. 1949) (upholding sale and delivery of car since purchaser was bona fide); Hawkins v. M \\& J Fin. Corp., 77 S.E.2d 669, 673 (N.C. 1953) (holding indicia of ownership insufficient to give notice of prior
In addition, some might argue that encouraging judicial recognition of digital property in conversion of chattels actions could invite a flood of litigation into an already congested court system. However, such a flood would benefit consumers in two ways. First, the sheer volume of lawsuits could send a wake-up call to Internet-based digital product providers, prompting voluntary restraint of post-sale controls. Second, increased litigation activity could bring the control imbalance between providers and customers to the public’s attention, concomitantly helping to solve the information imbalance by educating customers and readjusting expectations about digital property.

V. Conclusion

Digital property owners and users of online services received a warning notice when Amazon unilaterally deleted ebooks and personal notes from users’ Kindles. This action was a tell-tale sign of the relationship between Internet-based providers and consumers in the computer era where transactions occur online, digital property is bought and sold there, and providers retain an unfettered amount of control. Such power imbalances will continually increase if technologically-advanced providers are incentivized to exert power over their customers.

Judicial acceptance of digital chattels for conversion actions would likely provide meaningful results for consumers where other approaches have failed. Tort-based liability will also effectively incentivize providers to change their behavior and punish those who do not with potential punitive damages.

Courts in New York and California have taken the lead by recognizing various forms of digital property as convertible. Thus, other courts need not take great leaps of reasoning to establish new precedent. Technological developments can

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See McKinney v. Croan, 188 S.W.2d 144, 146-47 (Tex. 1945) (holding car sale invalid and estoppel not available).

See Buchanan, supra note 229; Manjoo, supra note 14.

See Buchanan, supra note 229.

See ZITTRAIN, supra note 16, at 177; Buchanan, supra note 229; Manjoo, supra note 14.

See Stone, supra note 5; Usborne, supra note 91.

See Barnhizer, supra note 20, at 2; Usborne, supra note 91.

See infra note 93-106 and accompanying text.

See infra notes 107-259 and accompanying text.

See infra notes 98-104 and accompanying text.

See Kremen, 337 F.3d at 1030, 1036; Thyroff, 864 N.E.2d at 1273, 1277-
change the assumptions people have about the world, facilitating and encouraging legal change. The tests and standards created in cases like *Kremen* and *Thyroff* fit digital property well. Their application in other jurisdictions could permit the widespread protection of digital property rights through conversion. Receiving full-fledged judicial support could be just the kick-start digital property needs to finally empower Internet consumers and propel conversion law into the computer age.

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266 See Fairfield, *supra* note 10, at 1066.
267 See infra notes 126-151, 169-259 and accompanying text.
268 See infra notes 107-259 and accompanying text.