The article originally appeared in the *Walsh College Tax Journal* where a number of other complex notions of tax, property, and value are addressed:

Hoops, *Digital Assets and Currencies in the Information Age: Do Your Ones and Zeros Have Value?*, 2 Walsh College Tax Journal 61 (2014).

The following material is selected to emphasize Hoops's point that however much our words, images, patterns of association, documents, and other online materials seem independent of the medium in which they appear, such is not the case. While they may seem to be "ours" no matter how they materialize before the audience, the issue is more complicated than that, a complexity revealed when the creator of the materials dies. These "Digital legacies" are themselves a complex problem, but for educators, the issue offers an illustration of how to think of our students' digital performances as deserving of the same legal protections that we grant to other assets.

I. Introduction

Cyberspace provides infinite conveniences (and inconveniences) for users, whether they are interested in personal or business interactions. While users may enjoy the luxury of online shopping, emailing friends and colleagues, or marketing their brick and mortar

businesses through Twitter and Facebook, tax advisors must be prepared to address these same users whose business and personal lives may be tied to the Internet

If the Internet were not complicated enough, users have gone so far as to create new currencies that are now being accepted off-line. While much of the news coverage for digital currencies concerns the potential for criminal activities, the fact that traditional businesses are accepting these new forms of "money" raises the bar for practitioners.

Until Congress provides otherwise, tax advisors must be prepared to apply traditional tax advice to clients who are engaged in activities involving these non-traditional assets and currencies.

A. What are Digital Assets?

A digital asset is a form of content created in an intangible medium through the Internet. The asset is simply an account hosted by an online business, store or website (e.g., PayPal, Amazon, iTunes, eBay, Alibaba, Etsy), social network (e.g., Facebook, Flickr, Pinterest, LinkedIn), blog (e.g., Twitter, YouTube, blogspace), multimedia cloud (e.g., Shutterfly, Snapfish, Flickr, Instagram), or email provider (e.g., Gmail, Yahoo, Hotmail, AOL).[1]

For purposes of determining the value of a digital asset, the analysis begins with the type of control and uses permitted by the service provider's terms of service. For example, assume Ansel Adams sold an original photograph to a collector for $100,000, the sale price would be based on the established value of one original Ansel Adams photograph. If Ansel Adams uploaded the same photograph to his Flickr account, would the account be worth

[1] Carroll, *Why You Should Inventory Your Digital Assets,* http://blog.passare.com/2014/01/14/why-you-should-inventory-your-digital-assets/ (accessed October 4, 2014).

$100,000? The value would be determined by whether Flickr's terms of service (a) allow its users to sell or transfer Flickr accounts (including the stored content) to third parties, (b) permit its account holders to give their account passwords to "unauthorized" users or persons who have not agreed to the terms of service, and (c) terminate the account and its contents if a violation of their terms of service arose.

The difference between digital assets and all other assets (both tangible and intangible) is the digital service providers' user agreements or eContracts. The terms of this contractual relationship will determine the permitted uses of the digital asset, its value and any tax consequences with sales or transactions involving the asset.

B. What are Digital Currencies?

The online gaming community is responsible for inspiring a new form of monetary currency referred to as *virtual* or *digital currency*.[2] Administrators of online games allow their respective players to acquire various advantages directly from the administrator or off-line from other game participants by using some form of digital currency. The purchased advantages benefit participants by conferring a higher player status, unique weaponry, additional player health, and other benefits that can be used immediately in their game.

When users earn virtual currency from their gaming administrator for a particular success (e.g., defeating a particular rival or enemy) or meeting an identifiable achievement (e.g., moving from level 10 to level 11), the terms *gold mining* and *gold farming* became

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[2] Heeks, *Gaming for Profits: Real Money from Virtual Worlds*, Scientific American (1/4/2010) http://themonetaryfuture.blogspot.com/2010/01/gaming-for-profits-real-money-from.html (accessed October 4, 2014).

synonymous for these "earners." Virtual currencies can be exchanged for real currency (e.g., dollars, euros, yen) using online pay services, such as PayPal.[3] By selling and exchanging virtual currencies freely and outside the boundaries of their games, the gaming community inadvertently created a monetary system that has no restrictions on their currencies' transferability.

In its 2008 Annual Report to Congress, the Internal Revenue Service (the "IRS") Taxpayer Advocate expressed concern with the growing popularity of digital currencies and that a failure to act by Congress could result in "unintentionally creating tax cheats, establishing noncompliance norm in the industry, and leaving IRS employees without clear guidance on how to do their jobs."[4]

Today, acceptance of digital currencies in the mainstream economy raises interesting legal and reporting issues for regulators, attorneys and accountants.

II. Business and Personal Dealings in Digital Contracts

Digital assets are created when a user establishes a contractual relationship with an Internet service provider. The agreement is executed when the user accesses the provider's website and agrees to the provider's terms of service; when the user clicks *accept*, the contractual relationship is formed between the parties.

For people interested in having a free email service or being part of an online community, understanding their rights under the providers' terms of service can be

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[3] *Id.*

[4] National Taxpayer Advocate, 2008 Annual Report to Congress, Most Serious Problems 13, pg. 213, at 225 http://www.irs.gov/pub/tas/08_tas_arc_intro_toc_msp.pdf (accessed October 4, 2014).

confusing,[5] but understanding the legal effect of those terms of service may not be fully appreciated. The value and tax consequences of digital assets are also determined by reference to the terms of service that gave rise to those assets. Therefore, understanding the rights a user has in the contract is paramount to all transactions involving digital assets.

A. eContracts

Electronically and paper signed contracts are valid upon execution with the express terms and conditions governing the respective rights of the parties to the agreement. While most paper signed contracts are governed under the common law, state and federal statutory law govern eSigned contracts.[6] Unless fraud was present when the contract was formed, courts are reluctant to deviate from agreed terms in eContracts.[7]

A common provision found in Internet terms of service is the unilateral right to change the eContract without the user having any right to negotiate the proposed change.[8] When the service provider amends the previously accepted contract, notice to the users must be given; if a user objects to the revised provision, their only recourse is to no longer

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[5]See, Mike Masnick, *Supreme Court Chief Justice Admits He Doesn't Read Online EULAS or Other "Fine Print,"* Techdirt (10/22/2010) http://www.techdirt.com/articles/20101021/02145811519/supreme-court-chief-justice-admits-he-doesn-t-read-online-eulas-or-other-fine-print.shtml. (accessed October 4, 2014).

[6]Electronic Signatures in Global and National Commerce Act, 15 U.S.C.S. §7001, *et seq.;* National Conference of Commissioners on Uniform State Laws, Uniform Electronic Transactions Act. http://uniformlaws.org/Act.aspx?title=Electronic%20Transactions%20Act (accessed October 2, 2014).

[7]*Breman v. Zapata Off-Shore Co.*, 407 U.S. 1 (1972).

[8]*I.Lan Systems, Inc. v. Netscout Service Level Corp.*, 183 F.Supp. 2d 328 (D.Mass. 2002); *Specht v. Netscape Communications Corp.*, 150 F.Supp. 2d 585 (S.D.N.Y. 2001); *Decker v. Circus Circus Hotel*, 49 F.Supp.2d 743 (D.N.J. 1999); *M.A. Mortenson Co., Inc. v. Timberline Software Corp.*, 970 P.2d 803 (Wash.App. 1999).

use the service.[9] If adequate notice of a changed term is given to site users, any continued use of the service will be subject to the amended eContract.[10]

Internet service providers' terms of service have been criticized for requiring users to sign such "one-sided" and "onerous" contracts.[11] In the eyes of the courts, however, users are not forced to access any website.[12] Today, terms of service governing digital assets will be treated as enforceable contracts between the website provider and its users.[13]

Applying the favorable view courts have of eContracts, whether an individual or business can sell a digital asset will be determined by the terms of that agreement. The

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[9]R*egister.com, Inc. v. Verio, Inc.*, 126 F.Supp.2d 238 (S.D.N.Y. 2000); *Briceno v. Sprint Spectrum, L.P.*, 911 So.2d 176 (Fla. Dist. Ct. App. 2005); *Hubbert v. Dell Corp.*, 835 N.E.2d 113 (Ill. App. Ct. 2005);

But, see *Specht v. Netscape Communications Corp.*, 150 F.Supp.2d 585 (S.D.N.Y. 2001) (notice was inadequate because users did not affirmatively accept the terms of service) *Douglas v. U.S. District Court for Central District of California*, 495 F.3d 1062 (9th Cir. 2007); *BellSouth Communications System, L.L.C. v. West*, 902 So.2d 653 (Ala. 2004) (change to terms of service unenforceable because provider could not prove that user continued to access the service after the change in terms was posted).

[10]*Breman v. Zapata Off-Shore Co.*, 407 U.S. 1 (1972).

[11]Jennifer Femminella, *Online Terms and Conditions Agreements: Bound by the Web*, 17 St. John's J. Legal Commentary (2003); Robert Lee Dickens, *Finding Common Ground in the World of Electronic Contracts: The Consistency of Legal Reasoning in Clickwrap Cases*, 11 Marq. Intell. Prop. L. Rev. 379 (2007); Ty Tasker and Daryn Pakcyk, *Cyber-Surfing on the High Seas of Legalese: Law and Technology of Internet Agreements*, 18 Alb. L. J. Sci. & Tech. 79 (2008). See, Ira S. Rubinstein, et al., *Data Mining and Internet Profiling: Emerging Regulatory and Technological Approaches*, 75 U.Chi.L.Rev. 261 (2008).

[12]*United States v. Drew*, 259 F.R.D. 449 (C.D. Cal. 2009); *Pichey v. Ameritech Interactive Media Services*, 421 F.Supp. 1038 (W.D. Mich. 2006); *Register.com, Inc. v. Verio, Inc.*, 126 F.Supp. 2d 238 (S.D.N.Y. 2000); *Caspi v. Microsoft Network*, 732 A.2d 528 (N.J. Super. Ct. App. Div. 1999). James J. Tracy, *Legal Update, Browsewrap Agreements: Register.com v. Verio, Inc.*, 11 B.U. J. Sci. & Tech. L. 164, 171 (2005); Also, see *Carnival Cruise Lines, Inc. v. Shute*, 499 U.S. 585 (1991).

But see, *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 606 (E.D. Pa. 2007) (terms of service can be held unenforceable if there are no market alternatives to a particular service).

[13]*Leatherwood v. Cardservice Int'l, Inc.*, 929 So.2d 616 (Fla. Dist. Ct. App. 2006); *DeJohn v. The .TV Corporation Int'l*, 245 F. Supp. 913 (N.D. Ill. 2003); *Forrest v. Verizon Comm., Inc.*, 805 A.2d 1007 (D.C. App. Ct. 2002); *Barnett v. Network Solutions, Inc.*, 38 S.W.3d 200 (Tex. App. 2001).

concern, therefore, should be whether the terms of service change; what the contract says in October 2014 might not be the same in January 2015.

B. User Rights in Digital Assets

Most service providers do not claim ownership of their users' original content, but they do control the content stored within users' accounts. Service providers are shrewd enough to know that claiming ownership of the original content in their terms of service would result in no one using their service.

A common term many users accept when they create their digital asset is a prohibition on the assignment of their account. This restriction has serious consequences if a user is interested in selling their digital asset (as they would with any other asset in their business). If the agreement forbids an assignment of the account, then the account cannot be legally sold.

The four terms of service users need to be aware of when dealing with a digital asset are: 1) who owns the content, 2) how long the content will be stored, 3) the circumstances that can result in the account's termination, and 4) whether a third-party, or someone other than the user who signed the eContract, can access the account's content. These four terms will determine the rights of the user and whether there is any value in the account if it were to be included as an asset in a sale transaction.

[note: sections of the article discussing Acceptance of Digital Currencies and The Tax Consequences of Digital Currencies have been omitted.]

V. Conclusion

Dealings with digital assets and currencies might appear to be complicated transactions for most people, but as the world's population and economy move deeper into cyberspace, these transactions really are no more complicated than traditional transactions when examined under existing law. As practitioners remain abreast of these new developments in business and technology, state and federal legislators must also adapt to these developments. The digital world moves quickly and practitioners must not fall from the information superhighway as additional guidance comes their way.