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# BEYOND THE BOTS: TICKED-OFF OVER TICKET PRICES OR THE ETERNAL SCAMNATION?

Sammi Elefant\*

## ABSTRACT

In 2016 alone, despite the passing of federal legislation banning its use, automated ticket-buying software known as “ticket bots” attempted to purchase five billion tickets at a rate of ten thousand tickets per minute on Ticketmaster’s website. The secondary market for tickets to live music, live theater, and sporting matches is worth roughly \$8 billion worldwide,<sup>1</sup> and so far, the profits accrued by cyber-scalpers have proven valuable enough for violators to run the risk of facing fines or criminal penalties legislation may impose.

It turns out that ticket bots are not the only problem contributing to secondary-market resale and price inflation. Industry insiders such as artists, managers, and producers, have a storied history of reducing the number of tickets actually made available to the general public. In some instances, less than half of available tickets for concert stadium tours have been put on sale.

Courts have struggled to protect public interests against monopolization of the free market. They have often employed a “rational basis” test to defend laws prohibitive of ticket resales, including anti-scalping measures. However, with the advent of e-commerce technology, cyber-scalping brings jurisdictional and identification issues to the forefront.

This Article suggests that current federal legislation should be amended to ban industry insider hold-back practices and the internal resale of tickets at inflated prices, thus making more tickets available for public sale at face value. This Article further argues for the implementation of non-transferrable paperless ticketing procedures claiming the already proven benefits of such procedures significantly outweigh minor inconveniences to the consumer.

Lastly, this Article explores the likely effects of moving the sale and purchase of tickets onto an open-source blockchain that the public can participate in on a global scale. The golden ticket here is that such blockchain technology does away with the need for a central database controlled by a ticket-sale platform vulnerable to scalpers. Instead, blockchain constitutes a

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1 All dollar amounts are in U.S. dollars unless otherwise indicated.

decentralized transaction platform that removes scalpers from the equation entirely; tickets exist as digital assets that cannot be transferred outside of the blockchain, rendering ticketing transactions virtually impervious to scalpers and free of the inflammatory forces cyber scalping otherwise superimposes on the marketplace.

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## INTRODUCTION

As U2 was accepting their third award of the evening at the 2005 Grammy Awards, drummer Larry Mullen used the stage to apologize to the band's fans.<sup>2</sup> "Due to circumstances beyond our control, a lot of our long-suffering fans . . . didn't get tickets [to our tour] and I'd like to take this opportunity on behalf of the band to apologize for that."<sup>3</sup> Why were loyal fans unable to purchase tickets?<sup>4</sup> The simple answer: Kenneth Lowson.<sup>5</sup>

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- 2 James Montgomery with John Norris, *U2 Working On How To Dismantle A Ticket-Scalping Bomb*, MTV NEWS (Feb. 16, 2005), <http://www.mtv.com/news/1497040/u2-working-on-how-to-dismantle-a-ticket-scalping-bomb> [<https://perma.cc/TJ42-MMPW>] (describing the band as once again apologizing for the way tickets had been distributed).
  - 3 *Id.*
  - 4 Jason Koebler, *The Man Who Broke Ticketmaster*, MOTHERBOARD (Feb. 10, 2017), [https://motherboard.vice.com/en\\_us/article/mgxcb8/the-man-who-broke-ticketmaster](https://motherboard.vice.com/en_us/article/mgxcb8/the-man-who-broke-ticketmaster) (outlining the career of Kenneth Lowson and his effects on the ticketing industry).
  - 5 *Id.* (showing the vast and permanent effects of Lowson's scalping business).

Lowson, the former CEO of Wiseguy Tickets,<sup>6</sup> earned his title as the most successful ticket scalper<sup>7</sup> in recent history for buying nearly all general admission tickets to all types of live entertainment events and reselling them at hugely inflated prices.<sup>8</sup> He is further credited with creating the first ever automated software known today as “ticket bots.”<sup>9</sup> In an interview, Lowson recalled the U2 tour: “They apologized on the Grammys because of us, and then they had a second round of sales to make up for it. We took all the good tickets in that second round too.”<sup>10</sup>

Five years later, Lowson would find himself at the center of a legal dispute, with forty-two counts of wire fraud charges against him and two other colleagues in the seminal scalping case *U.S. v. Lowson*.<sup>11</sup> The case ultimately concluded with a plea deal that dropped all wire fraud charges.<sup>12</sup> Lowson and his colleagues were charged with one count of conspiracy to commit wire fraud, narrowly avoiding a conviction that could have carried a prison sentence of up to twenty years.<sup>13</sup>

Even though Wiseguy Tickets has since folded, the initial sale price of live-event tickets has increased exponentially over the past few years.<sup>14</sup> Wary of losing markup potential to scalpers, primary ticket vendors have hiked the initial price of tickets for live events to the point where most consumers can no longer afford to purchase them at face value.<sup>15</sup> Scalpers remain the primary reason for price surges.<sup>16</sup> Indeed, scalpers have profited off of live

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6 *U.S. v. Lowson*, 2010 WL 9552416 (D.N.J. Oct. 12, 2010) (charging Lowson and Wiseguy Tickets as “knowingly and willfully” engaging in fraud).

7 *See Scalper*, CAMBRIDGE ENGLISH DICTIONARY (Online ed. 2016), <https://dictionary.cambridge.org/us/dictionary/english/scalper> (defining a scalper as a person who sells tickets at an increased price without official permission).

8 *See* Koebler, *supra* note 4 (characterizing Lowson as the man who broke Ticketmaster).

9 *Id.* (crediting Lowson with writing the software that automated ticket purchases in mass amounts); *see also* *Lowson*, 2010 WL 9552416 at \*2 (reporting Lowson as the creator of CAPTCHA Bots that circumvent security walls).

10 *See* Koebler, *supra* note 4.

11 *See* *Lowson*, 2010 WL 9552416.

12 *See id.*

13 *See* Koebler, *supra* note 4 (discussing the outcome of the case).

14 *See* Marie Connolly & Alan B. Krueger, *Rockonomics: The Economics of Popular Music* 13 (Nat’l Bureau of Econ. Research, Working Paper No. 11282, 2005) (concluding that concert ticket prices rose at a greater rate than inflation).

15 *See* Catherine Valenti, *Concert Ticket Prices Rise, Sales Fall*, ABC NEWS (July 9, 2015), <http://abcnews.go.com/Business/story?id=87981&page=1> [<https://perma.cc/59HV-UER4>] (exhibiting how the music industry began charging premium prices for the best seats as they were losing that profit from scalpers).

16 *See* James J. Atkinson, *The Economics of Ticket Scalping*, JIMMYATKINSON.COM (May 3, 2004), <http://jimmyatkinson.com/papers/the-economics-of-ticket-scalping> [<https://perma.cc/C97B-47NN>] (using Paul Krugman’s three marketing theories to show how scalpers impact the market).

entertainment since the 1800s.<sup>17</sup> The first recorded account of ticket scalping was in a letter, dated in the year 1850, from opera singer Jenny Lind<sup>18</sup> to her promoter P.T. Barnum<sup>19</sup> during the first leg of her New York tour.<sup>20</sup> In that letter she wrote:

You know that I have always been in favor of having lower prices to my concerts, and you have invariably expressed your willingness to them so far as could safely be done and at the same time prevent speculators<sup>21</sup> from taking advantage of the reduction. Will you permit me to suggest that Tripler Hall is immensely large and that with proper precaution you might certainly avoid selling tickets to speculators and at the same time put the prices within reach of the people at large.<sup>22</sup>

Lind's advocacy for her fans reflects just how difficult it was to combat scalpers, even at a time when it was easier to identify them as they were physically present outside the venue.<sup>23</sup> Those responsible for fueling the secondary market were not just individuals, but also multiple networks of people, including ushers and theater managers who would enjoy a cut of the markup obtained by the scalpers to whom they siphoned off tickets purchased from primary vendors.<sup>24</sup> New York City theater manager Harry Miner explained the infiltration: "I don't mean to say that it is customary for managers to take out nearly the whole of their orchestra and give it to the speculator in the lobby, but I have seen it done on several occasions."<sup>25</sup> Scalping proved to be a viable business,

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- 17 See James Anthony Devine, *Ticket Scalping in the Late 1800s and the early 2000s—Much has Changed, Much is the Same*, SETON HALL L. SCH. STUDENT SCHOLARSHIP 210 (2014) (providing an early history of the ticket scalping business).
- 18 See GLADYS DENNY SHULTZ, *JENNY LIND THE SWEDISH NIGHTINGALE* 11 (1962) (detailing the life of one of the most highly regarded singers in the nineteenth century).
- 19 See P.T. BARNUM, *THE LIFE OF P.T. BARNUM* (1888) (narrating the life of showman and promoter P.T. Barnum).
- 20 See KERRY SEGRAVE, *TICKET SCALPING: AN AMERICAN HISTORY, 1850–2005* 3 (2006) (showing a transcript of the letter from Jenny Lind to P.T. Barnum).
- 21 See *Speculation*, ONLINE ETYMOLOGY DICTIONARY, <https://www.etymonline.com/word/speculation> (last visited Mar. 23, 2018) (dating the term 'speculation' back to 1774 and defining it as "buying and selling in search of profit from rise and fall of market value").
- 22 See SEGRAVE, *supra* note 20 (quoting Lind's letter to Barnum).
- 23 See James Anthony Devine, Student Paper, *Ticket Scalping in the Late 1800s and the early 2000s—Much has Changed, Much is the Same*, SETON HALL L. SCH. STUDENT SCHOLARSHIP 210 (2014) (discussing the lack of regulation and enforcement against ticket scalpers).
- 24 See *id.* (explaining that theater managers and secondary sellers were working as allies to withhold seats and pass them onto scalpers for a cut of the profit).
- 25 See *Dividing The Pudding*, N.Y. TIMES at 5 (Dec. 14, 1883 at 5), <https://timesmachine.nytimes.com/timesmachine/1883/12/14/issue.html?action=click&contentCollection=Archives&module=ArticleEndCTA&region=ArchiveBody&pgtype=article> [<https://perma.cc/9GKT-2YU3>] (observing that theater managers often conduct business with the scalpers). These networks also included hotels who received advanced tickets for out of town guests, grocers who received advanced tickets in exchange for advertising, students, and even artists themselves. *Id.* See also MICHAEL RIEDEL, *RAZZLE DAZZLE: THE BATTLE FOR BROADWAY* 6 (2015) (detailing "ice" as the term for ticket corruption in New York

and would continue to flourish with the creation of the internet and the proliferation of online transactions.

As internet usage became mainstream, broadband access and technological developments created an online marketplace, giving scalpers a more direct target.<sup>26</sup> Arguably, the main cause of resale market growth was the implementation of the computerized ticket-buying software known as “ticket bots,” which Lawson himself pioneered.<sup>27</sup> Ticket bots are hawkish computer programs that thwart security walls on authorized internet sale sites such as Ticketmaster, AXS, and Telecharge.<sup>28</sup> This software enables scalpers to purchase large numbers of tickets within seconds of the time they are made available to the public for purchase.<sup>29</sup> Through what amounts to unauthorized priority buyouts, the ticket bots leave the average consumer with no other option but to purchase tickets on the secondary market for potentially up to ten times face value.<sup>30</sup>

In an effort to fight monopolization by the secondary ticket market, fifteen states have either passed or proposed legislation to criminalize or impose fines for the use of ticket-bot software and to offer a civil remedy to those who have been injured by its use.<sup>31</sup> As live entertainment productions often tour across

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theatres, particularly on Broadway). This is what Harry Miner was describing. Some theater historians argue that ticket corruption dates as far back to Ancient Athens, where fans had to bribe someone to get a ticket to *Medea*'s sold-out run at the Theater of Dionysus. *Id.*

26 See Zak Guzman, *The Surreptitious Rise of the Online Scalper*, CNBC (Mar. 4, 2015), [https://perma.cc/JFG3-NQ3D] (explaining how new software developments make scalping more accessible).

27 See Jim Zarroli, *Can't Buy A Ticket To That Concert You Want To See? Blame Bots*, NPR (Jan. 28, 2016) [https://perma.cc/C7ZJ-NV8V] (explaining how scalpers use technology to buy mass amounts of tickets instantaneously).

28 See Alexis Kramer, *Pushy Ticket-Buying Bots Feel Heat From Federal, State Officials*, BLOOMBERG BNA DAILY REPORT FOR EXECUTIVES, Mar. 26, 2015 (showing how bot software simulate the actions of human beings).

29 See *id.* at 1 (detailing the capabilities of ticket bots).

30 See Josh Cornfield, *Lawmaker Fighting Ticket Freeze-Out in the Name of Springsteen*, ASSOCIATED PRESS: THE BIG STORY (Aug. 21, 2016) [https://perma.cc/ZW9Y-4V58] (highlighting the investigation conducted by Attorney General Eric Schneiderman's office that found third-party brokers resell at average margins of 49 percent over face value).

31 See Alexis Kramer *supra* note 28 (discussing the laws passed by different states); see also CAL. BUS. & PROF. § 22505.5 (2015) (making it unlawful to use computerized software to circumvent security measures); COLO. REV. STAT. § 6-1-720(1)(a) (2009) (providing the increase in civil penalties recoverable by the State with regard to deceptive trade practice concerning online ticket sales); FLA. STAT. § 817.36(5) (2016) (concerning the authorized resale of tickets for not more than one dollar above admission price charged); MD. CODE ANN., COM. LAW § 14-4002 (2014) (lacking specific provision for online ticket resale); MINN. STAT. § 609.806 (2016) (recognizing the use of ticket bot buying software as a misdemeanor); OR. REV. STAT. § 646A.115(2) (2010) (making it unlawful for a person to intentionally use or sell software that bypasses security measures established to ensure equitable distribution of tickets); TENN. CODE ANN. § 39-17-1104(b) (2014) (punishing conduct designed to interfere with operations of ticket sellers by fine); VT. STAT. ANN. TIT. 9, § 4190(a) (2009) (constraining interference with internet ticket sales).

state lines, lack of interstate enforcement has, however, diminished the effectiveness of these statutes.<sup>32</sup> At the federal level, the Better Online Ticket Sales Act<sup>33</sup> (BOTS Act) appeared before Congress on February 4, 2015, and was signed into law on December 14, 2016.<sup>34</sup> The BOTS Act prohibits the circumvention of security software and access control systems used to enforce limits on ticket purchases.<sup>35</sup> Specifically, it sanctions the imposition of online purchasing rules, such as per-person purchase limits, set by ticket vending websites when public events have an attendance capacity that exceeds two hundred persons.<sup>36</sup> Further, the BOTS Act prohibits any sale of or offer to sell in interstate commerce<sup>37</sup> event tickets obtained using circumvention methods.<sup>38</sup> In addition to outlawing the unauthorized use of circumvention software,<sup>39</sup> the BOTS Act also grants the Federal Trade Commission (FTC)<sup>40</sup> with the authority to severely fine<sup>41</sup> violators.<sup>42</sup>

This Article will analyze the BOTS Act's effectiveness as the most comprehensive federal law to date working to protect consumers and maintain the economic integrity of the live-event ticket sales market. It will provide insight and opinion as to whether Congress should consider amending the BOTS Act to prohibit primary vendors and artists from engaging in common hold-back practices. Part I will discuss the history of live-entertainment ticket sales as well as the legislature's past attempts to regulate the fixed game of ticketing. Part

- 32 See Bryce Cashman, *New Bill Tackles Ticket-Buying Bots*, FUTURE OF MUSIC COALITION, Apr. 8, 2015, [archived at <https://perma.cc/7SPE-ZBNW>] (showing that supporters of legislation are fine with some forms of ticket bots and only want to monopolize the secondary market); see also Eliot Van Buskirk, *Artists, Venues, and Fans Are Responsible for Inflating Ticket Prices, Not Scalpers*, BUSINESS INSIDER, Apr. 5, 2011, [archived at <https://perma.cc/9RYZ-4MG6>] (portraying artists as responsible for the secondary market).
- 33 See BOTS ACT, H.R. 708, 114th Cong. (2016) (outlining violations that will be treated as deceptive and unfair acts under the Federal Trade Commission).
- 34 See *id.* (The bill passed the Senate and House quickly after much support by prominent industry influencers).
- 35 See BOTS ACT S.3183, 114th Cong. (2016) (outlining the effects of the bill).
- 36 *Id.* (describing what activities shall be deemed unlawful).
- 37 See *Commerce*, US LEGAL, <https://definitions.uslegal.com/i/interstate-commerce> (defining interstate commerce as “purchase, sale or exchange of commodities, transportation of people, money or goods, and navigation of waters between different states”).
- 38 See BOTS ACTS S.3183, 114th Cong. (2016) (citing violation if the seller participated in, had the ability to control, or should have known about the violation).
- 39 See Shawntaye Hopkins, *Blame it on the Bots: States Act To Ban Ticket-Buying Software*, THE COUNCIL STATE OF GOVERNMENTS, Mar. 14, 2016, [archived at <https://perma.cc/2PRY-AS9J>] (discussing how the bot technology, also known as circumvention software, bypasses online security measures).
- 40 See F.T.C Act, 15 U.S.C. §§ 41–58 (preventing businesses from engaging in deceptive and unfair practices that harm consumers).
- 41 See *id.* (detailing the range of fines violators may be subject to).
- 42 See BOTS ACTS S.3183, 114th Cong. (2016) (granting power under the FTC to enforce criminal punishment against violations).

II will explore the atypical market structure prevalent in the ticketing industry, discussing the effects of e-commerce on price floors, premium levels, and motives for price fluctuations. Part III will examine past legislative attempts at both the state and federal levels. It will then discuss the current federal law, the BOTS Act, which aims to deter cyber scalpers and ticket bot software. Part IV will present proposals for the implementation of non-transferable paperless ticketing procedures and will contend that the benefit to consumers significantly outweighs any minor inconveniences such procedures may cause. It will also consider the effects of a dynamic pricing structure to keep ticket prices fluid and in the range of face value. Finally, it will examine the potential for moving ticketing transactions onto a blockchain to help eliminate interference by scalpers. Lastly, this Article will predict the inability of the BOTS Act, as it currently stands, to remedy the cyber-scalping epidemic. It will show that a much more comprehensive approach is necessary to effectively stimulate cooperation by all key stakeholders, an approach that incentivizes industry insiders to be accountable for their pre-sale and ticket hold-back practices.

## I. HISTORY: ORIGINS OF THE WAR ON TICKET BOTS

### A. *Tickets as Licenses and the Right to Exclude Patrons*

Many consumers are unaware of their legal rights when they purchase a ticket to a live entertainment event.<sup>43</sup> Dating back to 1866, courts have held that an admission ticket to an entertainment event is a “freely revocable license.”<sup>44</sup> While technology has changed the ticketing business, modern courts still consider such a ticket—whether it be to a concert, sporting match, or live theater performance—a freely revocable license.<sup>45</sup> A revocable license provides the licensee with a right to temporary possession granted by the licensor or property owner.<sup>46</sup> This means the party granting the license, a primary vendor, is

43 See Ticketmaster Purchase Policy, TICKETMASTER, [archived at <https://perma.cc/5SMU-NQJR>] (delineating the rights and limitations granted to consumers upon purchase of tickets).

44 *Purcell v. Daly*, 19 Abb. N. Cas. 301, 304 (1886) citing *Mendenhall v. Klinch*, 51 N.Y. 26 (holding that “A theatre ticket is simply a license to the party presenting the same to witness a performance to be given at a certain time, and being a license personal in its character can be revoked.”); see also *Aaron v. Ward*, 203 N.Y. 351, 355 (1911) (finding that a proprietor has the right to revoke the license even when the ticket holder had already gained admission through the ticket); see also Adam Vaccaro, *From Concert Goers to Big Business Concerns Inside the Fight Over Paperless Tickets*, BOSTON.COM, Jan. 10, 2015, [archived at <https://perma.cc/28WK-QVE8>] (examining the debate over paperless tickets as non-transferrable licenses).

45 *Yarde Metals, Inc. v. New Eng. Patriots P’shp.*, 64 Mass. App. Ct. 656, 658 (2005) (discussing how purchasing a ticket to an event typically creates a revocable license and revocation of a license may constitute a breach in contract giving rise to an action for damages).

46 See Gregory M. Stein, *Will Ticket Scalpers Meet the Same Fate As Spinal Tap Drummers? The Sale and Resale of Concert and Sports Tickets*, 42 PEPP. L. REV. 1, 24 (showing that “the license gives the holder the right not to be considered a trespasser while she



able to restrict the licensee, a ticket purchaser, from assigning his or her limited property rights in the ticket to someone else.<sup>47</sup> Those who oppose this interpretation argue that tickets are much more than a mere revocable license.<sup>48</sup> These critics view tickets as personal property.<sup>49</sup> That is, when you buy a ticket, you own it and all the rights it affords,<sup>50</sup> a concept that is at the very foundation of our current legal and economic systems.<sup>51</sup>

It has long been held a fundamental principle of property law to protect the rights of consenting parties, those who voluntarily enter a legally valid agreement for the conveyance of property, by allowing them to transfer their property freely while also permitting them to impose restrictions on that alienability<sup>52</sup> as they see fit.<sup>53</sup> This protection, common in transactions such as assignments and leases, is significantly more limited for licenses.<sup>54, 55</sup> The debate over whether a ticket should be considered a license or personal property is usually resolved by the terms and conditions found on the back of the ticket itself.<sup>56</sup> For example, a Broadway Across America (BAA)<sup>57</sup> ticket states

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occupies the space”).

- 47 See Anastasia Boden, *Are Justin Bieber Tickets Property?* PAC. LEGAL FOUND.: LIBERTY BLOG, Apr. 26, 2013, [archived at <https://perma.cc/BM9E-TJPC>] (discussing licenses as an extremely limited right because they are non-assignable and freely revocable).
- 48 See Mark J. Perry, *Ticket Sales A Matter of Property Rights*, MACKINAC CTR. FOR PUB. POL’Y, Apr. 22, 2014 (arguing that ticket scalping is “nothing more than a voluntary market transaction between two consenting parties”); see also Hannah Karp, *Scalpers Beware: New Laws Redefine What A Ticket Is*, WALL ST. J., Apr. 26, 2013, (discussing the ongoing battle between promoters and resale websites like StubHub). StubHub argues that tickets are a personal property right until the ticketholder steps foot into the venue at which point it becomes a revocable license. *Id.* StubHub further argues because ticketholders own that right they should be able to re-sell the tickets. *Id.*
- 49 See Mark J. Perry, *Ticket Sales A Matter of Property Rights*, MACKINAC CTR. FOR PUB. POL’Y, Apr. 22, 2014, (arguing that scalping is nothing more than “a voluntary market transaction between two consenting parties”).
- 50 See *id.* (arguing that consumers have the right to do what they wish with their personal property).
- 51 See *id.* (discussing the interest in regarding a ticket as personal property rather than a license).
- 52 See *Alienable*, BLACK’S LAW DICTIONARY (2nd ed. 1910) (defining “alienability” as the lawful ability to transfer property or rights to another).
- 53 See generally, EDWARD H. RABIN et al., FUNDAMENTALS OF MODERN PROPERTY LAW (Found. Press, 6th ed. 2011) (providing the scope of protection for personal property rights and why it is important to enforce such protections).
- 54 See *id.* (defining a license as “a personal revocable and unassignable permission to use the property without possessing any interest in it”).
- 55 See *id.* (showing that the law allows temporary rights to be conferred to do some act—i.e. transfer a ticket—without which such authorization would be illegal).
- 56 Broadway Across America Standard Terms and Conditions, THE JOHN GORE ORG., Sept. 2016, [archived at <https://perma.cc/3CUY-PTT2>] (stating the terms ticket holders must adhere to and the rights the venue has in revoking tickets from ticketholders).
- 57 See *Broadway Across America*, BROADWAY.COM [https://perma.cc/Q53Q-N86R] (portraying

on its back, “[t]ickets are personal licenses revocable at the sole discretion of BAA . . . with or without cause, including without limitation . . . as determined by the BAA in its sole discretion.”<sup>58</sup> Courts have held, in a series of decisions known as “The Ticket Cases,” that the terms and conditions on tickets are binding whether or not a ticket user has actually read them.<sup>59</sup> Using the ticket, the courts have noted, is analogous to signing a contract effectively accepting the terms.<sup>60</sup>

#### B. *The Birth of an Industry: Scalping Finds Fertile Ground on Broadway*

It is reported that Joseph Siegrist<sup>61</sup> began New York’s secondary ticket market.<sup>62</sup> With no legislation deterring scalpers in the 1800s and no explicit terms and conditions printed on tickets themselves, self-policing efforts surfaced in the wake of frustrated fans’ growing concerns about the infiltration of scalpers.<sup>63</sup> Theaters began experimenting with different strategies to combat ticket scalping.<sup>64</sup> One of the many tactics deployed included the use of “spotters,”<sup>65</sup> people tasked with watching for and blacklisting anyone purchasing a “speculated”<sup>66</sup> ticket and then denying such persons entrance to the show.<sup>67</sup> This effort inevitably led to many confrontations between ticket holders attempting to assert their alleged rights and theater ushers attempting to enforce sales on the primary market only.<sup>68</sup>

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BAA as a presenter and producer of live theatrical events since 1982).

58 See Broadway Accorss America Standard Terms and Conditions *supra* note 56 (providing the language found on the back of the ticket).

59 See *Parker v. The South Eastern Railway Co.* 2 CPD 416 (1877) (holding a reasonable person test is to be the standard in determining whether the terms are binding). This became known as the exclusion clause in contract law. *Id.*

60 *Id.*

61 See KERRY SEGRAVE, *TICKET SCALPING: AN AMERICAN HISTORY, 1850–2005* 4 (2006) (citing an 1870 police crackdown that identified Siegrist as the originator of the theatre ticket scalping business).

62 *Id.* (reporting that Siegrist was a ticket speculator for over thirty years and could always be found in front of the Academy of Music).

63 James Anthony Devine, Student Paper, *Ticket Scalping in the Late 1800s and the early 2000s—Much has Changed, Much is the Same*, SETON HALL L. SCH. STUDENT SCHOLARSHIP 210 (2014) (discussing the legislative history of ticket scalping dating back to the 1800s).

64 *Id.* (outlining the different methodologies theatres attempted to employ in deterring scalpers).

65 *Id.* at 4 (describing “spotters” as people who observed consumers buying scalped tickets outside the theatre and later deny them entrance).

66 *Id.*

67 Devine, *supra* note 63 (arguing that spotters were effective as ticket speculators often stood directly outside the theatres and were easy to catch).

68 KERRY SEGRAVE, *TICKET SCALPING: AN AMERICAN HISTORY, 1850–2005* 4 (2006) (referencing an 1870s N.Y. TIMES article discussing different tactics to deter scalpers).

Another anti-scalper method employed by theaters was to impose a “limits per person” regulation, which restricted the number of tickets a consumer could purchase.<sup>69</sup> However, this proved ineffective given the use of proxies—agents who would help scalpers circumvent measures by posing as genuine consumers.<sup>70</sup> Other preventative measures included complex registration systems<sup>71</sup> and direct competition, which took the form of authorizing theater employees to stand out on the sidewalks and compete with scalpers by offering tickets at the original face value price.<sup>72</sup> In 1860, theaters also experimented with auction systems,<sup>73</sup> though these auctions quickly dissolved once raided by scalpers who would place bids.<sup>74</sup>

In 1963, David Clurman, special assistant to then-New York State Attorney General Louis J. Lefkowitz, began an investigation on the financing of Broadway shows after receiving a tip from a private investor.<sup>75</sup> According to the tipster, investors had no idea where their money went—sometimes the money backed the productions the investor wanted to support, but other times the money was funneled into shows the investor did not even know about, or worse, used to finance a producer’s personal wish list.<sup>76</sup> Clurman eventually discovered that financial disclosure documents were non-existent on Broadway, and angel investors, enamored of the glamorous Great White Way, accepted whatever financial documents and records the producers made available to them.<sup>77</sup>

Early in the investigation, Morris Ernst, founder of the American Civil Liberties Union, invited Clurman to his apartment for an informal meeting on

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- 69 See *The Booth-Barrett Season—An Effort To Prohibit Speculation In Tickets In Chicago*, N.Y. TIMES, at 1 (Sept. 29, 1887) (describing efforts theatres made to keep tickets out of the hands of scalpers and detailing that “no stranger not vouched for as wanting the tickets for legitimate purposes was sold more than four seats for each evening”). The article also provides an ordinance against ticket scalping that was introduced in front of the Chicago City Council. *Id.* The ordinance made “selling or buying, with intent to sell, either on the street or at any place save the regularly appointed office of a ticket or tickets to any theatre or place of amusement, a misdemeanor punishable with a fine ranging from \$20 to \$200.” *Id.*
- 70 *Id.* (describing the use of proxies acting as consumers enabling the scalper to work around the imposed purchase limit).
- 71 SEGRAVE, *supra* note 68 at 27 (describing a 5<sup>th</sup> Avenue theater manager in New York who would write down a purchaser’s name and seat number on the ticket and in a book—generating two separate records). When patrons arrived for a performance, the two records were compared requiring extra box office staff and lobby ushers. *Id.*
- 72 *Id.* at 25 (outlining the different stratagems attempted by theatres to curb scalping).
- 73 *Id.* (describing tickets being sold at auctions so as not to give scalpers too much of an opportunity). The auctions capped the number of tickets at ten for a single bidder. *Id.*
- 74 *Id.* (detailing the reasons why each self-policing attempt was essentially ineffective).
- 75 MICHAEL RIEDEL, *RAZZLE DAZZLE: THE BATTLE FOR BROADWAY 2* (2015) (describing the beginning of the investigation into scalping on Broadway).
- 76 *Id.* (delineating the many different ways an investor’s money was used).
- 77 *Id.* (comparing Broadway investors to slot machine players in Vegas).

the corrupt financial practices of Broadway.<sup>78</sup> Clurman learned that box office operators were incentivized to sell tickets to brokers at inflated prices because they reaped the benefits of “ice,” the term used to describe ticket corruption on Broadway.<sup>79</sup> Hayward told Clurman that he had once called the box office of one of his own shows to get tickets only to be told that the show was sold out.<sup>80</sup> When he arrived at the theater, entire rows were empty—the brokers had not been able to sell all of their tickets.<sup>81</sup> It was now clear to Clurman that ticket scalping and misuse of investor money were out of control on Broadway. Anyone with access to tickets could get a cut of the “ice”: Theater owners, general managers, producers, writers, directors, designers, and even actors were getting in on the money.<sup>82</sup>

The Shubert Organization controlled seventeen of Broadway’s most profitable and respected theaters at the time of the investigation, and the company was later found to have centralized the black market in tickets.<sup>83</sup> Above the famed Sardi’s restaurant was room 504, mission control for brokers to buy tickets to shows in Shubert theaters. Clurman discovered that several Shubert employees were collecting hundreds of thousands of dollars, and possibly millions, annually without reporting any of the money to the Internal Revenue Service.<sup>84</sup>

At a two-day public hearing, state investigators disclosed widespread bribery of producers and theatrical employees, as well as the existence of a black market in theater tickets that netted about ten million dollars annually.<sup>85</sup> The investigation culminated in a three-bill package proposed by Attorney General Lefkowitz to end loose accounting practices, kickbacks, and scalping on Broadway.<sup>86</sup> Of the three bills, only two passed.<sup>87</sup> The first bill required every producer to clear any financial offering for an investment in a show

78 *Id.* at 5. World-class artists and businesspeople including Leland Hayward, Gilbert Miller, Roger Stevens, Dickie Moore, and Richard Rodgers, were in attendance. The biggest discovery for Clurman that night was “ice,” the industry term for ticket corruption. No one at the meeting was able to say for sure how much “ice” there was—but the biggest names in the theater knew a lot of the money was being pocketed by people who had nothing to do with the creation of any given Broadway show. *Id.*

79 *Id.*

80 *Id.*

81 MICHAEL RIEDEL, *RAZZLE DAZZLE: THE BATTLE FOR BROADWAY 2* (2015).

82 *Id.*

83 *Id.*

84 *Id.*

85 Milton Esterow, *Lefkowitz’s Aide Says Ice Is Back*, *NY TIMES* (Apr. 28, 1964), <https://www.nytimes.com/1964/04/28/lefkowitzs-aide-says-ice-is-back.html> [https://perma.cc/7F5R-RB2V] (articulating the results of the investigation).

86 *Ticket Registration Bill Dies in Senate*, *NY TIMES* (Mar. 28, 1964) [https://perma.cc/HKF2-JN62] (describing the three bills proposed by Attorney General Lefkowitz).

87 *Id.*

through the Attorney General's office.<sup>88</sup> If an offering were approved, the producer would have to put all of the money raised into a trust account solely for production expenses.<sup>89</sup> The bill also required producers to maintain precise books and records from which reports would be created by independent third-party accountants for investors.<sup>90</sup> The second bill broadened the scope of penal law to criminalize ticket scalping, providing both district attorneys and the attorney general with jurisdiction over violations.<sup>91</sup>

## II. THE TICKETING INDUSTRY: NOT YOUR BASIC MARKET STRUCTURE

Ticketing economics are skewed and generally unlike most other market models.<sup>92</sup> There are several outside factors influencing ticket price fluctuation such that the initial on-sale price will have changed drastically by the time the ticket reaches the user.<sup>93</sup> First, because the vendor's primary goal is to fill seats for the venues, tickets are often sold on the primary market for a face value that is below actual market price.<sup>94</sup> And, as mentioned herein, primary vendors often do not release the total number of tickets available at the initial on-sale, thus decreasing availability and accessibility for the genuine fan from the outset.<sup>95</sup> Second, the percentage of tickets not held back are purchased in large part by scalpers using advanced circumvention software, or ticket bots, enabling scalpers to stockpile a majority of the available tickets and resell them at inflated prices.<sup>96</sup> This vicious cycle is incredibly difficult to penetrate, which is why it is critical that the legislature address the issue as a whole rather than passing laws attempting to treat individual symptoms.<sup>97</sup>

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88 *Id.*

89 *Id.*

90 *Id.*

91 *Id.*

92 See Office of the New York State Attorney General Eric T. Schneiderman, *Obstructed View: What's Blocking New Yorkers from Getting Tickets* (2016) at 27, [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/YGZ4-GPM3>] (characterizing the market structure as atypical).

93 See *Milgram v. Orbitz*, 419 N.J. Super. 305, 315–16 (N.J. Super. Ct. Law Div. 2010) (noting a strong interest in maintaining a competitive free market).

94 See Telephone Interview with Luis A. Miranda, Jr., Founding Partner, MirRam Group (detailing the Hamilton producers set a group of premium seats at a cost of \$10 for every show). Miranda also explained that the priority for 'Hamilton' was and still is to make the show accessible to younger fans or those of ordinary incomes. *Id.*

95 See Office of the NYAG *supra* note 92 at 11 (quantifying the number of tickets made available to the public as around 46 percent of those obtainable).

96 See Jim Zarroli, *Can't Buy A Ticket To That Concert You Want To See? Blame Bots*, NPR (Jan. 28, 2016) [<https://perma.cc/C7ZJ-NV8V>] (showing the use of ticket bot software as an enabler for scalpers).

97 See Telephone Interview with Noah Stein and Kathleen McGee, Assistant Attorney General and Bureau of Internet and Technology Chief (Dec. 7, 2016) (recognizing that the laws currently in place acknowledge certain parts of the problem rather than the problem in its entirety).

Ticket pricing is also affected by a combination of other economic and non-economic motives.<sup>98</sup> For example, sports leagues might utilize variable pricing to allow fans of all financial means to attend their games, thus promoting a culture of shared experience by those who love the game.<sup>99</sup> Some artists might want to sell out their shows for promotional purposes and so price tickets below market value.<sup>100</sup> Others might price a set number of tickets below what they might otherwise charge to ensure accessibility to younger fans or those who cannot afford premium pricing.<sup>101</sup> However, even with this conscious pricing effort, affordable tickets do not always end up in the hands of the fans for which they were meant.<sup>102</sup>

As ticket scalping transitioned into an e-commerce<sup>103</sup> industry,<sup>104</sup> technology has allowed for the creation of software that enhances online ticket

98 See *Office of the New York State Attorney General Eric T. Schneiderman, Obstructed View: What's Blocking New Yorkers from Getting Tickets* (2016) at 27, [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/YGZ4-GPM3>] (considering the different types of motives live events may face in determining ticket prices). The Attorney General's Office noted that investigations found factors such as goodwill and reputation are so important to certain performers that they are reflected in lowered price points. *Id.* The example given in the report for non-commercial goals is that of Pope Francis distributing free tickets for his public appearances. *Id.*

99 See D.R. *The Price Is Right*, *THE ECONOMIST* (Jan. 9, 2012) archived at <https://perma.cc/DUQ9-24G3> (observing that the dynamic pricing model alienates less fans and simultaneously combats the scalping issue).

100 The Office of the New York Attorney General discovered:

Some of the promoters we spoke with argued that a public sense of high demand and ticket scarcity is necessary to create strong demand for tickets. Hence, setting ticket prices at a low level, so as to drive sales, may be necessary to create the sense of a "sellout tour" that stokes demand to attend it.

See Office of the NYAG *supra* note 98, at 27 (delineating the rationale for low prices).

101 See OFFICE OF THE NEW YORK STATE ATTORNEY GENERAL ERIC T. SCHNEIDERMAN, *Obstructed View: What's Blocking New Yorkers from Getting Tickets* (2016), [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/YGZ4-GPM3>] (outlining justifications for pricing below perceived market value); see also *Examining the Better Online Ticket Sales Act of 2016: Hearing on S.3183 Before the U.S. Subcomm. on Consumer Protection, Prod. Safety, Ins., and Data Security, and Comm. on Commerce, Sci., and Transp.*, 114th Cong. (2016), <https://www.gpo.gov/fdsys/pkg/CHRG-114shrg25173/pdf/CHRG-114shrg25173.pdf> [<https://perma.cc/HVW9-3KLX>] (statement of Jeffrey Seller, lead producer, *Hamilton: An American Musical*) (highlighting *Hamilton's* educational initiative, which will make 20,000 10-dollar tickets available each year to high school juniors who would otherwise not be able to afford to see the musical).

102 See Office of the NYAG *supra* note 101 at 27 (indicating that the benefits only exist when the tickets end up in the rightful hands of fans).

103 *E-commerce*, INVESTOPEDIA (Online ed. 2017) <https://www.investopedia.com/terms/e/ecommerce.asp> [<https://perma.cc/4ZZC-QQUR>] (defining e-commerce as a business model that allows transactions to conduct business over an electronic network, most commonly on the internet).

104 See John Michael Gibbs, *Cyberscalping: On-Line Ticket Sales*, 31 U.TOL. L. REV. 471 (2000) (discussing how businesses reduce their overhead costs through paperless transactions).

scalping, or cyber-scalping.<sup>105</sup> Cyber-scalping relies on “ticket bot” software that allows resellers to “cut the line” and purchase high volumes of tickets before the average human consumer can even press “check out.”<sup>106</sup> As a result, ticket bots now pose one of the most serious threats to the fairness of today’s ticket resale market.<sup>107</sup> Consumer protection is effectively being subordinated to the interests of the middleman cyber-scalper.<sup>108</sup>

Ticket bot software programmers pride themselves on the ability to bypass CAPTCHA<sup>109</sup> technology, quantity limits, and queues, to “grab hundreds of tickets for multiple event[s] [. . .] with just a single click.”<sup>110</sup> Once the use of this ticket bot software became pervasive, several states passed statutes attempting to regulate the software’s use by criminalizing the activity, imposing civil fines, and providing legal recourse for consumers.<sup>111</sup> These statutes, however, have had little to no effect in deterring cyber-scalpers due to lack of enforcement by government officials, regulators’ inability to actually identify

105 See James Anthony Devine, Student Paper, *Ticket Scalping in the Late 1800s and the early 2000s—Much has Changed, Much is the Same*, SETON HALL L. SCH. STUDENT SCHOLARSHIP 210 (2014) (showing the shift from in person transactions to online forms—making scalping more efficient).

106 See LeRoy Comrie, *Transparency That’s The Ticket*, N.Y. DAILY NEWS (Oct. 19, 2012) <http://www.nydailynews.com/opinion/transparency-ticket-article-1.1186936> [<https://perma.cc/P5ZY-QLM9>] (arguing that stronger enforcement is necessary even though the use of ticket bots is already outlawed in New York State).

107 See Peggy McGlone, *Online Ticket Buyers Find Themselves Outgunned By High-Tech Bots*, NJ.COM (Mar. 19, 2010) [http://www.nj.com/news/index.ssf/2010/03/online\\_ticket\\_companies\\_strugg.html](http://www.nj.com/news/index.ssf/2010/03/online_ticket_companies_strugg.html) [<https://perma.cc/R55H-5W9F>] (stating that “the prevalence of bots has already raised questions about the industry’s claims of fairness in online sales”).

108 *Id.* (noting the shift in interests towards large profits).

109 The Official CAPTCHA Site *archived at* <https://perma.cc/M53U-GH25> (explaining CAPTCHA as a program that protects websites against bots). CAPTCHA stands for Completely Automated Public Turing Test to tell Computers and Humans Apart. *Id.*

110 TicketMaster Spinner/Drop Checker Bot, TicketBots.net *archived at* <https://perma.cc/WH8N-3YXP> (describing the software available for purchase and how it works on authorized ticket seller websites to bypass securities).

111 See CAL. BUS. & PROF. CODE § 22505.5 (2015) (making circumvention software unlawful); COLO. REV. STAT. § 6-1-720(1)(a)-(b) (2015) (defining ticket bots as a deceptive trade practice when used to purchase tickets in excess of the authorized limits); FLA. STAT. § 817.36(5) (2015) (applying a civil penalty equal to the amount for which the ticket was sold to persons who intentionally use or sell ticket bot buying software); MINN. STAT. § 609.806(a) (2015) (defining the use of bots as a misdemeanor); MD. CODE ANN., COM. LAW § 14-4002 (2015) (delegitimizing the circumvention of security measures that disrupts the equitable ticket buying process); OR. REV. STAT. § 646A.115(2) (2015) (describing the prohibitions as to the use of online software to purchase tickets to an entertainment event); TENN. CODE ANN. § 39-17-1104(b) (2015) (measuring cyber scalping software as an offense); VT. STAT. ANN. TIT. 9, § 4190(a) (2015) (defining the scope of constraint placed on bot software for admission to sporting event, theatre, musical performance, or place of public entertainment or amusement of any kind).

cyber-scalpers, and noncompliance by primary vendors.<sup>112</sup> A big part the problem is that the ticket scalping industry straddles unsettled areas of the law.<sup>113</sup> Specifically, many ticket resale transactions occur across state lines or even national borders, creating formidable issues in determining which state has jurisdiction over violators of anti-scalping statutes, or if there has even been a violation at all.<sup>114</sup>

New York State Attorney General Eric T. Schneiderman<sup>115</sup> published the results of an investigation evidencing that most ticket inaccessibility is due to the use of ticket bot software.<sup>116</sup> In effect, ticket bots continuously deny consumers the ability to deal in fair markets.<sup>117</sup> While the law has in recent years taken a giant step forward, technology experts remain skeptical as to regulators' ability to identify violators.<sup>118, 119</sup> Entertainment industry giants, artists, promoters, venues, and even big ticket distributors such as Live Nation and Ticketmaster have attempted to defeat cyber ticket scalpers with little to no

112 See Daniel J. Glantz, *For-Bid Scalping Online? Anti-Scalping Legislation In An Internet Society*, 23 CARDOZO ARTS & ENT. L.J. 261, 287 (2005) (indicating that “[b]ecause of the consensual nature of purchasing a ticket above its face value, as well as the anonymity of Internet transactions, enforcing scalping laws across state borders may be too costly”). This further indicates that the cost to enforce the law does not fit the fine. *Id.*

113 *Id.* at 269 (showing the uncertainty in the law with regard to ticket scalping regulations).

114 *Id.* (evidencing the many places where e-commerce transactions typically occur). In order to determine where a transaction occurred courts might look to: (1) where the seller is located, (2) where the buyer is located, (3) the location in which the transaction is processed, or (4) the location of the auction website's servers) *Id.*

115 ATTORNEY GENERAL ERIC T. SCHNEIDERMAN, ag.ny.gov., archived at <https://perma.cc/L8T4-HCBA> (portraying the highest ranking law enforcement officer for the state of New York).

116 *Id.* (concluding that tens of thousands of tickets in New York are acquired each year using this software).

117 Better Online Ticket Sales Act of 2016, S. 3183, 114th Cong. (2016) (acting as a companion bill to the BOTS Act to combat the software's ability to scoop up tickets before the regular human consumer can make a purchase).

118 *Examining the Better Online Ticket Sales Act of 2016: Hearing on S. 3183 Before the U.S. Subcomm. on Consumer Protection, Prod. Safety, Ins., and Data Security, and Comm. on Commerce, Sci., and Transp.* (2016) (statement of Jerry Moran, U.S. Senator) (discussing the increase in bot buying software in the entertainment industry). See also Jason Koebler, *The Man Who Broke Ticketmaster*, MOTHERBOARD (Fed. 10, 2017), archived at <https://perma.cc/JH8Z-J4RB> (describing Lowson as “uniquely placed” to plug the holes in the system he once exploited). Now that the ticket bots are illegal, even Ken Lowson, once scalper and programmer extraordinaire is inspired to solve the corruption embedded within the ticket buying experience with his new consultancy firm TIXFAN. TIXFAN works with artists and management teams to tackle scalpers by enforcing published ticket limits, microtargeting presales, and refusing to sell tickets to known scalpers. *Id.*

119 Taylor Armerding, *Congress Joins Battle Against Ticket Bots*, CSO (Dec. 3, 2015) archived at <https://perma.cc/TBM2-J3C7> (arguing that legislation cannot protect against some enemy enforcement officials are unable to identify).



success.<sup>120</sup> Due to the speed of modern-day technology developments, hacking experts have the ability to develop their own programs that enable them to bypass any security measure, old and new, with ease.<sup>121</sup> As such, federal law needs to reach beyond criminalizing the use of ticket bot buying software and focus on targeting scalping practices at their core.<sup>122</sup>

Ticket bots represent only a fraction of the anti-consumer practices that plague the ticketing industry. Outlawing ticket bots, while helpful, has done little to ensure that fans, as opposed to scalpers, have meaningful opportunity to purchase tickets at face value.<sup>123</sup> Online ticket marketplaces, such as StubHub, contend that a lack of transparency with the practice of ticket-hold-backs<sup>124</sup> is largely to blame.<sup>125</sup> However, Lawson has argued that artists, sports teams, and primary vendors such as Ticketmaster cannot condemn scalpers while continuing to engage in deals that help them.<sup>126</sup>

According to Attorney General Schneiderman's<sup>127</sup> report on ticket sales in New York, on average, only 46 percent of concert tickets are actually made available to the general consuming public for purchase.<sup>128</sup> The held-back tickets are generally reserved for industry insiders, forcing the average fan to compete against cyber ticket scalpers for less than half of the available tickets to the entertainment event.<sup>129</sup> Even though some consumers may be able to purchase

120 *Id.* (showing the ineffectiveness of legislation tried in 14 different states).

121 *Id.*

122 *Id.* (discussing the capabilities of scalpers to adapt circumvention technology to bypass any new measures).

123 Koebler, *supra* note 118 (emphasizing transparency and target audience as the main cause for scalper domination).

124 See Office of the Federal Register, Code of Federal Regulations, Title 28, Pt. 0-42 (July 1, 2012) (noting that it has been industry practice to hold back a set number of tickets from those released for groups connected with the event).

125 See Office of the New York State Attorney General Eric T. Schneiderman, *Obstructed View: What's Blocking New Yorkers from Getting Tickets* (2016) at 21, [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/YGZ4-GPM3>] (attributing ticket hold back practices by artists, venues, and promoters as a reason for lack of available tickets on the free market).

126 Koebler, *supra* note 118.

127 See ATTORNEY GENERAL ERIC T. SCHNEIDERMAN, AG.NY.GOV., *archived at* <https://perma.cc/L8T4-HCBA> (detailing the work of Attorney General Schneiderman).

128 Office of the New York State Attorney General Eric T. Schneiderman, *Obstructed View: What's Blocking New Yorkers from Getting Tickets* (2016) at 11, [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/YGZ4-GPM3>] (disclosing findings on the amount of tickets available to the general public including scalpers); *see also* Justin Jofe, *Ticket Bots Are Now Illegal, But They're Part of a Much Bigger Problem*, OBSERVER (Dec. 1, 2016) *archived at* <https://perma.cc/TE6W-E845> (addressing similar concerns found in the NYAG report).

129 Office of the New York State Attorney General Eric T. Schneiderman, *Obstructed View: What's Blocking New Yorkers from Getting Tickets* (2016) at 7, [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/YGZ4-GPM3>] (discussing the increased difficulties in obtaining tickets); *see also* *Examining the Better Online Ticket Sales Act of*

tickets at the initial on-sale, there are often downstream restrictions imposed by primary ticket vendors, artists, producers, and venues as a condition of the sale.<sup>130</sup> Such restrictions typically affect the purchaser's ability to transfer the ticket to another person.<sup>131</sup> StubHub argues that these restrictions do less to deter cyber-scalping than they do to limit the average fan's ownership rights.<sup>132</sup> Thus, as artists turn to tactics such as paperless ticketing<sup>133</sup> in an attempt to curb scalping, the consumer's transfer abilities are further restricted.<sup>134</sup>

Non-transferrable paperless ticketing is often criticized by consumers because the restrictions prevent them from gifting or making last-minute transfers to friends and family.<sup>135</sup> In 2011, New York responded to these consumer frustrations by becoming the only state to outlaw non-transferrable paperless ticketing unless certain options are made available to consumers.<sup>136</sup> Under the New York Arts & Cultural Affairs Law, artists and venues may implement paperless ticketing only if (1) the paperless tickets are freely transferrable

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*2016: Hearing on S. 3183 Before the U.S. Subcomm. on Consumer Protection, Prod. Safety, Ins., and Data Security, and Comm. on Commerce, Sci., and Transp.* (2016) (statement of Tod Cohen, General Counsel, StubHub) (encouraging a discussion on the primary ticketing market's allocation practices).

- 130 Ticket Act, H.R. 4795, Sec. 2 Findings, 111th Cong. (2010) (exploring Congress' findings that producers and artists are seeking to control the resale of tickets by employing restrictive state laws, imposing contractual and licensing terms, and imposing technological barriers on ticket resale).
- 131 *Examining the Better Online Ticket Sales Act of 2016: Hearing on S. 3183 Before the U.S. Subcomm. on Consumer Protection, Prod. Safety, Ins., and Data Security, and Comm. on Commerce, Sci., and Transp.* (2016) (statement of Tod Cohen, General Counsel, StubHub) (exploring the burdensome licensing conditions placed on ticket purchasers).
- 132 *Id.* (noting that licensing restrictions prohibit fans from buying tickets as gifts, giving them away to friends or family, or donating tickets for a charitable cause).
- 133 Miley Cyrus "Paperless Ticket" FAQs, TICKETMASTER.COM (Apr. 4, 2017) *archived at* <https://perma.cc/2F87-L56E> (defining paperless ticketing as a technology that creates an electronic ticket on the purchaser's credit card up until time of entry to the venue).
- 134 *Id.* (stating that paperless ticketing ensures that only fans can purchase tickets and attend the event); *see also* Robert Viagas, *London "Touts" Getting \$6k for 'Hamilton' Tickets Despite Anti-Scalping Measures* (Jan. 31 2017) *archived at* <https://perma.cc/S4FD-F9WF> (describing the implementation of paperless ticketing to one of the most anticipated West End productions).
- 135 Office of the New York State Attorney General Eric T. Schneiderman, *Obstructed View: What's Blocking New Yorkers from Getting Tickets* 36 (2016), [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/YGZ4-GPM3>] (noting end-user frustrations with paperless ticketing).
- 136 Alfred Branch Jr., *Gov. Cuomo Signs New York Paperless Ticket Bill Into Law*, TICKETNEWS (2011) *archived at* <https://perma.cc/KF8N-R9PN> (delineating the bill's effects and scope within New York's entertainment industry); *see also* Alfred Branch Jr., *New York Legislature Renews Paperless Ticketing Bill*, TICKETNEWS (2011) *archived at* <https://perma.cc/XRC5-ANPK> (highlighting the support this bill's renewal received from both the New York State Assembly and the Senate); *see also* N.Y. Arts & Cult. Aff. Law § 25.30 (2014) (leaving open options for fans to freely transfer their tickets).

without requiring that consent be obtained from the primary vendor, or (2) the purchaser is offered, at the time of the initial sale, the option to purchase the identical ticket in paper or other form at the same price point.<sup>137</sup> Supporters highlight the importance of consumer choice and an open and free market that values competition.<sup>138</sup>

A potential solution primary vendors may consider is dynamic pricing.<sup>139</sup> This practice has successfully deterred scalping and hindered massive price inflation in various industries such as airline and hotel businesses, and most recently, sports event ticketing.<sup>140</sup> Dynamic pricing has been successful because by eliminating the single price set for each seat, sports franchises have the ability to match demand fluctuation, which ultimately raises stadium attendance and total ticket revenue.<sup>141</sup> Scalpers have helped primary vendors more appropriately price their tickets based on the perceived value the consumer attaches to it—proving the viability of a dynamic pricing model.<sup>142</sup>

Another potential solution is decentralizing the industry and placing all transactions on a blockchain.<sup>143</sup> This has been validated by BitTicket, the first digital event ticketing process to take place on a blockchain, successfully guaranteeing the value of a ticket and publicly verifying every sale.<sup>144</sup>

Jeffrey Seller, lead producer on *Hamilton: An American Musical*, contends that ticket-holdback practices are unique to concert events and do not affect the theater industry.<sup>145</sup> This is true partly because theatrical productions,

137 N.Y. Arts & Cult. Aff. Law § 25.30 (2014) (providing an opt-out provision for consumers).

138 Alfred Branch Jr., *New York Legislature Renews Paperless Ticketing Bill*, TICKETNEWS (2011) archived at <https://perma.cc/XRC5-ANPK> (characterizing the purchasing of tickets to live events as a competition).

139 *Dynamic Pricing*, BUSINESS DICTIONARY (Online ed. 2017) (defining dynamic pricing as determining a product's value in fluid manner depending on a customer's perceived ability to pay).

140 D.R. *The Price Is Right*, THE ECONOMIST (Jan. 9, 2012) archived at <https://perma.cc/DUQ9-24G3> (observing the benefits of a dynamic pricing model versus a proprietary pricing model).

141 *Id.* (detailing the massive profit benefits franchises reaped as well as the benefits to consumers of available seats).

142 HARVARD BUSINESS REVIEW, *Pricing Secrets Of Ticket Scalpers*, HBR Idea Cast, archived at <https://perma.cc/NLZ5-M3GK> (July, 2011) (discussing how companies use price to profit and grow).

143 DON TAPSCOTT & ALEX TAPSCOTT, BLOCKCHAIN REVOLUTION 9 (1st ed. 2016) (demonstrating the benefits of removing the middle man).

144 Rebecca Campbell, *Using Blockchain Tech to Keep Concert Tickets Honest*, BITCOIN MAGAZINE (May 2017), archived at <https://perma.cc/DEJ7-UZ6Y> (describing the ways in which BitTicket have proved beneficial).

145 See *Examining the Better Online Ticket Sales Act of 2016: Hearing on S. 3183 Before the U.S. Subcomm. on Consumer Protection, Prod. Safety, Ins., and Data Security, and Comm. on Commerce, Sci., and Transp.* (2016) (statement of Jeffrey Seller, lead producer, *Hamilton: An American Musical*) (stating that less than 10 percent of the house is controlled by the writer, director, and actors for their personal use); see also *Hamilton*

if successful, often see a longer lifecycle than sporting events or live concerts.<sup>146</sup> Concerts range anywhere from two to ten performances in any given city.<sup>147</sup> Concerts' limited seating and short run periods allow ticket scalpers to earn larger profits off of immediate demand.<sup>148</sup> However, when it comes to the theater, cyber ticket scalpers have tended to infiltrate the ticket market only when there are critically acclaimed shows such as *The Producers*,<sup>149</sup> *The Book of Mormon*,<sup>150</sup> and most recently *Hamilton*.<sup>151</sup>

What the theater industry has in common with sporting and live concert events is the fact that productions tour from state to state.<sup>152</sup> Ticket vendors, presenters, sports commissioners, and online marketplaces are not looking to prohibit free market exchanges.<sup>153</sup> Rather, what is at issue for these stakeholders is the preservation of a level playing field within a ticketing system designed to make tickets accessible and convenient for consumers, no matter their location.<sup>154</sup> The foreseeable exponential growth of technology and e-commerce, combined with a lack of independent federal legislation regulating the ticketing industry has given entertainment executives a cause for action.<sup>155</sup>

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*Utilize Paperless Ticket System*, TICKETMASTER (Dec. 1, 2017) archived at <https://perma.cc/3XK3-43CA> (showing how *Hamilton* continues to combat scalpers in its worldwide productions).

146 Telephone Interview with Luis A. Miranda, Jr., Founding Partner, MirRam Group (Nov. 16, 2016) (discussing the longevity that is characteristic of theatrical productions).

147 *Id.*

148 *Id.* (citing the short term as the leading cause for holdbacks and scalper buyouts for live concerts).

149 See MEL BROOKS & THOMAS MEEHAN, *THE PRODUCERS* (2001) (a musical based on Mel Brooks' 1968 film of the same name, which won a record breaking 12 Tony Awards).

150 See TREY PARKER, ROBERT LOPEZ, & MATT STONE, *THE BOOK OF MORMON* (2011) (a religious satire musical on the Church of Jesus Christ of Latter-Day Saints).

151 See LIN-MANUEL MIRANDA, *HAMILTON: AN AMERICAN MUSICAL* (2015) (the acclaimed Broadway musical about the life of founding father Alexander Hamilton); see also RON CHERNOW, *ALEXANDER HAMILTON* (The Penguin Group, Inc., 2004) (Chernow's book provided the basis for Miranda's musical).

152 Telephone Interview with Luis A. Miranda, Jr., Founding Partner, MirRam Group (Nov. 16, 2016) (observing that for *Hamilton* cyber scalper buyouts affected not only Broadway, but also the Chicago production). Miranda expects the same aggression by ticket buying software when the production opens on the West Coast later this year. *Id.*

153 See *Examining the Better Online Ticket Sales Act of 2016: Hearing on S. 3183 Before the U.S. Subcomm. on Consumer Protection, Prod. Safety, Ins., and Data Security, and Comm. on Commerce, Sci., and Transp.* (2016) (statements of Jeffrey Seller, Tod Cohen, Senators Moran, Blumenthal, and Fisher) (agreeing that the answer is not to prevent buying and selling).

154 See *id.* (suggesting the bot buying software destroys the intent of creating consumer convenience through online purchases).

155 See *id.* (citing that regulation of the ticket industry has been left to state, local, and municipal governments).

### III. LEGISLATIVE EFFORTS TO CURB CYBER-SCALPING

#### A. *State Regulation Before the BOTS Act*

The first U.S. laws specifically targeting ticket scalping originated in the early twentieth century at the state level, decades before Attorney General Lefkowitz proposed bills in New York.<sup>156</sup> In 1905, some state legislatures passed laws prohibiting the resale of tickets for amounts greater than the initial sale price.<sup>157</sup> Once these new laws took effect, scalpers almost immediately challenged them on the basis of their constitutionality arguing that the secondary market works in the interest of the public by ensuring that theaters do not hold a monopoly in determining ticket pricing.<sup>158</sup> After much pushback from scalpers, courts ultimately ruled in their favor, overturning existing laws by finding that regulating ticket prices ultimately violated Due Process and was not within the scope of state governments' power.<sup>159</sup>

However, in 1965, the United States Supreme Court upheld the New York District Court's ruling in *Gold v. Di Carlo* that "the test of constitutionality is whether the method of regulation embodied in the statute bears a rational relation to a constitutionally permissible objective."<sup>160</sup> The District Court had upheld a state statute that made it illegal to resell tickets for more than \$1.50 over the initial price, finding that because "prices for public amusement are matters of public interest" the government is therefore justified in imposing price regulations.<sup>161</sup> Recently, courts carried over this "rational basis" test to defend laws governing the resale of tickets on the grounds that the laws are "rationally related to legitimate public concern."<sup>162</sup> Using this test, state courts, after the *Gold v. Di Carlo* decision, now hold most anti-scalping laws to be constitutional and enforceable pursuant to the states' police powers.<sup>163</sup>

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156 *People ex rel. Cort Theatre Co. v. Thompson*, 283 Ill. 87, 88 (1918) (addressing a city ordinance prohibiting secret partnerships between theatres and scalpers).

157 *Ex Parte Quarg*, 149 Cal. 79 (amending the California Penal Code to classify the resale of tickets at inflated prices as a misdemeanor).

158 *Tyson & Bro.-United Theatre Ticket Offices v. Banton*, 273 U.S. 418 (1927) (reviewing an appeal by a ticket broker corporation who argued that the act was unconstitutional under the Fourteenth Amendment).

159 *Id.* at 441. (holding it was unconstitutional for New York State to prohibit reselling tickets for fifty cents above face value because it interfered with ticket holders' property rights and therefore violated Due Process).

160 *Gold v. Di Carlo*, 235 F. Supp. 817, 820 (S.D.N.Y. 1964), *aff'd* 380 U.S. 520 (1965) (describing the rational basis test to determine the constitutionality of regulating the secondary ticket market).

161 *Id.* (analyzing whether the statute reaches too far in scope or is a correct exercise of governmental authority); *see also* *Nebbia v. New York*, 291 U.S. 502 (1934) (finding that the dairy industry was subject to price regulation in the public interest and therefore did not violate the Fourteenth Amendment).

162 *See* *Gold v. Di Carlo*, 380 U.S. 520 (1965) (detailing the rational basis analysis used by courts in favor of consumers).

163 John Michael Gibbs, *Cyberscalping: On-Line Ticket Sales*, 31 U. Tol. L. Rev. 471 (2000)

Since *Gold v. Di Carlo*, Alabama and Massachusetts have enacted statutes regulating the secondary ticket market.<sup>164</sup> These statutes range in scope from requiring that scalpers obtain business permits as a condition of lawful operation to completely banning ticket resale above face value.<sup>165</sup> Other state laws permit scalping but place restrictions on price, place, and time of resale, and the types of events for which scalpers may resell tickets.<sup>166</sup> For example, Virginia allows ticket scalping practices to occur at the discretion of the venue hosting the event, and the prohibitions of the statute do not apply to online transactions.<sup>167</sup>

### B. *Federal Regulation and Legislative Enforcement*

Lawmakers have successfully passed federal legislation targeting cyber-scalping, but much of that legislation has been ineffective in practice because the entities with the power to enforce the law do not prosecute known violators.<sup>168</sup> The federal Communications Decency Act<sup>169</sup> (CDA) aims to preserve the “vibrant and competitive free market that [currently] exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.”<sup>170</sup> However, it is questionable whether ticket broker services even constitute a “viable and relevant product market” entitled to protection under the CDA.<sup>171</sup> The CDA accomplishes this free market preservation in

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(stating that the Supreme Court deems anti-scalping legislation a permissible application of state police powers).

- 164 ALA. CODE § 40-12-167 (2015) (employing a \$100 license tax for scalpers selling at inflated prices); *see also* MASS. GEN. LAWS ANN. CH. 140, §§ 185A, 185D (2015) (prohibiting scalping as a business without a license and capping the inflated resell price at no more than \$2 above face value); *see also* N.Y. ARTS & CULT. AFF. LAW § 25.13(1) (2015) (requiring a license be procured each time resell is conducted).
- 165 James Anthony Devine, *Ticket Scalping in the Late 1800s and the early 2000s—Much has Changed, Much is the Same*, Law School Student Scholarship, Paper 210 (2014) (comparing the different state statutes across the United States showing those that encourage scalping and those that work against the practice).
- 166 *See* Gibbs, *supra* note 163 at 475 (describing the statutes that affect after-market ticket sales).
- 167 VA. CODE ANN. § 15.2-969 (2009) (stating that scalping shall be left to the discretion of the host and transactions that occur online are not covered within the statute). The statute states: “Any locality may provide, by ordinance, that it is unlawful for any person [. . .] to resell for profit any ticket for admission . . . . Such ordinance may provide that violators thereof are guilty of a Class 3 misdemeanor. This section shall not apply to any resale of a ticket that occurs on the Internet.” *Id.*
- 168 Bryce Cashman, *New Bill Tackles Ticket-Buying Bots*, FUTURE OF MUSIC COALITION (Apr. 8, 2015, 8:19 AM) <https://futureofmusic.org/blog/2015/04/08/new-bill-tackles-ticket-buying-bots> [<https://perma.cc/7SPE-ZBNW>] (detailing the lack of enforcement).
- 169 Communications Decency Act 47 U.S.C. § 230 (1996) (providing immunity from liability for service providers and users of an “interactive computer service”).
- 170 *Milgram v. Orbitz Worldwide, Inc.*, 16 A.3d 113, 1120 (N.J. Super. Ct. Law Div. 2010) (exhibiting Congress’ intent when passing the CDA).
- 171 *See* Eriq Gardner, *Ticket Broker Claims Hollywood’s Gated Events Amount to*

part by affording interactive computer service providers immunity from civil liabilities that might otherwise arise by virtue of their filtering or regulating user-generated content.<sup>172</sup> The concern among interactive computer service providers had been that, by restricting—or failing to restrict—lewd, violent, or otherwise objectionable user-generated content, they would assume liability as “publishers or speakers” of that information. In *Milgram v. Orbitz*, the court held that under the CDA online ticket vendors like StubHub would not necessarily be responsible for third-party content created on their websites, namely, the resold tickets.<sup>173</sup> The Seventh Circuit, however, rejected this interpretation of the CDA, holding that the law does not apply outside of the publishing context and cannot grant broad immunity to online service providers.<sup>174</sup> However, preserving free markets is an important interest to our courts, as evidenced by the appellate decision in *Hill v. StubHub, Inc.*<sup>175</sup> In *Hill*, the appeals court treated StubHub as a “venue” that enables buyer-seller interactions.<sup>176</sup> With this classification, the grant of broad immunity follows naturally, because the seller sets the final price for the tickets they have, which makes the price and the tickets third-party content for which StubHub is not liable.<sup>177</sup>

Another attempt at federal regulation is the Computer Fraud and Abuse Act<sup>178</sup> (CFAA), which criminalizes unauthorized computer access.<sup>179</sup>

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an Antitrust Conspiracy, THE HOLLYWOOD REPORTER (Feb. 29, 2017, 11:35 A.M.), <https://www.hollywoodreporter.com/thr-esq/ticket-broker-claims-hollywoods-gated-events-amount-an-antitrust-conspiracy-981541> [<https://perma.cc/WL2M-FG2A>] (questioning the relevance of scalpers as a viable product market); see also Complaint at 41, *Disney Enterprises, Inc. v. Hollywood Entertainment Group* (No. 16-9432-JWF(MRWx)) (offering defendant’s answer to a lawsuit filed against him which argues that there are no laws against ticket selling and that studio executives are just as guilty for profiting off of ticket resales).

172 *Milgram* 16 A.3d 113 at 1122 (holding that service providers are immune for content created by third parties).

173 *Id.* at 1120 (holding that §230 preempted the state Consumer Fraud Act and that immunity is given to “interactive computer services” acting as publishers of third party content). See also Ambike Doran & Tom Wyrwich, *The Test of Time: Section 230 of the Communications Decency Act Turns 20*, MEDIA LAW MONITOR (Aug. 9, 2016), <http://www.medialawmonitor.com/2016/08/the-test-of-time-%E2%80%A8section-230-of-the-communications-decency-act-turns-20> [<https://perma.cc/JY6D-S4UU>] (noting that courts generally rule in favor of broad immunity).

174 *Doe v. GTE Corp.*, 347 F.3d 655, 659–60 (7th Cir. 2003) (holding that § 230 may act as a definitional clause rather than as immunity).

175 *Hill v. StubHub, Inc.*, 727 S.E.2d 550, 564 (N.C. Ct. App. 2012) (holding that § 230 does grant broad immunity to StubHub against the scalping its site facilitates).

176 See *id.* at 552.

177 See *id.* at 558–59.

178 Computer Fraud and Abuse Act, 18 U.S.C. §1030 (1986) (criminalizing unauthorized access of nonpublic computers of a department or agency of the United States or protected computers, which includes basically all computers).

179 See Orin S. Kerr, *Vagueness Challenges to the Computer Fraud and Abuse Act*, 94 MINN. L. REV. 1561, 1561 (2010) (explaining that the legislative intent behind that statute was

The legislative intent behind the CFAA was to criminalize high-interest federal computer hacks.<sup>180</sup> However, the act has been interpreted expansively by courts, making it one of the most over-inclusive criminal laws<sup>181</sup> in the United States Code.<sup>182</sup>

*United States v. Lowson* provides an example of the courts' flawed applications of the CFAA.<sup>183</sup> With Ken Lowson at the helm, four men conducting business as "Wiseguy Tickets"<sup>184</sup> were charged with manipulating the ticket market to buy scores of tickets to a variety of events.<sup>185</sup> They were alleged to have engaged in cyber fraud by manipulating the ticket market using thousands of non-consecutive IP addresses to trick the CAPTCHA systems, registering under pseudonyms, and using more than 150 credit cards to effect their purchases.<sup>186</sup> With the Wiseguys indicted in March 2010, the owners of ticket vending sites, Ticketmaster among them, argued that criminal fraud occurs when a party violates a website's terms of service.<sup>187</sup> The website owners also argued that they had an interest in being exclusive ticket distributors for given events and, claiming a property interest in the tickets they sold on their sites, that their property rights were violated by the conduct of the defendants.<sup>188</sup> On the other hand, the Wiseguys contended that such an application of the CFAA would shackle the secondary market, undermine ticket purchasers' interest in

to create a private right of action for violations).

180 *Id.*

181 See Victor Manoloche, *Computer Fraud And Abuse Or Prosecutorial Fraud And Abuse: Time For Change*, 6 CASE W. RES. J.L., TECH. & INTERNET 67 (2015) (challenging the act as over-inclusive due to a lack of congressional specificity). Manoloche reasons that because Congress failed to define "authorization" within the Act it resulted in a split between the Seventh and Ninth Circuits. Second, Manoloche believes the CFAA is a bright-line rule, which affords no exceptions. *Id.*

182 See Kerr *supra* note 179 at 1578 (noting that under the current version of the CFAA any action that accesses any protected devices is subject to liability so long as some information is obtained by the violator).

183 *U.S. v. Lowson*, 2010 U.S. Dist. LEXIS 145647 at 18 (detailing the challenges in applying the CFAA broadly, in determining what constitutes "obtaining information").

184 *Id.* at 4 (describing Wiseguy Tickets and how the company circumvented computer code to acquire event tickets that were then resold).

185 *Id.*

186 *Id.* at 5 (showing the different measures of deception the company employed to purchase tickets). Although this is a criminal case, it is also related to e-commerce and the state of the law remains unclear. *Id.* Judge Hayden's opinion was criticized as being too lenient. However, if the CFAA is interpreted too broadly as any violation of a website's terms of use, many internet users would be considered misdemeanor criminals. *Id.*

187 See Peter F. Bariso III, *No Need to Fear Robots: Online "Bot" Use under the Computer Fraud and Abuse Act*, SETON HALL LAW STUDENT SCHOLARSHIP PAPER, No. 757 (2016) (discussing the scope of the CFAA in protecting against bot use).

188 Brief of *Amici Curiae* Electronic Frontier Foundation et al., in Support of Defendant's Motion to Dismiss the Indictment at 28, *U.S. v. Lowson* 2010 U.S. Dist. LEXIS 145647 (2010) (No. 10-114) (explaining the positions of both parties).



a free economy, and confer property rights in tickets where historically the law has not recognized any.<sup>189</sup> Furthermore, the defendants emphasized that the software employed did not hack the website owners' CAPTCHA.<sup>190</sup> In the words of the defense, "CAPTCHA was not hacked. It was responded to by a computer . . . . [T]he computer acted as an individual and answered the CAPTCHA response correctly, which allowed the computer to then go to the buy page to order tickets."<sup>191</sup> Faced with a motion to dismiss by the defense, the district court effectively sided with the prosecutors, holding that the indictment sufficiently alleged Wiseguys' intent to gain unauthorized access, and thus to contravene the CFAA.<sup>192</sup>

Although the case ultimately settled, the fact that the vague language of the CFAA is capable of incriminating a vast range of conduct is important.<sup>193</sup> The district court's interpretation in *Lowson* should be regarded cautiously because imposing criminal liability based on a website's terms of service may still violate the Constitution.<sup>194</sup> Firstly, terms of service arguably fail to provide users with sufficient notice that the actions they may be engaging in are illegal, whereby users' due process rights are threatened.<sup>195</sup> Additionally, pursuant to the *Lowson* court's interpretation, the CFAA may be void for vagueness because it fails to define "authorization," a term subject to various interpretations.<sup>196</sup> Ultimately, the distinction as to whether *Lowson*'s ticket bots hacked CAPTCHA or simply responded to it was vital to the court's determination in finding against *Lowson* and *Wiseguy Tickets*.<sup>197</sup>

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189 *Id.* (describing the alternative argument to the application of the CFAA).

190 Jason Koebler, *The Man Who Broke Ticketmaster*, MOTHERBOARD (Feb. 10, 2017), [https://motherboard.vice.com/en\\_us/article/mgxqb8/the-man-who-broke-ticketmaster](https://motherboard.vice.com/en_us/article/mgxqb8/the-man-who-broke-ticketmaster) (describing the intricacies of the case).

191 *Id.*

192 Kim Zetter, *Wiseguys Plead Guilty in Ticketmaster CAPTCHA Case*, WIRED, [<https://perma.cc/73FR-FZ29>] (Nov. 19, 2010) (noting Judge Hayden's reasoning for declining to dismiss the charges).

193 *Id.*

194 See Brief of *Amici Curiae* Electronic Frontier Foundation in Support of Defendant's Motion to Dismiss the Indictment at 28, *United States v. Lowson* 2010 U.S. Dist. LEXIS 145647 (2010) (No. 10-114) (showing the dangers in applying a broad interpretation of the CFAA).

195 *Id.*

196 *Id.*

197 Jason Koebler, *The Man Who Broke Ticketmaster*, MOTHERBOARD (Feb. 10, 2017), [https://motherboard.vice.com/en\\_us/article/mgxqb8/the-man-who-broke-ticketmaster](https://motherboard.vice.com/en_us/article/mgxqb8/the-man-who-broke-ticketmaster) (highlighting the issue on which the case centered).

In 1998, Representative Gary Ackerman<sup>198</sup> brought the Ticket Scalping Reduction Act<sup>199</sup> (TSRA) before the House of Representatives.<sup>200</sup> The TSRA was sparse and sought to amend the federal criminal code to prohibit anyone from “using the mails or any facility of interstate or foreign commerce to scalp five or more tickets in a single transaction,” setting penalties for violators.<sup>201</sup> Additionally, it defined ticket scalping as the “resell[ing] [of a] ticket, or offer to resell a ticket, at a markup of more than \$5 or 10 percent of its face value.”<sup>202</sup> The TSRA was never signed into law due to its insubstantiality.<sup>203</sup>

Several years later, the Better Oversight of Secondary Sales and Accountability in Concert Ticketing Act<sup>204</sup> (BOSS Act), was introduced by Representative Bill Pascrell.<sup>205, 206</sup> Utilizing the FTC’s authority to enforce federal consumer protection laws that prevent fraud, deception, and unfair business practices, and in an effort to preserve transparency in the market, the BOSS Act sets forth rules for ticket marketing, distribution, and pricing.<sup>207</sup> The BOSS Act directly targets primary ticket vendors, requiring them to disclose the number of tickets made available to the general public and the amount that would be withheld through ticket-holdback practices,<sup>208</sup> which reserve stockpiles of tickets for industry insiders, such as artists, venues, promoters, marketing departments, record labels, and sponsors, among others.<sup>209</sup> These

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198 GovTRACK, govtrack.us [https://perma.cc/5ZYU-HAQM] (highlighting sponsored bills and issues by Gary Ackerman, Former Representative from New York’s 5th District).

199 Ticket Scalping Reduction Act of 1998, H.R. 3951, 105th Cong. (1998) (amending the federal criminal code to prohibit and set penalties for scalping five or more tickets in a single transaction).

200 *Id.* (summarizing the scope of protections afforded by the Act).

201 *Id.* (stating the punishments for violations of the Act).

202 *Id.* (defining the term “scalp”).

203 *Id.* (noting that the bill was only ever introduced in the House).

204 The Better Oversight of Secondary Sales and Accountability in Concert Ticketing Act, H.R. 5245, 114th Cong. (2016) (suggesting it is the F.T.C.’s role to designate rules and regulations for the primary or secondary ticket sale markets).

205 CONGRESSMAN BILL PASCRELL, REPRESENTING THE 9TH DISTRICT OF NEW JERSEY, PASCRELL.HOUSE.GOV. archived at https://perma.cc/3H3B-CCD5 (providing a biography of Representative Bill Pascrell from New Jersey’s 9th District).

206 The BOSS Act, H.R. 5245, 114th Cong. (2016) (introducing heightened measures to combat cyber scalping).

207 *Id.* (requiring ticket vendors to maintain records of who is selling); see also Alfred Branch Jr., *Ticketmaster, Taylor Swift, and Keith Urban Ticket Holdbacks Exposed*, TICKETNEWS (Nov. 12, 2009) [https://perma.cc/D9YX-3NM2] (discussing artists as equally problematic as scalpers, through their use of ticket hold-back practices).

208 The BOSS Act, H.R. 5245, 114th Cong. (2016) (placing transparency requirements on ticket vendors to fully and completely disclose distribution and pricing to consumers).

209 Office of the New York State Attorney General Eric T. Schneiderman, *Obstructed View: What’s Blocking New Yorkers from Getting Tickets* (2016) at 3, https://ag.ny.gov/pdfs/Ticket\_Sales\_Report.pdf [https://perma.cc/N9U4-3FE6] (arguing that transparency in ticketing practices are rarely disclosed to the general public).

holdback practices started making headlines in 2009 when both Keith Urban and Taylor Swift faced great criticism after their enormous holdback numbers were exposed.<sup>210</sup> Moreover, the BOSS Act mandates the disclosure of tickets' face value, as well as any applicable processing fees.<sup>211</sup> As to ticket scalpers, the BOSS Act radically limits the timeframe for purchases by scalpers to the forty-eight hours immediately following the primary on-sale, when tickets are first released to the general consuming public.<sup>212</sup> To date, The BOSS Act's progress has remained stagnant; it has yet to reach the Senate.<sup>213</sup>

In 2015, Representative Marsha Blackburn<sup>214</sup> introduced the Better Online Ticket Sales Act<sup>215</sup> (BOTS Act) to Congress.<sup>216</sup> The intent behind this bill is to regulate the use of ticket-buying bots that bypass security walls on authorized online ticket marketplaces.<sup>217</sup> The BOTS Act proposes federal criminal sanctions for use of bot software, deeming such use an "unfair or deceptive practice" under the Federal Trade Commission Act.<sup>218</sup>

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210 Alfred Branch Jr. *Ticketmaster, Taylor Swift, and Keith Urban Ticket Holdbacks Exposed*, TICKETNEWS (Nov. 12, 2009) [<https://perma.cc/D9YX-3NM2>] (discussing the reallocation of thousands of tickets to credit card holders and the artist's entourage).

211 The BOSS Act, H.R. 5245, 114th Cong. (2016) (favoring consumer knowledge and fair-trade practices).

212 *Id.* (promoting stricter limitations on scalper access to first ticket sales).

213 *Id.* (indicating that the bill was referred to the Subcommittee on Commerce, Manufacturing, and Trade).

214 U.S. CONGRESSWOMAN MARSHA BLACKBURN, BLACKBURN.HOUSE.GOV *archived at* <https://perma.cc/NTW8-BZ8M> (serving the 7th District of Tennessee).

215 The Better Online Ticket Sales Act, H.R. 708, 114th Cong. (2015) (prohibiting the sale and use of circumvention software as well as the resell of tickets acquired through use of the software).

216 *Id.*

217 *Id.* (prohibiting "unfair and deceptive act or practice in commerce, the sale or use of certain software to circumvent control measures used by Internet ticket sellers to ensure equitable consumer access to tickets for any given event, and to provide for criminal penalties for such acts").

218 Legislation Tracker, FUTURE OF MUSIC COALITION (Sept. 13, 2016) [<https://perma.cc/8PXG-EV49>] (tracking the evolution of the proposed bill); *see also* Press Release U.S. Congresswoman Marsha Blackburn, Tennessee Representatives Lead Bipartisan Effort to Level Online Ticket Sales Playing Field for Fans of Live Entertainment, (Sept. 12, 2016) (stating the purpose of pushing the BOTS Act forward) Representative Blackburn has said:

For years ticket scalpers have been taking advantage of computer hacking software (BOTS) to overwhelm on-line ticketing websites with requests. The BOTS Act will make it an unfair and deceptive practice to use a bot to violate the terms and conditions of a ticketing site and will allow the FTC to take action against online scalpers. These anti-consumer tactics have no place in our society and it's time that we take action to protect fans of live entertainment. I encourage my Senate colleagues to pass this bi-partisan legislation immediately.

*Id.*

Senator Charles Schumer,<sup>219</sup> alongside award-winning composer-lyricist-actor and *Hamilton*<sup>220</sup> creator Lin-Manuel Miranda, launched a successful campaign calling on Congress to ratify the BOTS Act, which on December 14, 2016 was signed into law.<sup>221</sup> The BOTS Act, however, only addresses part of the greater ticket scalping epidemic, compelling the New York Attorney General (NYAG) to lead an ongoing multi-state investigation of the sale and resale of tickets, an undertaking that reaches beyond scrutiny of ticket bots.<sup>222</sup>

#### IV. SECURING ONLINE TRANSACTIONS

The ubiquity of online communication and e-commerce has both positive and negative effects.<sup>223</sup> The secondary ticket market would not hold such sway over ticket prices but for ticket bots' ability to hack security features employed by online vendors.<sup>224</sup> The internet has created more opportunity for the commission of cybercrimes such as identity theft, phishing, hacking, and data-napping to occur.<sup>225</sup> While innovators have tried to mitigate cybercrimes by using cryptography,<sup>226</sup> each attempt to secure transactions has failed

219 CHARLES E. SCHUMER UNITED STATES SENATOR FOR NEW YORK, SCHUMER.SENATE.GOV., [<https://perma.cc/8DXG-TFZ8>].

220 See LIN-MANUEL MIRANDA, *HAMILTON: AN AMERICAN MUSICAL* (2015) (the acclaimed Broadway musical about the life of founding father Alexander Hamilton); see also RON CHERNOW, *ALEXANDER HAMILTON* (The Penguin Group, Inc., 2004) (Chernow's book provided the basis for Miranda's musical).

221 Press Release, Standing With Broadway's Lin-Manuel Miranda, Schumer Spotlights & Rallies For Critical Senate Bill That Finally Cracks Down On Hackers Who Use Bots To Steal Popular Broadway & Concert Tickets Before True Fans Have A Chance To Even Turn On Their Computer (Aug. 14 2016) (stating "bots have gotten completely out of control and their dominance in the market is driving up prices for music and sports fans as well as tourists and theater-goers"). This new legislation, supported by Lin-Manuel Miranda, will crack down on online hackers and scalpers that use 'bots' to purchase thousands of tickets in a matter of milliseconds, and then sell them at outrageously-inflated prices. *Id.*; see also Lin-Manuel Miranda, *Stop The Bots From Killing Broadway*, N.Y. TIMES (June 7, 2016) [<https://perma.cc/99YR-28RD>] (endorsing the BOTS Act as an adequate first step in dissuading scalpers through criminal penalties).

222 Office of the New York State Attorney General Eric T. Schneiderman, *Obstructed View: What's Blocking New Yorkers from Getting Tickets* (2016) [[https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf)] [<https://perma.cc/N9U4-3FE6>] (providing investigatory findings and data on the use of bots by scalpers as well as other industry practices affecting consumer access to live entertainment at fair market value).

223 DON TAPSCOTT & ALEX TAPSCOTT, *BLOCKCHAIN REVOLUTION 4* (Portfolio/Penguin, eds. 1st ed. 2016) (describing the new landscape the Internet affords).

224 Kyle Torpey, *Bitcoin Could Put Ticket Scalpers Out of Business*, INSIDE BITCOINS (Oct. 2014).

225 TAPSCOTT *supra* note 223 (citing Moore's law as the explanation). "Moore's law of the annual doubling of processing power doubles the power of fraudsters and thieves." *Id.*

226 Cryptography, MERRIAM-WEBSTER DICTIONARY (online ed. 2017) (defining cryptography as the computerized encoding and decoding of information). Cryptography

because innovators have relied on third parties, such as banks, to facilitate transactions and maintain free and open markets.<sup>227</sup> Given that conducting transactions over the internet requires a leap of faith, the existence of these middlemen has been crucial in maintaining the appearance of consumer protection.<sup>228</sup> That is, consumers place value in knowing that their transactions are secure, and thus far banks and other third parties have been tasked with providing such security.<sup>229</sup>

New technology underlying cryptocurrencies like Bitcoin offers a promising alternative to this reliance on third parties.<sup>230</sup> It ensures the protection of the data exchanged while removing the “trusted third party” from the transaction.<sup>231</sup> This new way of transacting is referred to as the blockchain.<sup>232</sup> In its most basic form, the blockchain is an open source code that anyone can freely download and participate in on a global scale.<sup>233</sup> It comprises a “digital ledger” that is “shared, replicated, and synchronized among the members of a network.”<sup>234</sup> Because blockchain technology is distributed—running

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allows for secured communications that prevent third parties from deciphering the communication.

227 See TAPSCOTT, *supra* note 223 (describing the role of third parties as detrimental to privacy and security); see also Rebecca Campbell, *BitTicket Uses Ethereum Classic to Book Tickets on a Blockchain*, CRYPTO COINS NEWS (May 21, 2017) [https://perma.cc/GQ8Q-B4UD] (showing how the blockchain is already being utilized to sell tickets); see also Imogen Heap & Don Tapscott, *Blockchain Could Be Music’s Next Disruptor*, FORTUNE (Sept. 22, 2016) [https://perma.cc/P529-V8G8] (characterizing blockchain as the technology that could create a sustainable economic model for artists); see also Imogen Heap, *Blockchain Could Help Musicians Make Money Again*, HARVARD BUSINESS REVIEW (June 5, 2017) [https://perma.cc/D2WA-8CPB] (discussing why blockchain is worth exploring for creatives); see also Olusegun Ogundéji, *Imogen Heap Sees Blockchain as the Music Industry’s Savior*, CRYPTO COINS NEWS (Oct. 18, 2016) (explaining Heap’s views as to why it’s time to redefine the way creators get paid); see also Paul Resnikoff, *I’m Imogen Heap. And This Is Why I’m Releasing My Music on Blockchain*, DIGITAL MUSIC NEWS (Oct. 5, 2015) [https://perma.cc/E85W-R2G7] (describing blockchain’s ability for real-time distributions of royalties to all parties involved in song creation); see also Kyle Torpey, *Bitcoin Could Put Ticket Scalpers Out of Business*, INSIDE BITCOINS (Oct. 2014), [https://perma.cc/8QLU-GF9K] (arguing for ticketing companies to adopt an open distribution model); see also Jonathan Keane, *Blockchain Startups Take On Ticket Touting, But Will They Gain Traction?* (July 2017), [https://perma.cc/8QK4-9P9R] (articulating the hurdles blockchain may pose to ticketing).

228 See TAPSCOTT, *supra* note 223.

229 See *id.* (articulating why consumers and businesses alike have treated the middlemen as “deities”).

230 *Id.* (discussing how Bitcoin was born and the technology that enabled its success).

231 *Id.* at 5.

232 *Id.* at 5.

233 *Id.* at 6.

234 Sloane Brakeville & Bhargav Perepa, *Blockchain Basics: Introduction to Distributed Ledgers*, IBM DEVELOPERWORKS, (Aug. 21, 2017) https://www.ibm.com/developerworks/cloud/library/cl-blockchain-basics-intro-bluemix-trs/cl-blockchain-basics-intro-bluemix-trs-pdf.

on computers around the world—there is no central database to hack; and each transaction—such as the exchange of assets or data—is recorded within the network.<sup>235</sup>

For a transaction to be validated, each “block” on the blockchain must refer to the block that came before it.<sup>236</sup> Don and Alex Tapscott, avid blockchain investors and researchers, aptly describe the security impact this technology affords: “Blockchains enable us to send money directly and safely from me to you, without going through a bank, a credit card company, or PayPal. . . . If you wanted to steal a bitcoin, you’d have to rewrite the coin’s entire history on the blockchain in broad daylight.”<sup>237</sup> The internet is experiencing a shift, transitioning from a source of information to a source of value for consumers.<sup>238</sup> With monetary worth now attached, it is vital to secure our transactions and data so that they remain inaccessible to hackers.<sup>239</sup> If within the ticketing industry scalpers are the middlemen, moving the purchase and sale of tickets onto the blockchain could remove the threat of hacking entirely.<sup>240</sup> Blockchain decentralizes the ticket vending process by making a certain number of tickets available for purchase at any given moment.<sup>241</sup> With each transaction taking a predetermined amount of time to be publicly verified, the *modus operandi* of scalpers and the bots they use to buy thousands of tickets within seconds would be impracticable; once the verification time limit expires, the transaction is no longer valid.<sup>242</sup>

Though blockchain promises to deter scalpers, the technology’s status under the law remains unclear because jurisdictional boundaries can be crossed and Congress has yet to define “smart contract” enforceability within traditional contract law.<sup>243</sup> What is known is that security exchange regulators have established intel groups to explore what kind of legislation, if any, is

pdf [<https://perma.cc/5WB8-YWRW>] (defining distributed ledgers as a global network).

235 *Id.*

236 DON TAPSCOTT & ALEX TAPSCOTT, *BLOCKCHAIN REVOLUTION* 7 (Portfolio/Penguin, eds. 1st ed. 2016) (describing the new landscape the internet affords).

237 *Id.*

238 *Id.* at 6.

239 *Id.*

240 *Id.* at 21. (showing the possibilities of utilizing blockchain in entertainment allowing creators to get fully compensated for the value they create).

241 TheTicketingBusiness, *Blockchain Could Beat the Bots Says Tao Chief*, TICKETING BUSINESS NEWS (July 11, 2016), <http://www.theticketingbusiness.com/2016/07/11/blockchain-could-beat-the-bots-says-tao-chief> [<https://perma.cc/6J3G-YFXW>] (articulating the way blockchain could disarm scalpers permanently); *see also* CITIZEN TICKET, <https://www.citizenicket.co.uk/bitticket> [<https://perma.cc/96DS-2B79>] (showing a blockchain network that can distribute tickets to live events).

242 TheTicketingBusiness, *supra* note 241 (portraying the verification component of blockchain).

243 DON TAPSCOTT & ALEX TAPSCOTT, *BLOCKCHAIN REVOLUTION* 9 (Portfolio/Penguin, eds. 1st ed. 2016) (examining the role the judiciary will play).

appropriate to help shape the development of this technology.<sup>244</sup> Investment in research and development by venture capitalists in the U.S. is significant, and support from top economists and senior deputy governors of banks has only heightened curiosity for and credibility of this technology.<sup>245</sup>

## V. PROPOSALS

The implementation of the BOTS Act of 2016 and its companion bill (together, the BOTS Act) has been an important step in stabilizing the imbalanced ticketing industry. However, the BOTS Act is not an exhaustive or foolproof solution for combatting the forces that control the market for tickets.

### A. *Enhancing the BOTS Act*

The BOTS Act outlaws the use of ticket-bot software across the nation. However, careful examination of this legislation shows that it is a temporary fix for a problem that requires much more proactive attention from regulators and industry insiders.<sup>246</sup> In its current form, the BOTS Act prohibits the sale and use in interstate commerce of ticket bots, subjecting violators to civil penalties, such as hefty fines, at the federal level.<sup>247</sup> Notably, the BOTS Act defers to the individual states the option to impose criminal sanctions<sup>248</sup> and fails to directly address the complicity of primary vendors, artists, and licensed brokers in causing price inflation in the secondary market.<sup>249</sup>

To purchase tickets to popular live entertainment events, the general public is at the mercy of industry insiders and scalpers.<sup>250</sup> This is due in part to the fact that ticket bots have not been uniformly criminalized at the national level.<sup>251</sup> As a result, bot operators are able to evade criminal charges simply by moving the bases of their operations to those states where the use of the software is not deemed a criminal offense.<sup>252</sup> Moreover, cyber scalpers reap such

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244 *Id.*

245 *Id.*

246 Justin Joffe, *Ticket Bots Are Now Illegal, but They're Part of a Much Bigger Problem*, OBSERVER (Dec. 1, 2016) <http://observer.com/2016/12/ticket-bots-are-now-illegal-but-theyre-part-of-a-much-bigger-problem> [<https://perma.cc/TE6W-E845>] (arguing that laws still allow for the culture of secondary sales to drive the market).

247 BOTS Act, H.R. 708, 114th Cong. (2016).

248 BOTS Act of 2016, S. 3183, 114th Cong. (2016) (detailing the civil actions that may be pursued).

249 *Id.*

250 Office of the New York State Attorney General Eric T. Schneiderman, *Obstructed View: What's Blocking New Yorkers from Getting Tickets* 1, 11 (2016) [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/N9U4-3FE6>] (finding that the majority of live event tickets are diverted away from the general consuming public).

251 BOTS Act of 2016, S. 3183, 114th Cong. (2016) (lacking any mention of criminal penalties).

252 *See id.* (providing civil punishments under the Federal Trade Commission).

large profits from their ticket resale enterprise that any civil fines they may face under the BOTS Act can be internalized as basic operating costs.<sup>253</sup>

Despite its shortcomings, the BOTS Act does successfully account for the fluidity of ticket purchases, transfers, and online marketplaces by making unlawful the “selling or offering to sell” in interstate commerce any event ticket acquired using ticket bots.<sup>254</sup> Although the language is likely included to give the federal government jurisdiction only when such activity occurs across state lines,<sup>255</sup> it is likely to be interpreted as inclusive enough to enable lawmakers to broaden the scope of its application—allowing cyber-scalpers who operate in a state that has not outlawed the use of ticket-bot software to be prosecuted.<sup>256</sup>

As discussed earlier in this Article,<sup>257</sup> in addition to the cyber-scalping issue, artists and their teams engage in various ticket-holdback practices and pre-sale programs that reduce the number of tickets sold in the primary market.<sup>258</sup> These practices substantially contribute to the ticket accessibility problem.<sup>259</sup> The BOTS Act is deficient because it does not hold artists and management accountable.<sup>260</sup> By not including a clause that addresses this glaring and pervasive transparency issue, the BOTS Act limits itself to tackling just one prong of an industry-wide phenomenon.<sup>261</sup> A more comprehensive law would acknowledge this other major factor that contributes to inflated ticket prices.<sup>262</sup> The unpassed BOSS Act achieves this very objective by setting forth concrete rules for primary and secondary ticket sale distribution and pricing, and thus would serve as a strong companion bill to the BOTS Act, or even perhaps as inspiration for possible amendment to the BOTS Act.<sup>263</sup>

253 See Telephone Interview with Luis A. Miranda, Jr., Founding Partner, MirRam Grp. (Nov. 16, 2016) (noting that fines up to thousands of dollars had not deterred scalpers in New York City).

254 BOTS Act of 2016, S. 3183, 114th Cong. (2016) (addressing interstate commerce).

255 See *id.* (noting it shall be “unlawful for any person to sell or offer to sell any event ticket in interstate commerce”).

256 See *id.* (connecting interstate commerce to ticket sales generally).

257 See *supra* Parts II and III.

258 See OFFICE OF THE FED. REGISTER, CODE OF FEDERAL REGULATIONS, TITLE 28, PT. 0-42 (2012) (noting that it has been industry practice to hold back a set number of tickets from those released for groups connected with the event).

259 Office of the N.Y. State Attorney Gen. Eric T. Schneiderman, *Obstructed View: What's Blocking New Yorkers from Getting Tickets* 11 (2016) [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/N9U4-3FE6>] (citing that on average only 46 percent of tickets are reserved for the public). The remaining 54 percent of tickets are divided amongst holds and presales. *Id.*

260 See BOTS Act, H.R. 5104, 114th Cong. (2016) (making no mention of industry insiders).

261 See BOTS Act of 2016, S.3183, 114th Cong. (2016); (showing the federal law’s reach is specific to ticket-buying and circumvention software).

262 See Telephone Interview with Noah Stein, Assistant Attorney Gen., Bureau of Internet & Tech., and Kathleen McGee, Chief, Bureau of Internet and Tech. (Dec. 7, 2016) (discussing ticket bots as an important yet small issue in the fixed game of ticketing).

263 See The BOSS Act, H.R. 5245, 114th Cong. (2016) (requiring full disclosure of ticket



The BOSS Act holds primary vendors accountable by requiring them to disclose and display on their websites at least seven days prior to the date of on-sale the total number of tickets to be made available.<sup>264</sup> Furthermore, the BOSS Act ensures that ticket distribution methods are made known to consumers, that ancillary charges are clearly displayed alongside the initial ticket prices, and that consumers who purchase directly from primary vendors retain the right to transfer.<sup>265</sup> As to the secondary market, the BOSS Act, like the BOTS Act, outlaws the use of ticket-bot software.<sup>266</sup> Uniquely, however, the BOSS Act requires the secondary seller to disclose whether or not it is in possession of the ticket at the time of sale, the precise location and description of the seat and venue, as well as refund policies.<sup>267</sup> This is a crucial requirement because scalpers will often sell a ticket before they actually have the ticket in their possession—ultimately making a profit without any guarantee of actually transferring the ticket to the purchaser.<sup>268</sup> And most significant is the BOSS Act's prohibition on the resale of a ticket by

an individual employee of any venue, primary ticket seller, team, artist, online resale marketplace, or box office that is involved in hosting, promoting, performing in, or selling tickets if such resale is for a higher price than face value of the ticket or is made to any third party and the employee has actual knowledge, or knowledge fairly implied on the basis of objective circumstances, that the third party intends to sell the ticket for a higher price than face value of the ticket.<sup>269</sup>

If the BOTS Act were amended to include such a clause, information would be more effectively relayed to the public and likely level the playing field in terms of ticket acquisition because every person and entity involved in ticket transactions would be held accountable in ensuring equitable consumer access.<sup>270</sup> It is known that scalpers often begin amassing tickets at presale events, accumulating large numbers of tickets for resale even before the general on-sale occurs.<sup>271</sup> When big players are required to be transparent toward their consuming

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allocation by industry players).

264 *See id.* (detailing the transparency requirements).

265 *See id.* (emphasizing the interest in consumer protection and rights).

266 *See id.*

267 *See id.* (placing transparency requirements on secondary resellers).

268 *See* DANIEL DUFFY, CONN. GEN. ASSEMBLY, OFFICE OF LEGISLATIVE RESEARCH, TICKET SCALPING (2006) <https://www.cga.ct.gov/2006/rpt/2006-R-0761.htm> [<https://perma.cc/Z3UA-MNAE>] (providing a state survey on ticket scalping).

269 The BOSS Act, H.R. 5245, 114th Cong. (2016) (prohibiting industry insiders from engaging in scalping practices).

270 Office of the N.Y. State Attorney Gen. Eric T. Schneiderman, *Obstructed View: What's Blocking New Yorkers from Getting Tickets* 35 (2016), [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/N9U4-3FE6>] (arguing that this information void is what allows industry insiders to escape responsibility for consumer hardships).

271 *Id.* at 11 (showing brokers are members of artist fan clubs as well as exclusive credit card holders).

audiences, the business will likely benefit from increased customer retention and public approval.<sup>272</sup>

### B. *The Non-Transferrable Paperless Ticket Debate*

Ticketmaster developed the Paperless Ticket as an alternative delivery method to paper ticketing to ensure that genuine fans have access to secure and validated event tickets at the original sale price.<sup>273</sup> This practice makes it harder for the ticket to be resold on the secondary market. Indeed, many high-profile artists such as Bruce Springsteen<sup>274</sup> and Miley Cyrus<sup>275</sup> have advocated the importance of non-transferrable paperless tickets as a successful anti-scalping effort.<sup>276</sup>

Nevertheless, few artists and venues are willing to implement this system because it can cause end-user inconveniences for those purchasing the ticket as a gift or those who need to transfer the ticket to another person in the event of a last-minute scheduling conflict.<sup>277</sup> Non-transferrable paperless tickets require that holders present personal identification as a condition of being granted access to the venue.<sup>278</sup> The New York law banning non-transferrable paperless tickets discussed earlier is a strong example of the uncertainty in how to best balance the interests of consumer freedom and consumer protection.<sup>279</sup> By including a unique opt-out, this New York law portrays the struggle of creating a world where scalpers do not exist and consumers are able to transfer their tickets freely.<sup>280</sup> Notably, this mandated opt-out provision for primary ticket sellers, which allows consumers to transfer the ticket at no additional cost, essentially destroys the purpose of the non-transferrable paperless ticket because it directly counteracts the expected benefit of its

272 *Id.* at 35 (maintaining that current laws encourage behind-the-scenes deception).

273 TICKETMASTER, MILEY CYRUS “PAPERLESS TICKET” FAQs, <http://www.ticketmaster.com/mileycyrus/faq.html> [https://perma.cc/2F87-L56E] (last visited Apr. 17, 2017) (stating the goal of the system is to ensure total fan access to live entertainment).

274 See BOSS Act *supra* note 269 (discussing the proposed bill named after Bruce Springsteen that supports heightened anti-scalping measures such as paperless ticketing); *but see* Robert Viagas, *London “Touts” Getting \$6k for ‘Hamilton’ Tickets Despite Anti-Scalping Measures*, PLAYBILL (Jan. 31, 2017), <http://www.playbill.com/article/london-touts-getting-6000-for-hamilton-tickets-despite-anti-scalping-measures> [https://perma.cc/S4FD-F9WF] (describing the implementation of paperless ticketing to one of the most anticipated West End productions).

275 TICKETMASTER *supra* note 273 (outlining the paperless procedure for Miley Cyrus’ tour).

276 See Office of the N.Y. State Attorney Gen. Eric T. Schneiderman, *Obstructed View: What’s Blocking New Yorkers from Getting Tickets* 36 (2016) [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [https://perma.cc/N9U4-3FE6] (arguing that the difficulty in transferring tickets hinders the resale of tickets for profit).

277 See *id.* (outlining the inconveniences paperless tickets can cause).

278 *Id.* (describing how non-transferrable paperless tickets function).

279 *Id.*

280 *Id.* (noting the ban is effective unless an opt-out provision exists).

implementation, which is to make tickets accessible directly to the general public at reasonable prices, rather than through scalpers at inflated prices.<sup>281</sup> With transferrable tickets, scalpers are able to operate as they always have by continuing to purchase huge numbers of tickets at on-sale and then transferring them to consumers by resale at inflated prices.

The use of non-transferrable paperless ticketing should be incentivized. Detractors make the flawed argument that non-transferrable paperless ticketing undermines consumer choice, essential to the integrity of a free market. In reality, it is the lack of regulation that allows scalpers to manipulate sales and create a fixed, rather than a free, market economy.<sup>282</sup> Until scalpers are properly regulated, non-transferrable paperless ticketing offers to consumers some relief from ticket price inflation.<sup>283</sup> Granted, non-transferrable paperless ticketing is not entirely unassailable.<sup>284</sup> Scalpers may use fake identification cards or prepaid gift credit cards that are then physically mailed to the consumer for presentation at the door.<sup>285</sup>

The means by which live-event tickets are distributed to the public are left to the discretion of the artist as well as the artist's producers and venue managers.<sup>286</sup> Therefore, artists, as influencers in the ticketing game, must also be encouraged to fight scalpers.<sup>287</sup> If industry leaders change their practices, more genuine fans will have access to tickets at fair prices.<sup>288</sup> The secondary market is distinctive in that the problems of ticket access and price inflation only swell when artists or the live event itself becomes so popular that the demand enormously exceeds the supply.<sup>289</sup> Non-transferrable paperless tickets for high-demand shows would ensure that the widest possible audience has

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281 *Id.* (showing the ineffectiveness of the opt-out provision).

282 Alfred Branch Jr., *Gov. Cuomo Signs New York Paperless Ticket Bill into Law*, TICKET-NEWS (2011) archived at <http://www.ticketnews.com/gov-cuomo-signs-new-york-paperless-ticket-bill-into-law> [<https://perma.cc/KF8N-R9PN>] (presenting a flawed argument on the part of the bill's supporters).

283 Office of the N.Y. State Attorney Gen. Eric T. Schneiderman, *Obstructed View: What's Blocking New Yorkers from Getting Tickets* 36 (2016) [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/N9U4-3FE6>].

284 *Id.* at 36–37.

285 *Id.* (describing the ways in which scalpers may also defeat this deterrent).

286 *Id.* at 36–37 (highlighting the parties who determine where and by whom tickets are sold).

287 Eliot Van Buskirk, *Artists, Venues, and Fans Are Responsible for Inflating Ticket Prices, Not Scalpers*, BUSINESS INSIDER (Apr. 5, 2011, 9:01 AM), <http://www.businessinsider.com/stubhub-says-artists-venues-fans-not-scalpers-inflate-ticket-prices-2011-4> [<https://perma.cc/LZH9-UDZW>] (describing the importance of artist advocacy).

288 *Id.* (portraying artists as responsible for the secondary market).

289 See Telephone Interview with Luis A. Miranda, Jr., Founding Partner, MirRam Grp. (Nov. 16, 2016) (indicating that the demand for *Hamilton* far exceeded the theater's capacity).

access to tickets at face value, as opposed to only those who can afford tickets at exorbitant scalper-inflated prices.<sup>290</sup>

A common contention against the use of non-transferrable paperless ticketing is that it grants a de facto monopoly to primary vendors like Ticketmaster.<sup>291</sup> In a compromise with the public, Ticketmaster has made non-transferrable tickets transferrable on the condition that they be resold through Ticketmaster's own resale and exchange platform.<sup>292</sup> Essentially, Ticketmaster could leverage its domination in both primary and secondary ticket sales for live events.<sup>293</sup> If Congress were to incentivize non-transferrable paperless ticketing, it might consider adding competition-friendly safeguards to the resale and exchange policies of primary vendors.<sup>294</sup> Such safeguards might require the issuance of a full refund for a scheduling conflict, such that Ticketmaster would then put the returned ticket back into the general on-sale market as opposed to its resale platform.<sup>295</sup> With a model like this, consumers would be paying a fair face value price and vendors would not be perceived as monopolizing the secondary market through their own resale platforms.

### C. *Marketplace Restructuring With Dynamic Pricing*

It is undeniable that cheaper tickets benefit consumers. This is true so long as it is the consumers, not the scalpers, who have access to them.<sup>296</sup> Scalpers, acting as middlemen between primary vendors and genuine fans, take for themselves the benefits of affordable ticket prices intended for the general consuming public.<sup>297</sup> Nevertheless, those in support of the secondary market often cite scalpers as essential to preventing monopolies for the benefit of primary ticket vendors like Ticketmaster and encouraging effective competition that promotes consumer choice and a free market.<sup>298</sup> Such an

290 See Ticketmaster UK, *Hamilton Utilise Paperless Ticket System*, TICKETMASTER (Dec. 1, 2017), <http://getstarted.ticketmaster.co.uk/news/hamilton-utilise-paperless-ticket-system> [<https://perma.cc/3XK3-43CA>] (showing how the upcoming production will ensure face-value prices and accessibility to the public).

291 See Office of the New York State Attorney General Eric T. Schneiderman, *Obstructive View: What's Blocking New Yorkers from Getting Tickets*, 36–37 (2016) [https://ag.ny.gov/pdfs/Ticket\\_Sales\\_Report.pdf](https://ag.ny.gov/pdfs/Ticket_Sales_Report.pdf) [<https://perma.cc/N9U4-3FE6>] (describing the reasoning behind New York's ban on non-transferrable paperless ticketing).

292 *Id.* at 37 (pointing to the dangers in primary vendors monopolizing the resale market).

293 See *id.* at 36–37 (outlining advantages that might be taken by primary vendors).

294 See *id.* at 37 (arguing that the potential abuses by primary vendors do not outweigh the deterrent effects).

295 *Id.* (reasoning that the legislature may implement safeguards to alleviate competitive concerns).

296 See *id.* at 27 (criticizing the current market structure).

297 See *id.* (citing scalpers as the main interference in the alleged free market economy). The scalper's ability to purchase tickets in bulk before the public gets a chance leaves the consumer with a much higher price and the scalper pocketing more money. *Id.*

298 Alfred Branch Jr., *Gov. Cuomo Signs New York Paperless Ticket Bill Into Law*,

argument is unfounded because ticket resale services simply take the monopoly from primary vendors and hand it over to scalpers who engage in illegal, black-market practices.<sup>299</sup> Scalpers instead reign supreme because of the speed at which they are able to purchase tickets in bulk from primary vendors and post the marked-up product onto resale sites.<sup>300</sup> Indeed, the practices engaged in by scalpers have prompted primary vendors to increase initial on-sale ticket prices to better reflect the value consumers place on experiencing live entertainment.<sup>301</sup>

This trend in selling tickets at higher prices to better match higher demand demonstrates dynamic pricing at work. Dynamic pricing is the practice of pricing items at a level determined by a consumer's perceived ability and willingness to pay.<sup>302</sup> Pursuant to current pricing practices, scalpers enjoy markups on the secondary market while consumers are forced to engage in questionable, potentially sham transactions.<sup>303</sup> The profits artists and venues

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TicketNews (2011) <http://www.ticketnews.com/gov-cuomo-signs-new-york-paperless-ticket-bill-into-law> [<https://perma.cc/KF8N-R9PN>] (characterizing the secondary market as essential to preventing primary vendors' monopolistic tendencies).

299 See HARVARD BUSINESS REVIEW, *Pricing Secrets Of Ticket Scalpers*, HBR Idea Cast, <https://hbr.org/2011/07/pricing-secrets-of-ticket-scal> [<https://perma.cc/NLZ5-M3GK>] (July, 2011).

300 See Eriq Gardner, *Ticket Broker Claims Hollywood's Gated Events Amount to an Antitrust Conspiracy*, THE HOLLYWOOD REPORTER (Feb. 28, 2017, 11:35 AM), <https://www.hollywoodreporter.com/thr-esq/ticket-broker-claims-hollywoods-gated-events-amount-an-antitrust-conspiracy-981541> [<https://perma.cc/WL2M-FG2A>] (indicating that ticket brokers argue laws limiting the secondary market place unreasonable restraints on trade). Craig Banaszewski, the infamous ticket broker who offers access to Hollywood's most exclusive events such as The Oscars alleges that studios have done nothing to prevent insiders from engaging in the same sort of scalping practices. *Id.* In his response to studios monopolizing high-profile events Banaszewski alleges:

(a) Competition in the relevant product and geographic markets will be eliminated or substantially lessened. (b) Actual and future competition between Counter-Claimants and Counter-Defendants and between these companies in the sale and support in the relevant geographic markets will be eliminated or substantially lessened. (c) Prices for the relevant product in the relevant markets will likely increase to levels above those that would prevail absent Counter-Defendants' commercially restraining active, attempt to monopolize the market. (d) Consumers will continue to pay taxes on overinflated sweepstakes values or will overpay in an auction to attend the events.

*Id.*

301 See HARVARD BUSINESS REVIEW, *Pricing Secrets Of Ticket Scalpers*, HBR Idea Cast, <https://hbr.org/2011/07/pricing-secrets-of-ticket-scal> [<https://perma.cc/NLZ5-M3GK>] (July, 2011) (explaining why the secondary market exists).

302 *Id.*

303 See *Milgram v. Orbitz*, 16 A.3d 1113, 1119-20 (N.J. Super. Ct. Law Div. 2010) (noting a strong interest in maintaining a competitive free market) (noting the drastic price change by the time the product reaches the end-user).

lose to scalpers indicate that consumers value ticket prices higher than those at which the tickets are offered upon initial on-sale.<sup>304</sup> Dynamic pricing accounts for the fact that some consumers may be willing to pay higher ticket prices to ensure that they get to enjoy seeing their favorite team, artists, or musical,<sup>305</sup> while others are willing to sacrifice that certainty, waiting it out in hopes of getting tickets at lower prices.<sup>306</sup> Dynamic pricing essentially squeezes out the ticket scalper: When tickets are priced to match actual consumer demand, scalpers no longer find it a worthwhile enterprise to sell tickets on the secondary market because there is no profit to be made.

#### D. *The Promises of Blockchain*

While a new approach to the ticket pricing model would help deter cyber-scalping, blockchain has already proven itself to be a viable deterrent as well.<sup>307</sup> An alternative to dynamic pricing's wielding of economic forces, blockchain reconfigures the electronic infrastructure by which tickets are distributed and ticketing transactions are recorded.<sup>308</sup> In 2017, Citizen Ticket<sup>309</sup> launched a blockchain ticketing delivery system with BitTicket.<sup>310</sup> Any event organizer can create a BitTicket smart contract that encodes certain rules right into the tickets' electronic DNA.<sup>311</sup> For example, such a rule could limit the number of tickets any one customer may purchase or restrict the ticket from being resold after three days of the on-sale.<sup>312</sup> Once the event organizer, promoter, or artist decides on the rules, the smart contract is signed and deployed onto the blockchain.<sup>313</sup>

Blockchain operates against scalpers in that once a rule is set it cannot be changed, and BitTickets can only be resold or traded on the blockchain itself, not any other third-party platform.<sup>314</sup> With every ticket publicly verifiable, the

304 See HARVARD BUSINESS REVIEW, *supra* note 301.

305 *Id.* (highlighting the importance of "certainty" in pricing tickets).

306 See *id.* (detailing the amount of flexibility for which dynamic pricing allows).

307 Rebecca Campbell, *Using Blockchain Tech to Keep Concert Tickets Honest*, BITCOIN MAGAZINE (May 2017), <https://bitcoinmagazine.com/articles/using-blockchain-tech-keep-concert-ticket-prices-honest> [<https://perma.cc/DEJ7-UZ6Y>] (discussing Citizen Ticket's success in using blockchain for concerts).

308 *Id.*

309 See Citizen Ticket, <https://www.citizensticket.co.uk/bitticket> (last visited Aug. 17, 2017) [<https://perma.cc/96DS-2B79>] (describing the ticket delivery on a blockchain using Bit-Ticket technology).

310 Campbell, *supra* note 307 (describing Citizen Ticket's use of the Ethereum blockchain to launch its delivery system).

311 *Id.* (explaining how BitTicket works by utilizing smart contracts enabled by the Ethereum blockchain).

312 *Id.* (detailing the types of rules an event organizer can encode into tickets on a blockchain).

313 *Id.*

314 *Id.*

blockchain preserves and guarantees the price of the ticket in a way that is currently unmatched by private databases such as Ticketmaster.<sup>315</sup> BitTicket, for example, has anti-fraud rules embedded into its system to ensure that no secondary ticket bots or scalpers can purchase mass numbers of tickets by which to control ticket supply and resale at inflated prices.<sup>316</sup> If the encoded resale rule is broken by a secondary ticket website or a scalper, that party's BitTicket account is frozen immediately and the tickets purchased are invalidated.<sup>317</sup>

The first live event to use BitTicket was the Scottish Street Food Awards, and it proved to be a success.<sup>318</sup> Citizen Ticket Chief Operating Officer Philip Shaw-Stewart, said that BitTicket did not at all impair the consumer ticket-purchasing experience: "They purchased and presented their ticket like any other digital ticket. They were asked for ID at the door to confirm ownership of their ticket and that's it, they were in."<sup>319</sup>

Blockchain not only fosters transparency and trust in conducting transactions, but also ensures that profits are received by those entitled to them.<sup>320</sup> BitTicket shows the benefits that come from removing the third party, namely ticket vendors that can be easily infiltrated by scalpers, from ticketing distribution.<sup>321</sup> Blockchain renders middlemen—Ticketmaster, StubHub, Wiseguys and others—superfluous, allowing event organizers and artists to work directly with the customer on predefined terms and in a secure manner.<sup>322</sup> Bryce Weiner, founder of the Tao Network blockchain for the music industry, has stated,

The issue has always been that when 10,000 tickets go on sale, 9,000 of them disappear in the first few seconds because of automated systems. Converting ticket sales to a blockchain would solve that problem from the start simply because there is no way to resolve all 10,000 of those transactions within five seconds.<sup>323</sup>

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315 *Id.*

316 *Id.*

317 *Id.*

318 *Id.*

319 *Id.* (quoting Philip Shaw-Stewart).

320 Kyle Torpey, *Bitcoin Could Put Ticket Scalpers Out of Business*, INSIDE BITCOINS (Oct. 16, 2014), <https://insidebitcoins.com/news/bitcoin-could-put-ticket-scalpers-out-of-business/25498> [<https://perma.cc/E8ZB-2S9R>] (describing blockchain as the solution to leveling the playing field for ticket outlets).

321 *Id.*

322 DON TAPSCOTT & ALEX TAPSCOTT, *BLOCKCHAIN REVOLUTION 4* (2016) (characterizing the removal of the middleman).

323 TheTicketingBusiness, *Blockchain Could Beat the Bots Say Tao Chief*, TICKETING BUSINESS NEWS (July 11, 2016), <http://www.theticketingbusiness.com/2016/07/11/blockchain-could-beat-the-bots-says-tao-chief> [<https://perma.cc/6J3G-YFXW>] (quoting Weiner in explaining the value of the blockchain).

What Weiner is referring to is the network of blockchain participants called “miners.”<sup>324</sup> Miners run nodes<sup>325</sup> to gather transactions, solve the algorithm in the form of a block of data, and repeat the process every ten minutes.<sup>326</sup> On many blockchain platforms such as Ethereum, the miners timestamp the first transaction and reject any subsequent attempts to effect the transaction, thus eliminating the double spend or resale problem.<sup>327</sup> The key is that each block must refer to the preceding block to be valid, in other words the blocks must connect to each other through successive continuation of the algorithm.<sup>328</sup> Weiner believes that it would be impossible for scalpers to infiltrate the blockchain and override its algorithms to buy more tickets at once.<sup>329</sup>

Currently, ticketing contracts for events are largely structured such that there is no single issuer for tickets.<sup>330</sup> A percentage of tickets will be given to a primary vendor such as Ticketmaster, while the remaining tickets are divided among artists, management, and promoters.<sup>331</sup> For blockchain to be a successful ticket distributing technology, it would need to be the sole issuer of tickets to consumers.<sup>332</sup> Still, blockchain’s ability to eliminate fraud and provide ticket security from creation to redemption should prove compelling to artists and event management to consider using the blockchain for ticket sales.<sup>333</sup> In Weiner’s words, “You can’t fake it, you can’t spoof the data, [e]verybody is going to see that you’re a ticket scalper and we’re going to build all these mathematical metrics in order to determine who is and who is not a ticket scalper and then address the problem from where it stands.”<sup>334</sup>

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324 *Id.*

325 *See What Is Blockchain Technology? A Step-by-Step Guide for Beginners*, BLOCKGEEKS (2017) <https://blockgeeks.com/guides/what-is-blockchain-technology> (last visited Mar. 23, 2018) [<https://perma.cc/9B84-PBJB>] (defining a “node” as a computer connected to a blockchain network using a client that validates and relays transactions).

326 TAPSCOTT, *supra* note 322, at 30 (describing the way in which transactions are validated, and subsequent attempts at the same transaction are rejected).

327 *Id.*

328 *Id.*

329 TheTicketingBusiness, *supra* note 323 (showing a scalper’s inability at solving blockchain algorithms to purchase stockpiles of event tickets).

330 Jonathan Keane, *Blockchain Startups Take On Ticket Touting, But Will They Gain Traction?* COINDESK (July 30, 2017), <https://www.coindesk.com/blockchain-startups-take-ticket-touting-will-gain-traction> [<https://perma.cc/8QK4-9P9R>] (discussing the contracting agreements for live event tickets).

331 *Id.*

332 *Id.*

333 *Id.*

334 TheTicketingBusiness, *Blockchain Could Beat the Bots Say Tao Chief*, TICKETING BUSINESS NEWS (July 11, 2016), <http://www.theticketingbusiness.com/2016/07/11/blockchain-could-beat-the-bots-says-tao-chief> [<https://perma.cc/6J3G-YFXW>].



## CONCLUSION

The BOTS Act is an important, albeit miniscule, step in rectifying the cyber-scalping epidemic. Both industry insiders and government officials must work together to protect consumers. If Ken Lawson can begin anew, so too can the rest of the industry. The NYAG and other researchers have found that there are effective ways to prevent scalpers. The nontransferable paperless ticketing system and dynamic pricing model have been proven as most effective within live concert and sports ticketing. Blockchain technology, such as BitTicket, although in its infancy, has begun to prove itself as a strong and maximally viable solution to beat scalpers. The legislature and industry insiders can work together to regain control of the ticketing industry in the service of fans. Until proposed solutions are implemented and enforced, fans will continue to turn to secondary vendors; artists and venues will lose out on profits; and cyber ticket scalpers will remain a terrorizing monopoly force within the industry.

In July 2017, Ed Sheeran cancelled 10,000 of his concert tickets that were being sold at inflated prices on resale websites. Sheeran's management team decided to resell those tickets at face value on official channels, which still allows scalpers to purchase mass blocks of tickets and resell tickets on different secondary platforms. Ticketmaster just debuted a new technology called "Verified Fan" that examines purchase histories of ticket buyers to track ticket bots and high-volume resellers. *Hamilton* is one of few Broadway shows that has employed technology that sets a time limit for potential purchasers to be verified and qualify for exclusive access to a one-day pre-sale. Lead producer Jeffrey Seller stated, "This is a new effort to put tickets into the hands of theatergoers at regular prices. We'll always be fighting the resellers because their incentive to keep trying is so powerful. Are we making progress? Yes. But is it foolproof? Not at all."

Seller's statement makes clear that it is of utmost importance that current federal legislation be amended to hold industry leaders and artists just as accountable as cyber ticket scalpers. By requiring them to be more transparent about the number of tickets made available to the public, industry insiders will be compelled to do away with their holdback practices in order to maintain goodwill among audiences. If not by passing an amendment or a new law, then perhaps artists and their teams should follow on the heels of Imogen Heap who took it upon herself to begin selling her music on a blockchain, gaining total control over the money and data produced by the work she creates. Insofar as BitTicket has proven the effectiveness of blockchain in accommodating ticket distribution on a decentralized peer-to-peer network, those relying on the support of fans should invest in its continued development and use. What is clear is that a theatrical event, concert, or sporting match is nothing without loyal fans who devotedly drive its success. To the extent it has not already, a scalper-driven ticket market could very well compromise that loyalty.