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ARTICLE

CONTRACTUAL INDESCENDIBILITY: EXAMINING INHERITANCE OF INCOME-GENERATING DIGITAL ACCOUNTS[†]

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With the rise of user-generated online content, a new form of asset has emerged: income-generating digital accounts (IGDAs), such as YouTube accounts. These accounts can be extremely lucrative financial assets for the account holder. However, due to their contractual nature, IGDAs and their accompanying revenue are difficult—if not impossible—to pass on through normal inheritance. This Article explores the legal framework surrounding inheritance of digital assets, the hurdles to inheritance presented by federal antihacking statutes, and recent efforts to improve fiduciary access to digital assets. I argue that both current laws and proposed reforms fail to resolve adequately the issues surrounding IGDAs, and that legislative reform of digital inheritance law is required. I propose facilitating inheritability through statutorily implied contractual terms.

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I. INTRODUCTION

With the rise of websites hosting user-generated content, a new form of asset has arisen: income-generating digital accounts (IGDAs). Posting videos to YouTube, for example, can be extremely lucrative, with some content creators earning \$1 million

per year in ad revenue.¹ For many digital accounts, the terms of service stipulate that the account is personal and non-transferable.² As such, heirs are unable to take control of the account when the account holder dies. The service provider may in fact face liability under federal law if they grant the heirs access to the account.³ However, the death of the account holder does not stop the account from generating income. Advertising, for example, may continue to generate value for both the advertiser and the service provider. This raises the question of how the account holder's interest in the revenue stream can be passed to his or her heirs.

This Article explores the legal framework surrounding inheritance of digital assets. It argues that legislative reform of digital inheritance law is required to adequately deal with incomegenerating digital accounts. Part II explains what an IGDA is, discussing its typical features and how it differs from other intangible assets. It also examines the current legal barriers to the inheritability of digital assets. Part III argues that federal law, in particular the Stored Communications Act (SCA) which already makes inheriting digital assets difficult,⁴ is a complete barrier to inheriting IGDAs. Part IV discusses currently proposed solutions to these hurdles. These include a proposed reinterpretation of the SCA and two competing legislative efforts: the Uniform Fiduciary Access to Digital Assets Act (UFADAA) and the Privacy Expectations Afterlife and Choices Act (PEAC Act). This part argues that all of these solutions are inadequate when dealing with IGDAs. Part V argues that the indescendibility of IGDAs cuts against the prevailing public policy favoring free inheritance. Part VI proposes a more direct solution, suggesting that the most viable solution is for legislatures to adopt

^{1.} See Harrison Jacobs, We Ranked YouTube's Biggest Stars by How Much Money They Make, BUS. INSIDER (Mar. 10, 2014, 9:22 PM), http://www.businessinsider.com/richest-youtube-stars-2014-3/.

^{2.} See, e.g., AdSense Online Terms of Service, GOOGLE ADSENSE, https://www.google.com/adsense/localized-terms (select "United States" in the drop-down box) (last visited Oct. 30, 2018) ("You may not assign or transfer any of your rights under the AdSense Terms."); Terms of Service, YOUTUBE (May 25, 2018), https://www.youtube.com/static?template=terms [hereinafter Terms of Service] ("These Terms of Service, and any rights and licenses granted hereunder, may not be transferred or assigned").

^{3.} See Naomi Cahn, Probate Law Meets the Digital Age, 67 VAND. L. REV. 1697 (2014) (discussing legal barriers to disclosure of digital assets arising from the Stored Communications Act and the Computer Fraud and Abuse Act); Natalie M. Banta, Inherit the Cloud: The Role of Private Contracts in Distributing or Deleting Digital Assets at Death, 83 FORDHAM L. REV. 799, 840-42 (2014); see also discussion infra Part III.

^{4.} See, e.g., Banta, supra note 3, at 840-42; Cahn, supra note 3, at 1711.

statutorily implied terms creating a right to descendibility notwithstanding the contractual terms of service. Part VI also examines the extent to which courts can implement this solution judicially, but concludes that legislative enactment is a more viable solution.

II. INCOME-GENERATING DIGITAL ACCOUNTS

A. The Typical IGDA and Its Features

As used in this article, the term "income-generating digital account" refers to an account with a digital service provider, usually online, that can generate income without input from the account holder. For example, YouTube accounts allow users to upload their own video content. Once the video is uploaded, the user can earn money by displaying targeted ads.⁵ As soon as the video begins to earn money, the account requires no further input or work on the part of the user to continue generating revenue.⁶ The account holder can, of course, upload more videos to increase their earnings, but they can also simply continue to earn revenue on their existing content.

Advertising revenue is the most common method of generating income from a digital account, but it is not the only one. A number of websites allow so-called "bot" accounts (short for "robot"), which are user accounts operated by an automated computer script rather than a human being. Take, for example, Reddit, a popular entertainment, social networking, and news website. Reddit uses an application programming interface (API) that makes it easy for automated external services to operate on the site. Users have used this API to create a large number of bot accounts that work automatically to perform a variety of pre-programmed actions. Some are informational, such as bots looking for posts using imperial units and replying with a metric conversion, or providing mirror links for overloaded websites. Others are more light-hearted—

^{5.} See How It Works, GOOGLE ADSENSE, https://www.google.com/adsense/start/how-it-works/ (last visited Mar. 3, 2018) [hereinafter How It Works].

^{6.} See id. ("When ads are seen or clicked, you'll automatically earn money.").

^{7.} REDDIT, https://www.reddit.com (last visited Mar. 3, 2018).

^{8.} See Duncan Lock, A Marvellous & Incomplete Compendium of Reddit Automatons & Bots, DUNCANLOCK.NET (June 19, 2013), http://duncanlock.net/blog/2013/06/19/a-marvellous-incomplete-compendium-of-reddit-automatons-bots/.

^{9.} *Id.*

^{10.} Id.

playing tic-tac-toe with users or reposting any seventeen-syllable comment as a three-line haiku. A bot known as "ChangeTip," which operated on Reddit, Twitter, GitHub, and other websites, allowed users to tip other accounts (including other bots) with bitcoins (a digital currency) or with U.S. dollars. As such, a bot could conceivably provide a self-sustaining income stream for the human account holder. If so, the account holder's heirs have a clear economic incentive to inherit control of the bot.

As YouTube is perhaps the most widely-known service provider for IGDAs, this Article will make repeated reference to it as an example. Technically, advertising revenue for YouTube videos is generated through Google's AdSense service, rather than through YouTube directly. However, because Google provides both services, and the user only needs one Google account, this Article will treat them as one service for simplicity's sake.

IGDAs arise from a contractual agreement between a user and a service provider. As such, they are governed primarily by the contractual terms of service between the service provider and the end user. There are three distinct interests that heirs may have in the account. First, if there are any funds currently held by or accrued in the account (i.e. past earnings not yet paid out), the heirs will likely want them distributed. This does not present a significant problem. Because these funds belonged to the account holder at the time of his or her death, they are part of the decedent's estate. The only potential hindrance to inheritance is whether or not the estate administrator knows about the funds and is able to account for them.

Second, if the account is still active, the heirs may also want any ongoing income paid to them. For the account holder, the receipt of ongoing income was a contractual right. As such, redirecting

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^{11.} *Id.*

^{12.} See ChangeTip Wiki, REDDIT, https://www.reddit.com/r/changetip/wiki/index (last visited Mar. 3, 2018). The ChangeTip bot was shut down in 2016 after most employees of the company that developed it were "aqui-hired" by Airbnb. See ChangeTip Shutting Down, REDDIT (Nov. 18, 2016, 10:54 AM EST), https://www.reddit.com/r/changetip/comments/5dn3rc/changetip_shutting_down/.

^{13.} See Monetization, YOUTUBE, https://www.youtube.com/account_monetization (last visited Oct. 28, 2018); How It Works, supra note 5.

^{14.} See Get Started, GOOGLE ADSENSE, https://www.google.com/adsense/start/get-started/ (last visited Oct. 30, 2018) (noting that to get started with AdSense, you need a Google account, and that "if you're using Gmail or any other Google service, you already have one").

^{15.} See Banta, supra note 3, at 816-17 ("Through private contracts, internet service providers determine if an asset is descendible and how it is distributed without direction from an account holder.").

payments to the heirs would require assigning the contractual right to them.

Third, the heirs may want control of the account itself. Imagine, for example, that a popular YouTube content creator dies. Assuming the heirs somehow acquired a right to the ongoing revenue, they may wish to publish new or previously unpublished content to increase ad revenues, taking advantage of the account's existing subscriber base to reach a larger audience. As such, the heirs would want full control of the account. This would require assigning them not just one contractual right, but the entire bundle of rights held by the account holder.

B. Contractual Indescendibility and Practical Work-Arounds

As mentioned above, redirecting ongoing income generated by an IGDA would require assigning the account holder's contractual right to these funds. Under common law principles, a contractual right can generally be assigned to a third party. However, a right cannot be assigned if doing so would increase the burden or risk imposed on the other party or if the assignment is forbidden by statute. Additionally, a right cannot be assigned if such assignment is precluded by the contract. Commonly, the terms-of-service agreements for IGDAs expressly prohibit transferring the account. For example, YouTube and Google AdSense have provisions completely barring any transfer of accounts, and do not distinguish between transfers during life and transfers by inheritance.

Because the rights associated with the account are provided by contract, a user could theoretically bargain for their account to be

^{16.} See Liz Shannon Miller, What Should Matter More on YouTube: Subscribers or Views?, GIGAOM (Oct. 29, 2010, 2:00 PM CDT), https://gigaom.com/2010/10/29/what-should-matter-more-on-youtube-subscribers-or-views/ (noting that "subscribers are a really important part of building an audience"). YouTube ad revenue can be earned either on a per-click or per-view basis. See How Many Views Does It Take to Make Money on YouTube, VIDEOPOWER MARKETING, http://videopower.org/how-many-views-to-make-money-on-youtube/ (last updated Apr. 6, 2017). Either way, a larger audience will generally correspond to more ad revenue.

^{17.} RESTATEMENT (SECOND) OF CONTRACTS § 317(2) (1981).

^{18.} *Id.* § 317(2)(a)-(b). As will be discussed *infra*, the Stored Communications Act effectively prohibits such assignments and imposes a risk of statutory liability on service providers.

^{19.} *Id.* § 317(2)(c).

^{20.} See Banta, supra note 3, at 817.

^{21.} See sources cited supra note 2.

descendible.²² In reality, the average consumer-user has minimal bargaining power. Any request to change the standard contractual provisions would likely go unanswered, making this option ultimately unrealistic. However, there are practical solutions that can, with significant limitations, be used to sidestep this problem. One solution might be for the prospective user to form a corporation and open the account under the corporate name. Doing so would not change the transferability of the account itself, since the account would simply belong to the corporation. However, the user could transfer their ownership of the entire corporation, thus also transferring the account.²³ On the other hand, such a solution would require significant foresight by the user. It would also require ongoing efforts to maintain corporate formalities, 24 as well as payment of corporate taxes.²⁵ Accordingly, incorporation would only be practical for a user who actually expects to have a substantial income from that account.

Some service providers have implemented their own policies to help mitigate the problem of indescendibility. Google allows account holders to designate a representative who gains limited account access—short of a full account transfer—upon the account holder's death.²⁶ This access can be used to close the decedent's

22. Terms-of-service agreements are, after all, contracts, which in theory are formed from a negotiated mutual assent. *See* David Horton, *Indescendibility*, 102 CAL. L. REV. 543, 597 (2014).

^{23.} *Cf. Sale of a Business*, INTERNAL REVENUE SERV., https://www.irs.gov/Businesses/Small-Businesses-&-Self-Employed/Sale-of-a-Business/ (last updated Apr. 23, 2018) ("The sale of a business usually is not a sale of one asset. Instead, all the assets of the business are sold.").

^{24.} For example, the account holder might need to file annual corporate reports with the Secretary of State. See, e.g., CAL. CORP. CODE § 1502 (2018).

^{25.} Incorporation will in many cases result in double taxation on income. See Forming a Corporation, INTERNAL REVENUE SERV., https://www.irs.gov/businesses/small-businesses-self-employed/forming-a-corporation (last updated May 4, 2018) ("The profit of a corporation is taxed to the corporation when earned, and then is taxed to the shareholders when distributed as dividends."). Additionally, some states have a flat annual tax on corporations. In California, for example, this "minimum franchise tax" is \$800 per year, regardless of whether the corporation is active. See What is the Minimum Franchise Tax?, STATE OF CALIFORNIA FRANCHISE TAX BOARD, https://www.ftb.ca.gov/businesses/faq/712.shtml (last visited Mar. 3, 2018). For low-revenue IGDAs, this tax burden alone might make incorporation infeasible.

^{26.} Andreas Tuerk, *Plan Your Digital Afterlife with Inactive Account Manager*, GOOGLE PUBLIC POLICY BLOG (Apr. 11, 2013), http://googlepublicpolicy.blogspot.com/2013/04/plan-your-digital-afterlifewith.html. Facebook has implemented a similar policy, whereby a deceased user's page can be either deleted or "memorialized." The user can designate a "legacy

account,²⁷ but does not allow the representative to assume control of the account. Google also allows heirs to request accrued funds from a deceased user's account—again, without gaining control of the account—by producing a death certificate and court-issued probate documents.²⁸ Such solutions may well be sufficient to handle the descendibility problem—and prevent litigation—for a particular service provider. However, relying entirely on corporate policy solutions provides no guarantee of uniformity or stability and leaves inheritance rights at the mercy of the service provider. One potential reason for service providers not to allow transfer of digital assets to beneficiaries is concern that such transfers may violate federal privacy laws.²⁹ This results in some service providers having explicit policies on what happens to an account when the account holder dies, while others do not.³⁰

C. Distinguishing IGDAs from Other Digital and Intangible Assets

IGDAs differ fundamentally from other digital and intangible assets and revenue streams. Perhaps most important, at least for IGDAs that earn advertising revenue, is the distinction between generated income and royalties paid for use of intellectual property.

1. IGDAs Compared to Royalties

Under traditional intellectual property law, a broadcaster or publisher wanting to use someone else's material would pay a royalty. A royalty is a payment for each copy of the material made, used, or sold.³¹ If the owner of a copyright dies, the copyright and

contact" who would gain limited control over the memorialized page upon the user's death. *See Memorialized Accounts*, FACEBOOK, https://www.facebook.com/help/1506822589577997/ (last visited Aug. 18, 2018). However, because memorialized Facebook pages do not provide a self-sustaining source of income, they are not IGDAs.

^{27.} Memorialized Accounts, supra note 26.

^{28.} Submit a Request Regarding a Deceased User's Account, GOOGLE ACCOUNT HELP, https://support.google.com/accounts/contact/deceased (select "Submit a request for funds from a deceased user's account") (last visited Oct. 30, 2018); see also As a Rightful Heir to a Deceased Person, How Do I Get Payment for Any Unpaid Earnings?, ADSENSE HELP, https://support.google.com/adsense/answer/165678 (last visited Mar. 3, 2018).

^{29.} See Banta, supra note 3, at 840; See also discussion infra Section II.D.

^{30.} REVISED UNIF. FIDUCIARY ACCESS TO DIG. ASSETS ACT introductory cmt. (UNIF. LAW COMM'N 2015) [hereinafter *RUFADAA*].

^{31.} See Royalty, BLACK'S LAW DICTIONARY (10th ed. 2014), Westlaw (defining "royalty" in the intellectual property context as "[a] payment — in

the rights it comprises pass to the owner's heirs by will or intestate succession.³²

In the case of many IGDAs, however, the income is often explicitly not a royalty for the use of the owner's material. For example, YouTube's terms of service stipulate that it has a royalty-free license to use any content uploaded to its service.³³ As such, if an account holder dies, the heirs are not automatically entitled to the current or future income that the copyrighted content generates.³⁴ Even if the will devises control of the account to the copyright heir, such a transfer would violate the terms of service, which explicitly prohibit transferring the account.³⁵ The copyright heirs' legal options at this point are limited. The heirs can at any time re-upload the videos to their own account, since they own the copyright. However, doing so would deny them the viewership and subscriber base of the original account, likely resulting in a smaller audience and thus a smaller income stream.³⁶

In the case of YouTube, specifically, the decedent's immediate family or representative can submit a request to close the deceased user's entire account.³⁷ The decedent's heirs may also request that accrued earnings be redirected to themselves.³⁸ These options, however, derive from the contractual terms of service and Google's corporate policy, not from the law.

2. IGDAs Compared to Online Banking and Investments

If an IGDA's value is in the account itself, it may be tempting to think of it as similar to an online banking or investment account. Investment accounts hold financial assets like stocks and bonds alongside liquid funds, and may generate income from interest

addition to or in place of an up-front payment — made to an author or inventor for each copy of a work or article sold under a copyright or patent").

^{32. 17} U.S.C. § 201(d) (2012) ("The ownership of a copyright may be transferred in whole or in part by any means of conveyance or by operation of law, and may be bequeathed by will or pass as personal property by the applicable laws of intestate succession.").

^{33.} Terms of Service, supra note 2.

^{34.} The copyright heirs would, of course, be entitled to any royalty payments, but because the license granted to YouTube is "royalty-free," there are no royalties.

^{35.} Terms of Service, supra note 2 ("These Terms of Service, and any rights and licenses granted hereunder, may not be transferred or assigned by you.").

^{36.} See sources cited supra note 16 and accompanying text.

^{37.} See Submit a Request Regarding a Deceased User's Account, supra note 28.

^{38.} See sources cited supra note 28.

payments or dividends.³⁹ As such, there is a clear economic interest in inheriting those assets. Where such accounts are accessible online, and particularly where they are accessible exclusively online,⁴⁰ it seems logical to call them digital assets.

However, an online bank account is not itself an asset, but a repository and means of access for underlying traditional assets: money, stocks, or other investments. ⁴¹ Since the underlying real assets can be transferred to the decedent's heirs through the normal probate process, whether or not the bank account itself is descendible is largely moot. ⁴² By contrast, for an IGDA, the relevant asset is the account itself and the contractual rights attached to it.

D. General Federal Law Hurdles to Inheritance of Digital Assets

The Stored Communications Act (SCA) bars unauthorized access to stored communications (including digital accounts).⁴³ It also prohibits providers of electronic communication services from disclosing electronic communications and records about subscribers, with a handful of exceptions.⁴⁴ The SCA was enacted in 1986, before email use became common, and long before major digital services like Facebook and Google were founded.⁴⁵ The drafters were mainly concerned with privacy protection and did not consider the Act's impact on the probate process.⁴⁶

^{39.} See What to Expect When You Open a Brokerage Account, FIN. INDUSTRY REG. AUTHORITY, http://www.finra.org/investors/what-expect-when-you-open-brokerage-account (last visited Mar. 3, 2018) ("Sometimes there is cash in your account that hasn't been invested. For example, . . . you may have received cash dividends or interest.").

^{40.} See, e.g., Our Company, ALLY, http://www.ally.com/about/company-structure/#ally-bank (last visited Mar. 3, 2018) (describing Ally as an "online" bank "[w]ithout physical branch locations").

^{41.} To illustrate the point: bank accounts are not themselves transferred to heirs during estate administration; rather, funds are withdrawn *from* the account and distributed to them. *See, e.g.*, CAL. PROB. CODE § 7661(a) (2005).

^{42.} The decedent may also have set up a pay-on-death designation, avoiding the probate process entirely. *See, e.g.*, CAL. PROB. CODE §§ 5139-5140 (1991), 5203(a)(2) (2017) (part of the Probate Code's Division 5 — "Nonprobate Transfers").

^{43. 18} U.S.C. § 2701 (2012).

^{44.} *Id.* § 2702 (2018).

^{45.} See Cahn, supra note 3, at 1700-01.

^{46.} See id. at 1701; U.S. DEP'T OF JUSTICE, Justice Manual: Criminal Resource Manual § 1061, http://www.justice.gov/usam/criminal-resource-manual-1061-unlawful-access-stored-communications-18-usc-2701 ("The 1986 [Stored Communications] Act added new statutory provisions . . . to protect the privacy of stored electronic communications"). Cf. Christopher J. Borchert, Fernando M. Pinguelo & David Thaw, Reasonable Expectations of Privacy Settings: Social

For traditional assets, the SCA hampers access to digital records, thus potentially making it difficult for a fiduciary to identify the decedent's assets. For example, a fiduciary might need to access an online brokerage account to find out what stocks the decedent owned. Similarly, a decedent might have had a copyright interest in a writing that is stored only in the "cloud." The asset might even be a tangible one: access to a decedent's email might reveal that they secretly purchased a plot of land somewhere. The SCA makes it difficult for fiduciaries to discover these assets and estimate their value. Underlying asset once it has been identified.

III. FEDERAL LAW'S COMPLETE BAR TO INHERITING IGDAS

As noted above, the Stored Communications Act makes fiduciary access to digital assets more difficult, although it does not affect the distribution of the underlying asset. For IGDAs, the situation changes completely. As this Part will show, the Stored Communications Act and the Computer Fraud and Abuse Act (CFAA) work in conjunction to make IGDAs and the income they generate effectively uninheritable.

A. The SCA Affects IGDAs More than Other Digital Assets

Unlike copyrighted works, online bank accounts, and email records of real estate purchases, IGDAs may have no underlying asset. The asset is the account itself and the corresponding contractual rights.⁵¹ It should be noted that disclosure of the account's content and records is not the same as actually transferring ownership of the account. For example, giving a user's heirs a copy of every record YouTube has about the user does not make the heirs party to the service agreement. Ownership of the account will remain subject to the terms of the service agreement and to judicial

Media and the Stored Communications Act, 13 DUKE L. & TECH. REV. 36 (2015) (arguing that the SCA was crafted with language specific to the technology of 1986 and failed to anticipate modern technology).

^{47.} See Cahn, supra note 3, at 1701.

^{48.} The "cloud" refers to software and services that run on the Internet instead of on the user's own computer. David Goldman, *What is the Cloud?*, CNN: MONEY (Sept. 4, 2014, 9:05 AM ET), http://money.cnn.com/2014/09/03/technology/enterprise/what-is-the-cloud/. This includes Apple iCloud, file storage services like Dropbox and Google Drive, and email services like Yahoo Mail. *Id.*

^{49.} See Cahn, supra note 3, at 1701.

^{50.} See id.

^{51.} See Banta, supra note 3, at 816. See also discussion supra Part II.

application of state contract law.⁵² However, if account ownership were to be transferred, the transferee would be placed in the shoes of the original account holder and would have access to all records and stored communications to which the original account holder had access. Accordingly, it would be practically impossible to transfer an account to the account holder's heirs without running afoul of the SCA's prohibition on disclosing the contents of the original account holder's communications.⁵³

The SCA does allow disclosure of stored communications with the lawful consent of the account holder.⁵⁴ One could interpret an express provision in a will as the decedent's consent to disclose to the designated devisee. There are, however, a number of problems with this approach. First, the statutory exception only states that a provider "may divulge" communications. 55 As such, it limits liability in the case of a voluntary disclosure, but does not mandate disclosure. In other words, the service provider could conclude on its own that the will constitutes adequate consent, but the provider risks SCA liability if a court determines otherwise.⁵⁶ Second, this exception would only apply to decedents who wrote a will and perhaps only to wills that explicitly leave that specific account to a particular person. The result would be to allow transfers by devise, but not by intestacy. This is anomalous compared to estate law generally, where testation and intestacy may result in different beneficiaries but should not change the contents of the estate.⁵⁷

B. The Computer Fraud and Abuse Act Compounds the Problem

Unable to formally gain ownership of the account, heirs might be tempted to "inherit" more informally, for example, by accessing

^{52.} See Jamie P. Hopkins & Ilya A. Lipin, Viable Solutions to the Digital Estate Planning Dilemma, 99 IOWA L. REV. BULL. 61, 67 (2013).

^{53.} See 18 U.S.C. § 2702(a) (2012).

 $^{54.~18~}U.S.C.~\S~2702(b)(3)~(2012)$ (providing that "[a] provider . . . may divulge the contents of a communication . . . with the lawful consent of the originator or an addressee or intended recipient of such communication, or the subscriber in the case of remote computing service").

^{55.} See id. (emphasis added).

^{56.} *Cf.* Cahn, *supra* note 3, at 1717-18 (discussing *In re Facebook, Inc.*, 923 F. Supp. 2d 1204 (N.D. Cal. 2012) and the related question of whether the estate executors can provide consent for disclosure).

^{57.} See Horton, supra note 22, at 549 ("[O]ne way or another, everything previously owned by a deceased person is going to pass into someone else's hands.") (quoting Adam J. Hirsch, *Incomplete Wills*, 111 MICH. L. REV. 1423, 1424 (2013)). See also id. at 588 ("Testation and intestacy are not discretionary: once something belongs to a decedent, she cannot exclude it from her estate.").

the account with the decedent's password. Even if the account password is unknown, accessing the account would often be quite simple as long as the heirs have physical access to the decedent's computer.⁵⁸ Once they have access, the heirs could simply designate their own bank account as the recipient of any funds as if they were the original account holder.

However, doing so would expose the heirs to criminal liability under the Computer Fraud and Abuse Act. The CFAA makes it a criminal offense to intentionally access and obtain information from a service provider's computer (e.g. YouTube's servers, accessed through the decedent's account) without authorization. ⁵⁹ If this access is for private financial gain—as in the example above—the heirs could face a fine, up to five years of imprisonment, or both. ⁶⁰ As such, the heirs will find themselves between the proverbial rock and hard place; the SCA prevents a formal transfer of account ownership, while the CFAA criminalizes attempts at informal distribution of revenue. Between the two, federal law acts as a complete bar to inheriting IGDAs and the revenue from them.

IV. THE INADEQUACIES OF PROPOSED SOLUTIONS

As noted above, the Stored Communications Act serves as a complete bar to formally inheriting IGDAs.⁶¹ It also imposes hurdles on the inheritability of digital assets generally.⁶² In response to the latter, a number of solutions have been proposed, including

^{58.} Many websites allow the user to stay signed in without needing to reenter their password so long as the same computer is used. See Troy Hunt, How to Build (and How Not to Build) a Secure "Remember Me" Feature, TROY HUNT (July 1, 2013), http://www.troyhunt.com/2013/07/how-to-build-and-how-not-to-build.html. If the decedent used this function, or used their internet browser to remember passwords, the heirs would only need physical access to the computer. Similarly, if the heirs have access to the decedent's email account, they could likely get access to the website account by resetting the password. And even if the computer itself is password protected, such passwords are often easy to bypass. See Chris Hoffman, How to Bypass and Reset the Password on Every Operating System, HOW-TO GEEK (May 17, 2017, 6:40 AM ET), http://www.howtogeek.com/192825/how-to-bypass-and-reset-the-password-on-every-operating-system.

^{59.} See 18 U.S.C. § 1030(a)(2)(C) (2012). The statute prohibits accessing a "protected computer," the definition of which includes a computer used in interstate or foreign communication. *Id.* § 1030(e)(2)(B). Unless the service provider intentionally restricts all users of its service to a particular state, this is likely to include the servers of just about every digital service provider.

^{60.} *Id.* § 1030(c)(2)(B)(i) (for offenses "committed for purposes of . . . private financial gain").

^{61.} See discussion supra Section III.A.

^{62.} See discussion supra Part II.

revisiting the judicial interpretation of federal law and new legislative enactments aimed at tackling the problem directly. As this Part will show, none of these proposals adequately resolves the issues surrounding the inheritability of IGDAs and the revenue they generate.

A. Re-interpreting the SCA Removes Hurdles to Fiduciary Access, but Does Not Affect Substantive Inheritability

Some scholars have called for a revised, more liberal, interpretation of the SCA. Under this interpretation, the SCA would not bar a legally-recognized fiduciary's access to the contents of a decedent's digital accounts.⁶³ Rather, pursuant to state fiduciary law, the fiduciary would be granted the same level of access as the decedent.⁶⁴

This is a reasonable argument, and this approach would likely go a long way toward solving the general problem of fiduciary access to digital assets. In particular, it would help in cases where the SCA stands in the way of a fiduciary gaining information about assets that are otherwise inheritable. In the case of IGDAs, however, the SCA does not merely bar fiduciary access, but also stands in the way of the heirs receiving control of the account. The revised interpretation would allow the estate administrator or personal representative to access the account, but only in their role as a fiduciary. Once the probate process is complete, their fiduciary position would end, along with their access to the account.

An argument could be made that the fiduciary, standing in the decedent's shoes, could grant consent on the decedent's behalf. The fiduciary could direct the account to be transferred to the decedent's heirs. This argument, however, disregards the contractual nature of IGDAs, which are governed primarily by terms-of-service agreements. If the terms of service prohibit transferring the account, then the fiduciary cannot transfer the account to a third party any more than the original account holder could. Where the terms of service are silent, the fiduciary can only assign the decedent's contractual rights to third parties according to common law principles. A contract cannot be assigned if doing so materially increases the risk to the obligor or if the assignment is prohibited by

^{63.} See Cahn, supra note 3, at 1701-02.

^{64.} See id. at 1702.

^{65.} See discussion supra Section III.A.

^{66.} See Banta, supra note 3, at 816-17.

^{67.} See sources cited supra note 2.

^{68.} See discussion supra Section II.B.

statute.⁶⁹ Thus, unless the service provider is guaranteed to avoid the risk of liability under the SCA (e.g. by a declaratory judgment), they can contest the assignment as invalid. Ultimately, no matter how liberal the interpretation—and too liberal an interpretation raises additional concerns about the appropriate scope of judicial review—the governing law of contracts and the SCA stand as a barrier to inheriting IGDAs.

B. Proposed Reforms Focus on Fiduciary Access, Not Inheritability

There are currently two legislative approaches that are pending or have been adopted in various states. The Uniform Fiduciary Access to Digital Assets Act (UFADAA) is the Uniform Law Commission's proposal to facilitate fiduciary access to digital assets. In response to the UFADAA's "disclose everything" approach, NetChoice (a trade association of e-commerce businesses) drafted the Privacy Expectations Afterlife and Choices Act (PEAC Act). As of March 2018, more than thirty states had enacted the UFADAA, with several other states having introduced legislation to adopt it. Virginia adopted the PEAC Act in 2015, but later repealed it and adopted the UFADAA. It does not appear that any other states have currently adopted the PEAC Act. Although there was an initial split among states in adopting the two statutes, the UFADAA now seems to have prevailed. However, neither approach adequately tackles the barriers to inheriting IGDAs.

^{69.} RESTATEMENT (SECOND) OF CONTRACTS § 317(2) (a)-(c) (AM. LAW INST. 1981). As will be discussed *infra*, the Stored Communications Act effectively prohibits such assignments, and imposes a risk of statutory liability on service providers.

^{70.} See RUFADAA, supra note 30, introductory cmt.

^{71.} See Frequently Asked Questions about Privacy Afterlife, NETCHOICE, http://netchoice.org/library/decedent-information/#faq (last visited Mar. 3, 2018). While NetChoice does not explicitly mention it, it is generally acknowledged that the PEAC Act was proposed by the digital service industry as a response to the UFADAA. See, e.g., Karin Prangley, War and PEAC in Digital Assets: The Providers' PEAC Act Wages War with UFADAA, 29 PROB. & PROP. MAG., July—Aug. 2015, at 40, 44; Dan Kelly, Private Law in the Digital Age, NEW PRIVATE LAW (Aug. 14, 2015), https://blogs.law.harvard.edu/nplblog/2015/08/14/private-law-in-the-digital-age-dan-kelly/.

^{72.} See RUFADAA, supra note 30.

^{73.} See Privacy Expectation Afterlife and Choices Act, VA. CODE ANN. §§ 64.2-109–115 (2015) (current version at Unif. Fiduciary Access to Dig. Assets Act, VA. CODE ANN. §§ 64.2-116–132 (2017)).

1. The Uniform Fiduciary Access to Digital Assets Act

The UFADAA addresses four types of fiduciaries: personal representatives of estates, conservators for protected persons, agents acting under a power of attorney, and trustees.⁷⁴ The main operative provisions of the Act are Sections 7 and 8. These obligate the "custodian" (i.e. the digital service provider) to give the personal representative of a deceased user access to the decedent's electronic communications and digital assets.⁷⁵ Importantly, they do so by providing that the "custodian shall disclose" a catalogue of the decedent's electronic communications and digital assets and—if the user consented to such disclosure—the content of communications. The use of the word "disclose" here highlights the real focus of the Act: to remove barriers to a fiduciary's access to electronic records.⁷⁶

However, the Act is not intended to affect other substantive law, such as contract, copyright, probate, and property law.⁷⁷ This is further highlighted in Section 2, where "digital asset" is defined as an "electronic record" in which an individual has a property right or interest.⁷⁸ Notably, the definition excludes the underlying asset unless it is itself an electronic record. As such, the term "digital asset" as used in the UFADAA is somewhat of a misnomer.

For example, imagine a decedent who had copyrightable writings stored on a cloud server.⁷⁹ Here, the electronic file is a "digital asset," but the actual asset that would be inherited is the copyright, a traditional—though intangible—asset. Similarly, if the decedent has an unknown amount of funds saved with a known online bank, the bank records are "digital assets." The actual inheritable asset—the money—is a traditional asset. In the first example, the UFADAA helps the fiduciary find and identify the writing. In the second, the UFADAA allows the fiduciary to discover the existence of the funds and their amount. In other words, the UFADAA is intended only to grant a fiduciary access to the information they need to properly administer the decedent's estate. Existing substantive law continues to govern the actual distribution of the decedent's assets.

For IGDAs, the UFADAA is a partial solution at best. The disclosure provisions would allow a fiduciary to find out if there are

^{74.} See RUFADAA, supra note 30, introductory cmt.

^{75.} See id. at §§ 7-8.

^{76.} See id. introductory cmt.; see discussion supra Section II.D.

^{77.} See RUFADAA, supra note 30, § 3 cmt.; introductory cmt.

^{78.} *Id.* § 2(10).

^{79.} Goldman, supra note 48.

any funds currently held by the decedent's YouTube account. However, the account itself remains governed by contract law. The comments to the UFADAA explicitly provide that granting fiduciary access to a digital asset does not mean the fiduciary may engage in transactions with the asset. Using the example of an online bank account, they proclaim that the Act does not affect the authority to engage in transfers of title to the funds or securities. This suggests that the fiduciary would have no new authority to transfer ownership of the account itself either. Nor does the Act provide fiduciaries with authority to redirect future income—which is not yet an asset held by the account—to decedent's heirs.

The provisions of Section 5 make this even clearer. The Act does not give a fiduciary any new or expanded rights other than those held by the user.⁸² As such, if the user did not have the right to transfer their account to a third party, neither does the fiduciary.

Ultimately, the UFADAA does little to promote inheritability of IGDAs. If a decedent made no explicit directions for disclosure, either via an online tool or through his or her will, fiduciary access depends entirely on the relevant service agreement. Even if a decedent explicitly authorized the service provider to provide fiduciary access to all of his or her assets, the Act only requires disclosure of those assets. In either case, the actual distribution of assets is governed by existing law, which relegates IGDAs to the realm of contracts. In short, the UFADAA neither gives heirs control over a decedent's account nor provides a mechanism for assigning future income to them.

2. The Privacy Expectations Afterlife and Choices Act (PEAC Act)

As noted above, the PEAC Act appears to have been largely abandoned in favor of the UFADAA. Even so, in light of the UFADAA's shortcomings described above, it is worth considering whether the PEAC Act would have solved the problem of IGDAs.

The main difference between the UFADAA and the PEAC Act is that the latter has a narrower scope.⁸³ The UFADAA provides fiduciary access to all digital assets.⁸⁴ In contrast, the PEAC Act

^{80.} RUFADAA, supra note 30, § 2 cmt.

^{81.} *Id.*

^{82.} *Id.* § 5(b).

^{83.} See Prangley, supra note 71, at 44.

^{84.} Id.

addresses only access to electronic communications, such as email.⁸⁵ Furthermore, while the UFADAA grants such access to a variety of fiduciaries, the PEAC Act only addresses fiduciaries acting on behalf of a deceased person.⁸⁶ Where the inheritability of IGDAs is concerned, however, the two acts are largely the same.

Under the PEAC Act, once the correct procedure has been followed, courts must order a service provider to disclose relevant information to the fiduciary.⁸⁷ This disclosure should include records pertaining to the deceased user consistent with the SCA's voluntary disclosure provisions but not the contents of stored communications.⁸⁸ As with the UFADAA, the focus on disclosure reflects the key goal of the PEAC Act: balancing fiduciary access to information against the decedent's privacy expectations. Section 5 of the PEAC Act, meanwhile, provides that the service provider cannot be compelled to allow a requesting party to take control of the account.⁸⁹ In other words, the fiduciary access granted by the PEAC Act cannot be used to transfer the account itself to the decedent's heirs. The disclosure order under Section 1 is the only operative provision of the PEAC Act, and it makes no provisions to change the law governing the distribution of assets. As such, the current legal framework would remain in place.

There is another possible reading of Section 5 that would actually make inheriting IGDAs more difficult. The full text of the section reads: "A provider shall not be required to allow any requesting party to assume control of the deceased user's account." Notably, this section does not reference the other provisions of the PEAC Act and is without qualifying language of any kind. Furthermore, while Section 1 addresses requests by "the executor or

^{85.} See id.

^{86.} See id.

^{87.} See Privacy Expectation Afterlife and Choices Act (PEAC) $\$ 1(A) (Netchoice) http://netchoice.org/library/privacy-expectation-afterlife-choices-act-peac/ (last visited Mar. 3, 2018) [hereinafter PEAC].

^{88.} See id. (referencing 18 U.S.C. § 2702 (2012)). There are some aspects of the PEAC Act that make it unclear how well it would improve fiduciary access. For example, because the mandated disclosure does not include stored contents, copyrighted material may remain inaccessible to the fiduciary. See id. Furthermore, Section 3 stipulates that a provider cannot be compelled to disclose any record if disclosure violates "other applicable law." Id. § 3. Where it is unclear whether a particular disclosure would violate the SCA, the service provider has good reason to object to broad disclosures without being protected from liability. These issues, however, are beyond the scope of this Article.

^{89.} See id. § 5.

^{90.} Id.

administrator" of a deceased user's account,⁹¹ Section 5 refers to "any requesting party."⁹² A strict reading of Section 5 could imply that, regardless of circumstances, a provider cannot be required to transfer the account to a third party. Under this reading, even if the terms-of-service agreement allows the account to be transferred, a court could not order the provider to do so. This interpretation is not likely to be adopted. For one, courts would likely interpret the statute in the context of the PEAC Act's other provisions and limit its application to administration of a decedent's estate. Second, this reading would allow service providers to breach the terms-of-service agreement without fear of injunctive relief. Nonetheless, while this reading is unlikely, it is consistent with the plain text of the PEAC Act.

Ultimately, just like the UFADAA, the PEAC Act leaves the question of whether IGDAs can be inherited unresolved. Under both approaches, the fiduciary is allowed more access to information about the decedent's assets. However, neither changes the substantive law governing asset distribution. As such, the future income of an IGDA, as well as account control, would be considered a contractual right, not inheritable property.

V. INDESCENDIBILITY OF IGDAS FRUSTRATES PUBLIC POLICY

The right to pass on property to one's heirs is an ancient and fundamental aspect of the Anglo-American legal system, and one that has existed—in one form or another—since at least the 12th century. The U.S. Supreme Court recognized as much in *Hodel v. Irving*; in which the plaintiffs challenged a federal act that would cause small, undivided interests in Indian lands to escheat to the tribe on the interest-holder's death. In many cases, these interests could not be alienated, changed hands only through inheritance, and thus grew increasingly fractionated. Notably, the court recognized that interest-holders had the ability to avoid escheat through "complex inter vivos transactions" like revocable trusts.

^{91.} *Id.* § 1.

^{92.} Id. § 5.

^{93.} See United States v. Perkins, 163 U.S. 625, 627-628 (1896) (discussing the history of inheritance law as dating back to the reign of Henry II); see also Horton, supra note 22, at 544-45 (noting that "commentators routinely contend that disposing of one's estate is 'part and parcel of ownership' and tied 'to the very notion of private property.").

^{94.} See Hodel v. Irving, 481 U.S. 704, 716 (1987).

^{95.} See id. at 707.

^{96.} Id. at 716.

However, the Court held that this ability was an inadequate substitute for the right lost. 97

This is similar to the current situation with IGDAs. The account holder has a right to receive continuing payments from revenue generated by their account.98 This interest generally cannot be alienated during life, and for the reasons outlined above, cannot pass by inheritance either. As mentioned previously, the account holder can work around this problem by creating the IGDA in the name of a corporation. 99 This would allow for indirect inheritance by devising the interest in the entire corporation. However, it would also subject the account holder to the complexities and costs of maintaining a separate corporate entity. ¹⁰⁰ This process is analogous to Hodel's "complex inter vivos transactions." Furthermore, the plaintiffs in *Hodel* had the option to create a revocable trust to ensure inheritability at any time before death. By contrast, an IGDA-being nontransferable-would have to be set up under a corporate name from the outset. 101 As such, if the options available in *Hodel* were inadequate, the options available to IGDA holders are certainly inadequate as well.

It may be argued that continuing interests in IGDAs are distinct from interests in land because IGDAs are not property, but rather contractual in nature. ¹⁰² In response, it should be noted that the land interests in *Hodel* were not fee interests, but a beneficiary interest in land held in trust by the U.S. government. ¹⁰³ As a result, most Indians holding such interests did not live on the land, but leased it and passively earned income from rents, ¹⁰⁴ making the two interests remarkably similar. More theoretically, property and ownership are often seen as going hand-in-hand with labor and effort. ¹⁰⁵ A successful YouTuber, having spent time and effort creating videos

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^{97.} *Id.*

^{98.} See supra Section II.A.

^{99.} See supra Section II.B.

^{100.} See Cal. Corp. Code §1502 (2018); see INTERNAL REVENUE SERV., supra note 25; see State of California Franchise Tax Board, supra note 25; see also supra text accompanying note 24.

^{101.} See supra Section II.B.

^{102.} Commentators have also noted that "property" is merely a label affixed to a particular bundle of rights. *See* Horton, *supra* note 22, at 546. As such, the "not property" argument is circular. It effectively claims that something is not property because it is not descendible, and not descendible because it is not property. *See id.* at 546-547.

^{103.} See Hodel v. Irving, 481 U.S. 704, 707 (1987).

^{104.} See id.

^{105.} See Horton, supra note 22, at 567 (citing JOHN LOCKE, TWO TREATISES OF GOVERNMENT 288 (Peter Laslett ed., Cambridge Univ. Press 1988) (1690)).

and building an audience, might feel that he or she has a property interest in the resulting income. ¹⁰⁶ Finally, there is a line of cases, developing in bankruptcy courts, that directly recognizes some contractual rights as property. ¹⁰⁷

Ultimately, where the account holder has a justifiable expectation of holding property rights, there is a clear public policy in favor of inheritability by devise or intestacy. As discussed, the continuing financial interest in an IGDA is analogous to the rental income interest in *Hodel*. This interest is currently both inalienable and uninheritable unless the account holder engages, ex ante, in the complex and costly process of incorporation. Accordingly, public policy would favor improved inheritability of IGDAs.

VI. RESOLVING INDESCENDIBILITY WITH IMPLIED CONTRACTUAL TERMS

As noted above, there is a long-standing public policy favoring inheritability, as the Supreme Court recognized in *Hodel v. Irving*. The numerous barriers to inheriting IGDAs and their accompanying revenues conflict with public policy. As a result, one might expect courts to follow the Supreme Court's lead and direct service providers to allow inheritability.

However, service providers are likely to resist orders to allow account access unless they are immunized from liability under federal computer laws. For example, in *In re Facebook, Inc.*, ¹⁰⁹ Facebook opposed a subpoena for records of a deceased user's account, citing the SCA. ¹¹⁰ The court granted Facebook's motion to quash the subpoena, noting that even where the SCA permits disclosure, it does not require it. ¹¹¹ But the court declined to issue an advisory opinion addressing whether the surviving family members could consent to disclosure on the decedent's behalf; ultimately, the court left Facebook to decide at its own risk whether

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^{106.} *Cf. id.*; F. Gregory Lastowka & Dan Hunter, *The Laws of the Virtual Worlds*, 92 CALIF. L. REV. 1, 45–48 (2004) ("Since millions of people labor to create objects of value in virtual worlds, there are utilitarian grounds for granting property rights based on the value of the transactions to individual users.").

^{107.} See In re Platt, 292 B.R. 12, 17-18 (Bankr. D. Mass. 2003) (involving Boston Red Sox season tickets); In re I.D. Craig Serv. Corp., 138 B.R. 490, 495 (Bankr. W.D. Pa. 1992) (involving Pittsburgh Steelers season tickets).

^{108.} Hodel v. Irving, 481 U.S. 704, 707 (1987).

^{109.} *In re* Facebook, Inc., 923 F. Supp. 2d 1204 (N.D. Cal. 2012).

^{110.} For additional discussion of the case, see Cahn, *supra* note 3, at 1717-18.

^{111.} *In re Facebook*, 923 F. Supp. 2d at 1205-1206.

disclosure would violate federal law.¹¹² When given such discretion, most service providers will likely err on the side of caution, choosing nondisclosure over possible liability.

The fact that inheritance is generally handled in state probate courts while the SCA is federal law further complicates the matter. Any interpretation of the SCA by a state court that preemptively insulates a service provider from liability is non-binding for a later federal court. The end result is that any estate administration involving IGDAs might end up in federal court, as *In re Facebook* did. As that case illustrates, federal courts might be reluctant to preemptively grant immunity from SCA liability. Ultimately, it seems that judicial intervention to improve the inheritability of IGDAs is unlikely to be successful. As such, a legislative solution is needed.

A. The Potential Benefits of Implied Terms Promoting Inheritability

As discussed above, unpaid income earned before the account holder's death can be inherited through traditional inheritance law, since the funds already belonged to the decedent. The same cannot be said for the right to receive continuous payments of future income, since the heirs are not a party to the original contract. However, a potential solution to make this income inheritable is a legislative implementation of an implied contractual term.

Contract law is almost exclusively the governing law for online services. 114 As such, efforts aimed at improving the inheritability of economic interests in online service agreements may be easier to implement by working from within contract law. Implied terms are a common feature of contracts. Where a term is implied by law, courts will construe all contracts as including that term, where it makes sense to do so. For example, many jurisdictions impose an implied warranty of merchantability on contracts for sales of

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^{112.} *Id.* at 1206; see also Suzanne Brown Walsh et al., *Digital Assets and Fiduciaries*, in RESEARCH HANDBOOK ON ELECTRONIC COMMERCE LAW 91, 92 (John A. Rothchild ed., 2016).

^{113.} See THE WRITING CTR. AT GEORGETOWN UNIV. LAW CTR., WHICH COURT IS BINDING? 6 (2014) (noting that, for federal issues tried in federal courts, previous state court decisions are merely persuasive authority).

¹¹⁴. See Banta, supra note 3, at 816-817; see also supra text accompanying note 15.

goods. 115 Similarly, contract law imposes on every contract an implied duty of good faith and fair dealing. 116

For most IGDAs, a simple change to the terms of service would be sufficient to ensure the inheritability of continuously generated income. The implied term could simply stipulate that upon the death of the account holder, any earnings subsequently accrued to the account are awarded to the decedent's rightful heirs. These heirs would then need to submit the account holder's death certificate and proof of inheritance to the service provider. This would be similar to the system that Google already uses. However, as discussed above, Google's current inheritance procedure relies entirely on corporate policy, and is not reflected anywhere in the relevant terms of service. There is no guarantee that a competing service provider will have a similar policy, and Google can change its policy at any time. By contrast, a statutorily implied term would apply to the terms of service of all service providers that enable users to create an IGDA.

In some cases, there might be some confusion about who the rightful heirs are. For example, a decedent with a lucrative YouTube account might devise all his copyrights to his son ("A") and leave the remainder of his estate to his daughter ("B"). A might want to bring a claim to the YouTube income. A's argument would be that, because the income is generated from views of material to which he owns the copyright, he should be the one to receive such income. B, in turn, would object to this claim. She would argue that YouTube's license to the content is explicitly royalty-free, so no income is due to A as the copyright holder. Instead, B would argue that the contractual right to the income passes to her as the residual heir.

B's claim is stronger under a strict interpretation of contract law: it is consistent with the express terms of the contract, while A's claim directly contradicts it. However, A might argue in return that allowing B to earn income from his copyrighted works violates his property interest in the copyright. A might also argue that the decedent, by leaving him the copyright in the videos, actually intended to leave him all related interests. As such, the dispute creates a tension between contract law and property law, as well as creating uncertainties under testamentary law.

^{115.} See, e.g., Henningsen v. Bloomfield Motors, Inc., 161 A.2d 69, 95 (N.J. 1960).

^{116.} RESTATEMENT (SECOND) OF CONTRACTS § 205 (AM. LAW INST. 1981); see, e.g., Guz v. Bechtel Nat'l, Inc., 8 P.3d 1089, 1110 (Cal. 2000).

^{117.} See supra Section II.B.

A might even try submitting a copyright takedown notice—pursuant to the Digital Millennium Copyright Act—to have the video removed from YouTube, or at least to stop B from earning anything. Such a claim should fail, since the video was originally posted with the authorization of the original copyright holder, the decedent. However, as recent events have shown, private copyright enforcement—like YouTube's complaint system—can be abused to the detriment of even law-abiding users. Whether backed by law or not, a complaint by A would complicate the process and potentially make things difficult for B.

One potential solution to this problem would be for a legislature to factor in a list of priorities. For example, first priority might be given to a person specifically designated in the decedent's will to receive the income, if any. If there is no such person, second priority might go to any person designated as inheriting the relevant copyright. Where no such person exists either, the income might simply go to the decedent's estate. This approach would tend to respect the decedent's wishes, and would likely avoid a fair number of disputes before they arise.

It should also be noted that the copyright issue would not arise with all forms of IGDAs. For YouTube, revenues generated from video views are analogous to royalties, potentially creating an expectation that the income should follow the copyright. For some other IGDA, like a bot account, there may be nothing about the account that is protectable as intellectual property. In such cases, there would likely be fewer disputes about who should inherit the income. Additionally, this issue would not arise where the decedent died intestate, as both the account and any intellectual property rights would go to the same heirs.

B. The Likely Shortcomings of Implied Terms

In addition to inheriting the rights to the income from the IGDA, the account holder's heirs may wish to take control of the account itself. As discussed above, they may wish to do so in order to post videos the decedent made but never uploaded. However, even with an implied term promoting inheritability, the restrictions regarding

^{118.} See Submit a Copyright Takedown Notice, YOUTUBE HELP, https://support.google.com/youtube/answer/2807622 (last visited Mar. 3, 2018) ("If your copyright-protected work was posted on YouTube without authorization, you may submit a copyright infringement notification.").

^{119.} See, e.g., Russell Brandom, YouTube's Complaint System Is Pissing Off Its Biggest Users, VERGE (Feb. 1, 2016, 1:11 PM EST), http://www.theverge.com/2016/2/1/10887120/youtube-complaint-takedown-copyright-community.

digital privacy in the Stored Communications Act still apply. Relaxing these could make it easier for a fiduciary to get the information they need to administer the estate. But even so, it would be practically impossible to transfer the entire account without disclosing protected records about the account. Accordingly, it may be difficult to find a way to enable such transfers in general without creating a conflict with federal law.

On the other hand, inheriting the income itself is likely to satisfy the heirs in most cases. And in the odd case where heirs find themselves in possession of unpublished videos, they may be able to convince the service provider to post those videos on the decedent's behalf, on a case-by-case basis. Where the service providers take a share of the revenue, as they typically do, the providers have additional incentive to allow the video to be posted posthumously. This would not require the service provider to grant direct access to the decedent's account, nor require them to disclose any records. As such, the heirs could have the video uploaded, boosting their income stream, without exposing the service provider to liability under the SCA.

Ultimately, an implied term promoting inheritability of the income generated by an IGDA does not grant the heirs everything they may want. However, the shortcomings of this solution are limited to a rare set of circumstances that, in most cases, could be resolved on a case-by-case basis. As such, this solution represents a balanced compromise between allowing inheritance and avoiding both conflicts with federal law and a disruption of the contracting process.

VII. CONCLUSION

Under the current legal framework, income-generating digital accounts such as YouTube accounts are governed almost exclusively through contract law. The relevant service agreements generally provide that the account holder's rights are personal and non-transferable. As such, if an account holder dies, his heirs are only entitled to the revenue generated before the account holder's death. Even if the account stays open and continues to accrue funds, the account holder's right to receive those funds died with him or her. Any attempts by the heirs to gain control of the account for themselves or gain access to the funds are barred by federal law. The Stored Communications Act prevents service providers from formally transferring the account to them, and informal efforts to

assume control using the decedent's password are criminal violations of the Computer Fraud and Abuse Act.

Measures have been proposed to improve the inheritability of digital assets. These include a relaxed interpretation of federal computer laws, as well as statutory efforts to craft specific exceptions to facilitate the probate process. However, these measures are all aimed at a slightly different problem. Primarily, these efforts deal with granting fiduciary access to digital records regarding a decedent's assets. Such information is needed to identify and value traditional assets before distribution. However, these measures do not consider the problem of how to inherit assets that are themselves of a digital nature. For IGDAs, the underlying asset is the account itself, so mere information about the account is insufficient to enable inheritance. Accordingly, these efforts do not resolve the barriers to inheriting a continuing interest in IGDAs.

As a matter of public policy, the right to convey financial interests on death should be protected equally with the right to alienate traditional property. In the case of IGDAs, however, this financial interest is sandwiched between contractual provisions and federal computer regulations. As a result, this public policy is being frustrated.

However, a legislature could impose an implied term on service agreements governing IGDAs. This might stipulate that ongoing income generated by IGDAs is inheritable, notwithstanding contractual provisions barring the account holder from assigning his rights during life. This solution would not grant full control of the IGDA to the account holder's heirs. It would, however, grant heirs the right to inherit the income without requiring the service provider to disclose anything else about the account. In most cases, this should sufficiently satisfy their inheritance interest. Accordingly, this solution is a balanced compromise between allowing inheritance, respecting privacy, and avoiding conflict with federal law.