



KEEPING PACE WITH DIGITAL ASSETS: PREPARING FOR THE FUTURE

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Liabilities for the Estate Practitioner**

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Introduction	1
<i>Understanding the complexities of crypto assets</i>	4
<i>Digital Wallets</i>	4
Digital Asset Inheritance	5
The Development of Digital Assets	8
Global Development of Digital Assets	8
Canada	8
United States of America	12
Germany	17
France	20
United Kingdom	21
Ukraine	24
Russia	24
New Zealand	25
Australia	25
Hong Kong	27
Digital Planning Tools	27
<i>eState Planner</i>	28
<i>Registries</i>	28
Future Trends	30
<i>Wills</i>	30
<i>Developers of Digital Applications</i>	30
<i>Passive Income Opportunities</i>	30
<i>The Rise of Decentralized Finance (DeFi)</i>	31
<i>The Growth of Cryptocurrencies</i>	32
<i>The Rise of Cyberattacks</i>	32
Conclusion	33
Glossary of Terms	35

Keeping Pace with Digital Assets: Preparing for the Future

Globally, the growth of digital assets is currently outpacing legislation. While model legislation exists, many states in the US and almost all Canadian provinces have been slow to adapt to the fast-moving pace of technology. Rapid growth of cryptocurrency has demonstrated that individuals have been amassing significant assets that are worthy of protecting. Legislation alone, however, is not enough to protect digital assets. Individuals' planning for the future require a mixture of digital estate planning and a legislative regime that recognizes fiduciary access to digital assets.

Introduction¹

Digital assets represent a rapidly developing area of law and commerce. Of significant importance is the impact that digital assets have on the administration of estates. Initially, the discourse centered on questions of whether digital assets were considered goods or information. Despite being in what can be considered the infancy of jurisprudence, there is much that is already known about digital assets.

In the broadest sense digital assets include a person's email accounts text messages, social network accounts, online banking, credit card accounts, electronic documents, cloud storage (such as iCloud, OneDrive), digital subscriptions or wallets, domain names, blogs, web pages, and virtual currencies.²

Digital assets can be primarily arranged in two categories: online accounts; and, files stored on a physical computer or server. There are also hybrid assets, such as mobile applications. These are hybrid in the sense that access to them is granted by signing into an online account with a username and password and gaining access to a distribution's server where files are uploaded and stored.³

The development of digital assets across the globe has seen the rise of crypto assets and block chain technology. Among the latest developments are the rise in popularity of the non-fungible token ("NFT"). An NFT is "a digital certificate of ownership recorded on Ethereum blockchain, a decentralized public ledger that's impossible to retroactively

¹ This paper was originally prepared November 2021 for the Canadian Lawyer Magazine webinar presentation "Keeping Pace with Digital Assets: Preparing for the Future" by Kimberly A. Whaley and Ian M. Hull and updated December 2022 with the kind assistance of Jeff Kehoe, Director of the Enforcement Branch of the Ontario Securities Commission.

² Patricia Sheridan, "Inheriting Digital Assets: Does the Revised Uniform Fiduciary Access to Digital Assets Fall Short?" (2020) 16:2 Ohio St Tech L J 363, at 365 [Sheridan].

³ See generally Edwin Cruz, "The Digital Inheritance of Mobile Apps: Where's the App for That?" (2016) 14 NW J TECH & INTELL PROP 111 [Cruz].

modify.”⁴ NFT’s are unique and cannot be duplicated, making each piece incredibly rare. During the second week of May 2021, Christie’s Auction House held a ‘CryptoPunks’,⁵ auction which sold nine works for over \$16 million. The record NFT art sale price known to date is upwards of \$69 million.⁶

There is also significant volatility in these markets. By October of 2022, the NFT market is down in almost every trackable metric with trading volume across all sectors down by 90 per cent since October of 2021. Scott Nover reports that since the start of September, NFT trading volumes have averaged \$35 million per week. The popular CryptoPunks and Bored Ape Yacht Club NFT collections are down more than 80 per cent compared to one year ago and off 94 per cent from their peak earlier this spring.⁷

Despite market downturns, dubbed as “crypto winter”⁸ it is clear that cryptocurrency is not going anywhere. Applications now include mortgages,⁹ insurance,¹⁰ payment services, and in New Zealand, cryptocurrency was even accepted as security for costs in a legal proceeding.¹¹ There is also a growing number of crypto credit and debit cards available for consumers to make instant purchases with.¹²

In Canada, the Ontario Securities Commission released its *Crypto Asset Survey* in September 2022, detailing the results which addressed attitudes and beliefs towards crypto assets including whether investors believe crypto assets currently play a key role in our financial ecosystem. The survey revealed that:

⁴ Lauren O’Neil, “Someone in Toronto just sold a digital home for more than \$600k” blogTO, Online: <https://www.blogto.com/tech/2021/03/toronto-digital-house-nft-600k/>

⁵ Christies Auction House, “10 things to know about CryptoPunks, the original NFTs” April 8, 2021, Online: <https://www.christies.com/features/10-things-to-know-about-CryptoPunks-11569-1.aspx>

⁶ See Jacob Kastrenakes, “Beeple sold an NFT for \$69 million” March 11, 2021, The Verge, online: <https://www.theverge.com/2021/3/11/22325054/beeple-christies-nft-sale-cost-everydays-69-million>

⁷ Scott Nover, “The NFT market is down by almost every metric” October 14, 2022, Quartz, online: <https://qz.com/the-nft-market-is-down-by-almost-every-metric-1849655660>

⁸ See Lyllah Ledesma, “FTX Collapse Leaves Total Crypto Market Cap Under \$800B, Close to 2022 Low” November 17, 2022, *CoinDesk*, online: <https://www.coindesk.com/markets/2022/11/17/ftx-collapse-leaves-total-crypto-market-cap-under-800b-close-to-2022-low/> where the author cites that with collapse of the FTX exchange, the total market capitalization of digital assets has fallen below \$800 billion, a level not seen since early 2021.

⁹ See Chisom Maduonuah, “Crypto Mortgages: How and Where to Get a Cryptocurrency Mortgage Loan” November 19, 2022, *DeFi Rate*, online: <https://defirate.com/mortgages>

¹⁰ See for example, KASE Insurance, “Cryptocurrency Insurance” Online: <https://kaseinsurance.com/cryptocurrency-insurance/>

¹¹ *Hague v Cordiner* (No. 2) [2020] NSWDC 23

¹² See Software Testing Help, “10 Best Crypto Debit and Credit Cards [2022 Updated Review]” online: <https://www.softwaretestinghelp.com/crypto-debit-and-credit-cards/> which features a list that includes: Gemini Crypto Credit Card, Coinbase Visa Card, BlockFi Bitcoin Rewards Credit Card, Wirex Visa Card, Nexo, Crypterium Visa Crypto Card, SoFi Credit Card, TenX Visa Card, and Swipe Visa Card.

- 13 per cent of Canadians currently own crypto assets or crypto funds; 6 per cent own crypto assets only; 6 per cent own both crypto assets and crypto funds; and 2 per cent own crypto funds only;
- 6 per cent used to own crypto funds or crypto assets;
- Half of crypto investment funds (50 per cent) were reported to be under \$10,000 and just over half of crypto assets (53 per cent) were under \$5,000; and
- The average crypto asset knowledge score was 37 per cent.¹³

Estimates have claimed that in 2021 cryptocurrency assets represented an industry worth \$2.48 trillion.¹⁴ Within this industry, it is estimated that 20% of all bitcoins (a specific crypto currency) are ‘lost’ meaning that the wallets containing them have not been accessed in over 5 years. Without factoring in the over 10,000 other cryptocurrencies on the market, this accounts for approximately 3.7 million in bitcoin, or, \$140 billion in lost assets. These significant losses mean that a substantial number of crypto asset owners may be dying or becoming incapacitated without leaving their heirs a pathway to access these assets.¹⁵

The evolution of the crypto asset market has led to significant changes.

A recent industry survey on the perceptions of institutional investors of digital assets reveals that while 74 per cent of investors plan to buy or invest in digital assets in the future, half felt that price volatility was the greatest overall barrier followed by concerns around security (35 per cent) and market manipulation (35 per cent).¹⁶

As the crypto asset market continues to grow, practitioners must understand that digital assets do not operate in the same way as traditional assets historically dealt with. This will become more apparent in the coming years as accountants, tax experts, litigators, family lawyers, wills and estate practitioners, business advisors and the like, will be asked to handle or comment on the digital assets of clients.

¹³ Ontario Securities Commission, “Crypto Asset Survey – Final report” September 26, 2022, *Ontario Securities Commission*, online: https://www.osc.ca/sites/default/files/2022-10/inv_research_20220928_crypto-asset-survey_EN.pdf

¹⁴ Olga Kharif, “Cryptocurrency’s Value Surges to \$45 Billion One Day After Its Debut” (May 11, 2021), *Bloomberg*, online: <https://www.bloomberg.com/news/articles/2021-05-11/cryptocurrency-s-value-surges-to-45-billion-after-monday-debut>

¹⁵ Zachary Crockett, “Death, bitcoin, and taxes: A guide to post-life crypto”, June 6, 2021, Issue #162, *the Hustle*

¹⁶ Fidelity Digital Assets Research, “Institutional Investor Digital Assets Study: Key Findings” October 2022, *Fidelity Digital Assets*, online: https://www.fidelitydigitalassets.com/sites/default/files/documents/2022_Institutional_Investor_Digital_Assets_Study.pdf

Understanding the complexities of crypto assets

Every transaction on a blockchain involves both a public key and private key, known as a cryptographic pair. The public key is like a bank account, housed on a crypto exchange, and it is used to transfer crypto to and from the block chain. It is often called the 'hot wallet', but not recommended for long term storage. As with bank accounts, you can have many public keys associated with different platforms.

The public key allows you to send and receive crypto-asset payments. An example of a public key bitcoin address is: `33yCMdhnsTYqs1638ppoDrZ9LRdn7BQ2Pyl`. Bitcoin can be sent to that public key address without ever contacting or communicating with anyone. The private key is very different in that it is the asset itself and its existence establishes ownership of a crypto asset. It is akin to a digital bearer bond and whoever has this key has complete control and possession of the asset.

A private key on the other hand, is very different in that it is the asset itself and its existence establishes ownership of a crypto asset. It is akin to a digital bearer bond and whoever has this key has complete control and possession of the asset. A private key is a long string of random, unpredictable characters. Here is an example of a private key, which is a 256-bit secret number:

108165236279178312660610114131826512483935470542850824183737259708
197206310322

Without the private key, the cryptocurrency cannot be accessed by anyone. This includes the bona fides owner. Needless to say, secure storage of the private key is critical. Private keys themselves are stored in a wallet, which could be either a hot wallet (i.e., connected to the internet) or a cold wallet (which is not connected to the internet). A cold wallet example is one that utilizes the thumb drive technology. Here, the private key number is stored within a thumb drive and no longer connected to the internet for safety reasons. Cold wallets are often stored in secure physical locations such as safe-deposit boxes or safes.

Digital Wallets¹⁷

¹⁷ Cryptocurrency wallets further divide into subcategories:

- **Desktop wallets:** Downloaded onto a desktop computer. You have custody of your private keys but there is a risk if critical damage is done to the laptop hard drive.
- **Online wallets:** These wallets exist in the cloud and are often in the custody of a third party, such as a cryptocurrency exchange. They are convenient for trading but expose you to another layer of risk – the exchange misappropriating your assets or getting hacked.
- **Mobile wallets:** Same as desktop wallets, but on your phone.

Digital wallets are the public and private keys required to buy/trade crypto assets and the public key is a critical part of the process to authorize a crypto transaction on the blockchain. The phrase crypto wallet is a misnomer because the wallets are nothing more than a digital numeric string on software that facilitates crypto transactions. A public wallet enables you to interact with the blockchain. The public wallet stores private key information and allows its owner to move digital assets to other parties while also letting others on the blockchain see the asset balance held at any given address. The public wallet is connected to a blockchain and works with the public ledger to show you the balances in the other addresses on that blockchain. The public wallet is used to hold the private keys that enable you to make transactions.

A cold wallet is never connected to the Internet. It is the safest storage possible. A hacker cannot access a private key on a cold wallet if it is not online. However, a lost cold wallet means the cryptocurrency is as good as gone. A cold wallet storage device is usually a small metal object that can receive (or send) crypto assets via Bluetooth or phone.

Digital Asset Inheritance

A 2007 Microsoft study revealed that on average, participants had twenty-five online accounts that required passwords for access.¹⁸ For executors, or estate lawyers, who can access these accounts after death, is a critical question. In cases of intestacy, unless the custodian of an account provides informal access, no one will be permitted access.¹⁹ A recent report which published the results of a global survey of estate practitioners found that social media and email accounts top the list of the most-asked-about assets.²⁰ To demonstrate the real-life difficulties of password protected accounts and post-mortem access, consider the following below mentioned publicized stories.

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- **Hardware wallets:** Like USB drives, fitted and optimized for the storage and security of digital assets. If you lose the USB, you lose your crypto assets forever.
 - **Paper wallets:** If you print or write down your private and public key on a paper you can keep your funds completely offline. However, if you lose the paper, you lose your crypto assets forever.
 - **Mnemonic wallets:** Some people commit the key to memory. But if you forget the key number or something happens to the person, the crypto assets are lost forever.

¹⁸ See generally, Alberto Lopez, "Posthumous Privacy, Decedent Intent, and Post-Mortem Access to Digital Assets," (2016) 24:1 Geo Mason L Rev 183, which looks at Dinei Florencio & Cormac Henry's study, "A Large-Scale Study of Web Password Habits" (2007) International World Wide Web Conference Committee, online: <http://www.2007.org/papers/paper620.pdf> [Lopez]

¹⁹ Faye L. Woodman, "Fiduciary Access to Digital Assets: A Review of the Uniform Law Conference of Canada's Proposed Uniform Act and Comparable American Model Legislation" (2017) 15:2 CJCT, 204. [Woodman]

²⁰ STEP, "Digital Assets: A Call to Action. Examining the risks and challenged posed by digital assets to estate planning and administration." Online: https://www.step.org/system/files/media/files/2021-09/stepdigitalassets_calltoaction.pdf [STEP]

In 2014, Maureen Henry, had to obtain the order of a Judge to gain access to her late son, Dovi's social media accounts. Dovi Henry's last contact with his family was in April of that year. Three months later, his body was recovered from a Toronto Marina on Lake Ontario. Due to the state of decomposition, a positive identification wasn't made until late 2016. Since that time, Maureen Henry has been trying to find leads regarding the death of her son, including hiring legal counsel who helped her obtain the court order.²¹

In another social media case, Carol Anne Nobel of Toronto sought access to the Apple account she shared with her late husband, Don Nobel, who died of a rare spinal cancer in 2016. Before dying, Don asked Carol to finish writing his book, which was on his Apple account. What's problematic is that the account is in Don's name. Carol is the executor and sole beneficiary of Don's estate. In early 2017, Carol contacted Apple after providing documentation proving she had the legal right to her husband's estate. Apple called back, informing Carol she needed a court order since providing the password to Don's account would contravene a U.S. law, the *Electronic Communications Privacy Act* of 1986.²²

In 2018, Matthew Moody, the billionaire scion of the family that founded BNY Mellon Bank,²³ died in a hotel room in Mexico before a scheduled stay at a rehabilitation facility. Matthew had struggled with an opioid addiction for decades. Before his untimely demise, Matthew turned a risky \$2 million investment in the cryptocurrency XRP/Ripple into a record \$1 billion profit. Matthew had reported that he kept the digital keys to his assets in cold storage in other people's names across various locations across the United States.²⁴ Matthew died leaving behind three children and without telling anyone about the private keys to his cryptocurrency wallet.²⁵

In May of 2014, International best-selling author of *Pomegranate Soup*, Marsha Mehran, died unexpectedly in Ireland.²⁶ Her father Abbas sought to determine if she had any literary works remaining on her Google Chromebook. He sent four emails to Google but

²¹ Josh K. Elliot, "Judge grants mother access to dead son's social media," CTVNews.ca, Thursday, October 12, 2017.

²² Rosa Marchitelli, "Apple blocks widow from honouring husband's dying wish," CBC News, online: <https://www.cbc.ca/news/business/widow-apple-denied-last-words-1.5761926>

²³ See Nathan Vardi, "The Last Days of Banking Heir Matthew Mellon," April 19, 2018, Forbes Magazine, online: <https://www.forbes.com/sites/nathanvardi/2018/04/19/the-last-days-of-banking-heir-matthew-mellon/?sh=142c7b715d52>, where it's explained that Matthew's great-great-great-grandfather, the Honourable Judge Thomas Mellon, founded Mellon Bank in Pittsburgh and became the patriarch of one of America's richest dynasties.

²⁴ *Ibid.*

²⁵ *Ibid.*

²⁶ See Annalisa Quinn, "Book News: Iranian Author Of 'Pomegranate Soup' Found Dead In Ireland" (2014) NPR, online: <https://www.npr.org/sections/thetwo-way/2014/05/05/309718747/book-news-iranian-author-of-pomegranate-soup-found-dead-in-ireland>

received no response. After hiring legal counsel, “Mr. Mehran obtained a CD from Google that included 200 documents written by his daughter.”²⁷

In 2018, Gerald Cotton, the CEO of the crypto exchange Quadriga, died suddenly at the age of 30, reportedly of Crohn’s disease complications while on his honeymoon in India. When Gerald died, many understood that he possessed the private keys to \$250 million worth of personal and client’s cryptocurrency.

Often Overlooked Digital Assets

In 2018, celebrated chef, traveller, and guide to the world, Anthony Bourdain, took his own life in France. In his last will and testament, Anthony Bourdain wrote that his estranged wife should dispose of his frequent flyer miles and other possessions in a way she believes he would have.

According to Bond Brand Loyalty, in Canada the value of unredeemed loyalty points reached \$16 billion in Canada. The report indicates that “memberships have grown by 68 per cent to average of 12.3 cards per person in 2017.”²⁸

One helpful tool to record loyalty reward/award program points could be to use a program such as AwardWallet so as to ensure the executor has access to the account. The onus is on the program member to provide their executor with written instructions dictating what should be done with these assets. Additionally, there is no industry standard which outlines what happens to loyalty reward program points or rewards upon the death of a member. The rules differ among vendors. Most vendors post the details in the terms and conditions of their programs while some require individual members to contact customer service. According to Money Sense, Air Miles, Aeroplan, Esso, WestJet Airlines, Porter Airlines, Hudson’s Bay, the five largest banks, and United States based hotels Hilton, Marriott, and Starwood all permit loyalty reward program members to transfer their points or miles.²⁹

Loyalty reward programs have risen significantly in their use and demand. Over the past several years, emerging economies like India, China, Indonesia, and Singapore have experienced a sharp demand for these programs. There has also been a growing demand in North America and the UK for loyalty programs among customers of financial services. As an example, in March 2022 one of the UK’s leading financial providers in Lloyds

²⁷ Lopez, *supra*, 185.

²⁸ MoneySense, “Anthony Bourdain gave away loyalty points in his will” August 2, 2018, online: <https://www.moneysense.ca/news/anthony-bourdain-loyalty-points/>

²⁹ *Ibid.*

Banking Group entered a collaboration with Bink, a loyalty app. The goal is to allow retailers to connect their various loyalty programs to their customers.³⁰

The Development of Digital Assets

In the following section there will be a bit of an exploration of the global development of digital assets by looking at newly created legislation and demands from the academic and legal communities in jurisdictions that are currently giving digital assets a closer look. Technology available to individuals and practitioners to aid in the succession of digital assets such as the Artificial Intelligence (“AI”) powered, eState planner will be mentioned below.

Accompanying this paper, is a checklist for practitioners and their clients to assist with digital planning and in identifying estate assets as well as provide a glossary of terms to help explain some of the technical terminology.

Global Development of Digital Assets

In North America, model acts created by the Uniform Law Commission and Uniform Law Commission of Canada provide a framework which jurisdictions can adopt. Across the globe, however, the tide is rising, in that digital assets are outpacing legislation. In its most recent report on Digital Assets, the Society of Trust and Estate Practitioners (“STEP”)³¹ argues that “Legal systems need to provide clear rules around property rights of access by personal representatives.”³² In jurisdictions without the adoption of a model act or similar legislation, leading cases on access to digital assets prove that conflicts in this area can be arduously contentious, costly, and time-consuming.

Canada

In Canada, digital assets have been addressed through model legislation. In 2016, the *Uniform Access to Digital Assets by Fiduciaries Act* was adopted by the Uniform Law Commission of Canada as the model legislation. Section 3 (1), of the Act holds that a fiduciary has the right to access all the decedent’s digital assets, unless specified otherwise in a will. The Act takes the stance of media neutrality, and as Emily Lynch has

³⁰ GlobeNewswire, “Global Loyalty Programs Market Intelligence Report 2022: Financial Firms are Entering into Strategic Partnerships to Create Customer Loyalty Program Solutions” *Research and Markets*, May 18, 2022, online: <https://www.globenewswire.com/news-release/2022/05/18/2445791/28124/en/Global-Loyalty-Programs-Market-Intelligence-Report-2022-Financial-Firms-are-Entering-into-Strategic-Partnerships-to-Create-Customer-Loyalty-Program-Solutions.html>

³¹ STEP is the Society of Trust and Estate Practitioners. It was founded in 1991 by George Tasker and is headquartered in London, United Kingdom.

³² STEP, *supra*.

argued, is consistent with Quebec's *Act to establish a legal framework for information technology* which formalizes the principle of technological neutrality (granting the same legal treatment to documents regardless of their form). Ontario's *Electronic Commerce Act*, also recognizes technological neutrality.³³ The drafters of the Uniform Act were clear to specify that fiduciary access in Canada is not barred by privacy laws.³⁴ Section 3 (1) holds that default access is the basic rule.³⁵

The ULCC's Uniform Act governs four types of fiduciaries: personal representatives for a deceased account holder; an attorney appointed for an account holder who is the donor/grantor of the Power of Attorney; a guardian appointed for an account holder; and, a trustee appointed to hold in trust a digital asset.

Curiously, only two jurisdictions in Canada have adopted the model legislation: Saskatchewan, with their *Fiduciaries Access to Digital Information Act*³⁶ (the "*Fiduciaries Access Act*") which came into effect on June 29, 2020, and most recently, Prince Edward Island with their *Access to Digital Assets Act*³⁷ (the "*Digital Assets Act*") which came into force on January 1, 2022. The *Fiduciaries Access Act* and the *Digital Assets Act* both identically define digital assets³⁸ and grants fiduciaries the right to access a decedent's digital assets. The *Fiduciaries Access Act* also establishes who qualifies as a fiduciary.³⁹ Right to access is only granted pursuant to instructions given in a will, letters of administration, guardianship court order, power of attorney, trust, or other court order.⁴⁰ What's more, the *Fiduciaries Access Act* also provides clarity and protection for account holders: to make a request, a fiduciary may request access from the account holder in writing⁴¹ and so long as the custodian complies with the *Act*, the fiduciary is protected from liability for any loss incurred with respect to digital assets. Both Saskatchewan and Prince Edward Island's statutes also contain an identical exception for an employer's digital assets, meaning that a fiduciary cannot demand access to an employer's digital assets.

³³ Emily Lynch, "Legal Implications Triggered by an Internet User's Death: Reconciling Legislative and Online Contract Approaches in Canada" (2020) 29 Dal J Leg Stud 135, 150-151. [Lynch]

³⁴ Woodman, *supra*, 207.

³⁵ *Ibid*, 212.

³⁶ SS 2020, c 6. [*Fiduciaries Access Act*]

³⁷ *Access to Digital Assets Act*, 2021 c. 27, R.S.P.E.I. 1988, A-1.

³⁸ *Fiduciaries Access Act*, *supra*, Definitions – digital asset "means a record that is created, recorded, transmitted or stored in digital or other intangible form by electronic, magnetic or optical means or by any other similar means"

³⁹ An executor or administrator for a deceased account holder; a property guardian; a property attorney; or a trustee appointed to hold in trust a digital asset or other property; the Public Guardian and Trustee when acting in its capacity.

⁴⁰ *Fiduciaries Access Act*, *supra*, 4 (1).

⁴¹ *Ibid*, 8 (1).

In Alberta, Digital Assets are partially addressed through the *Estate Administration Act*⁴² which references ‘online accounts’ in the context of the duties of an estate trustee in identifying estate assets and liabilities.

At the federal level, the recently proposed Bill C-27⁴³ contemplates granting broadening individual rights to control personal data that is held by commercial entities.⁴⁴ If Bill C-27 passes, it would also enable a fiduciary to demand all information they have about a decedent or incapable person and even demand the disposal of this information.⁴⁵

Critics of the model legislation argue that it tends to dangerously favor access, over privacy (in contrast with two versions of the American Model Act developed by Uniform Law Commission). Additionally, some have commented that the model act needs an ‘online tool’ provision, which would serve as a solution to the problem of a person who dies intestate and has not yet had an administrator appointed by the court.⁴⁶ Arguing for the promotion of efficient estate administration, Emily Lynch calls for the implementation of a rebuttable presumption against access to a decedent’s digital data. According to Lynch, amended legislation could provide a mechanism through which a representative could request access to a digital asset or account by simply satisfying a ‘good cause’ requirement, being required to adduce a legitimate interest in justifying access.⁴⁷

The treatment of digital assets in Canadian jurisprudence so far has been focused on crypto assets and their interpretation for the purposes of asset recovery. Some decisions have granted Interim preservation of property orders (IPO) where crypto assets have been stolen or misrepresented. In a representative case, *Shair.com Global Digital Services Inc. v Arnold*,⁴⁸ an application was brought where the plaintiff alleges the defendant, a former officer and employee of the plaintiff, illegally converted company property in the form of digital currencies.⁴⁹ In that case, the court denied the request for

⁴² SA 2014, c E-12.5.

⁴³ Proposed *Digital Charter Implementation Act*, 2022

⁴⁴ See Charlotte M. McCurdy, “What Will Happen to Your Digital Assets Upon Your Death or Incapacity?” November 10, 2022, *Perley-Robertson, Hill & McDougall LLP*, online: <https://perlaw.ca/2022/11/10/what-will-happen-to-your-digital-assets-upon-your-death-or-incapacity/> which cites Bill C-27, section 63.

⁴⁵ *Ibid*, at Bill C-27, section 55.

⁴⁶ Woodman, *supra*, 216.

⁴⁷ Lynch, *supra*, 159.

⁴⁸ 2019 BCSC 870.

⁴⁹ Defendant was hired in May 2011, became secretary and Vice President in 2015, purchases \$18,500 in Bitcoin for the company between the period of June – August 2014. Employment ended in April of 2017, in December 2017 the plaintiff realized the defendant had not returned their laptop or upload the digital wallet with the currency to their server. The defendant unsuccessfully argued that his computer died, and the information was lost.

a Mareva injunction, yet granted a global preservation order after applying the four-element test.⁵⁰

In the legal troubles leading up to the untimely death of Gerald Cotten, the CIBC Bank, sought an interpleader order regarding \$25.7 million it had frozen related to intended cryptocurrency transactions by hundreds of individuals on an exchange operated by Quadriga CX.⁵¹ In that case, CIBC froze accounts opened by a platform connected to Quadriga called Costodian when it determined the business operated as a money service.⁵² The disputed funds were placed with the court after it was agreed that CIBC met the onus of demonstrating that adverse claims have been made against the disputed funds. In this interesting decision, the court noted that, “Cotton’s refusal to answer relevant questions leads me to draw an adverse inference that Depositors have not been credited with QuadrigaCX bucks in their online wallets.”⁵³

In 2019, the Ontario Securities Commission (the “OSC”) released a report concluding that Gerald Cotton had committed fraud and that most of the customer funds had been spent in the last two years leading up to his death.⁵⁴ According to the OSC, over 76,000 clients were owed a combined \$215 million in assets. A 10-month investigation by the OSC’s multi-disciplinary team of Enforcement Branch Staff analyzed Quadriga’s trading and blockchain data, concluding that the bulk of the shortfall was attributed to Gerald Cotten’s fraudulent activity.⁵⁵ It has been alleged that Gerald faked his own death, with investors and their legal counsel still to this day pressing the RCMP to exhume his remains, though there is no evidence this is the case.⁵⁶

⁵⁰ The four element test derived from *McKnight v Hutchinson*, 2011 BCSC 36 at paras 145 – 146 : a) the plaintiff has a proprietary interest in property in issue, b) the plaintiff’s belief that property is threatened with disposition is reasonable, c) substantial question to be tried as to whether the plaintiff may ultimately be entitled to call of the partnership property in question, and d) balance of convenience favours the granting of the order.

⁵¹ *Canadian Imperial Bank of Commerce v Costodian Inc. et al*, 2018 ONSC 6680. [CIBC]

⁵² *CIBC, supra*, at para 3 where it is stated that between December 2017 and February 2018, 388 individuals or corporations made 465 deposits worth \$67 million into Costodian’s accounts.

⁵³ *CIBC, supra*, at para 34.

⁵⁴ Barbara Shecter, “OSC: Quadriga founder Gerald Cotten carried out cryptocurrency fraud by himself” (June 11, 2020), Postmedia Network Inc., online: <https://www.saltwire.com/nova-scotia/business/osc-quadriga-founder-gerald-cotten-carried-out-cryptocurrency-fraud-by-himself-461043/>

⁵⁵ See the Ontario Securities Commission, “QuadrigaCX - A Review by Staff of the Ontario Securities Commission” Online: <http://www.osc.ca/quadrigacxreport/> where they conclude that Mr. Cotten opened Quadriga accounts under aliases, credited himself with fictitious currency and crypto asset balances which he traded Quadriga clients. When the price of the crypto asset changed, Mr. Cotten sustained real losses and covered the shortfall with other clients’ deposits; in effect operating like a Ponzi scheme.

⁵⁶ See Keith Doucette, “Tales from the crypto: Clients want to see human remains of QuadrigaCX founder” (December 19, 2019), Canadian Press, online:

Finally, in the Canadian Criminal Law context, courts have wrestled with the question of whether Bitcoin companies are subject to the same principles as financial institutions in the context of search and seizure and return of seized goods as seen recently in Prince Edward Island.⁵⁷ Judges have also struggled with determining whether a crypto asset is considered a ‘good’ for the purposes of conversion or wrongful detention.⁵⁸ Recently, a decision in British Columbia defined Bitcoin as a form of currency in a summary judgment where the defendant was alleged to have failed to pay the plaintiff for the exchange of 50 bitcoins.⁵⁹

United States of America

In the United States, questions regarding digital assets have begun to take prominence. For example, the question of whether a digital asset can be regulated by the International Trade Commission categorized as a ‘good’ was recently addressed.⁶⁰ There have also been succession questions concerning what tax consequences follow the transfer, or donation of digital assets.⁶¹ On April 20, 2021, the U.S. House of Representatives passed the *Eliminate Barriers to Innovation Act of 2021*, HR 1602 which directs the Commodity Futures Trading Commission and the Securities and Exchange Commission to jointly establish a digital asset working group to investigate and issue a report analysing the legal and regulatory framework and development in the U.S. in the area of digital assets.⁶²

The main barrier to accessing digital assets in the United States includes the *Stored Communications Act* (“SCA”) which is part of the *Electronic Communications Privacy Act* and does not permit the disclosure of the contents of communication which is stored, carried by, or maintained by a service.⁶³ Additionally, the *Computer Fraud and Abuse Act* (the “CFAA”) which prohibits the unauthorized access to computers serves as a major barrier. Under the CFAA, violation occurs when anyone who is not the owner accesses

<https://www.investmentexecutive.com/news/industry-news/tales-from-the-crypto-clients-want-to-see-human-remains-of-quadrigacx-founder/>

⁵⁷ *R v Jahanshahloo*, 2018 CarswellPEI 122.

⁵⁸ *Copytrack Pte Ltd v Wall*, 2018 BCSC 1709

⁵⁹ *Nelson v Gokturk*, 2021 BCSC 813, para 9 where the Honourable Madam Justice Tucker held that, “Bitcoin (or ‘BTC’) is a form of cryptocurrency. A cryptocurrency is a digital asset that is designed to function as a medium of exchange using strong cryptography to secure financial transactions, control the creation of additional units, and verify the transfer of assets.”

⁶⁰ *Clear Correct Operating LLC v International Trade Commission*, 810 F.3d 1283 (Fed. Cir. 2015).

⁶¹ Victoria Blachly, *Uniform Fiduciary Access to Digital Assets Act: What UFADAA Know*, 29 PROB. & PROP., July-Aug. 2015, at 8, 10

⁶² Margo H.K. Tank, Mark F. Radcliffe, “Achieving Digital Transformation and Securing Digital Assets” (May 20, 2021) DLA Piper Publications – Blockchain and Digital Assets News and Trends

⁶³ Electronic Communications Privacy Act of 1986, Pub. L. No. 99-508, 100 Stat. 1848 (2012) (Codified as amended at 18 U.S.C. §§ 2510-22, 2701-12, 3121-27)

an online account in violation of the providers terms of service agreement. The CFAA provides no specific exemption for fiduciaries.⁶⁴

In March of 2022, President Biden signed an Executive order outlining the Federal government's comprehensive approach to addressing risks and harnessing potential benefits of digital assets and the technology that supports it. Within the Order, President Biden outlines a national policy on digital assets that focuses on six key priority areas:

1. Consumer and investor protection;
2. Financial stability;
3. Illicit finance;
4. U.S. leadership in the global financial system and economic competitiveness;
5. Financial inclusion; and
6. Responsible innovation.

The Order also directs the U.S. government to assess the technological infrastructure and capacity required for a potential U.S. Central Bank Digital Currency ("CBDC").⁶⁵

- **Legislation**

The model legislation on digital assets in the United States, the *Uniform Fiduciary Access to Digital Assets Act* (the "*Uniform Act*") was approved by the Uniform Law Commission in 2014. The *Uniform Act* grants fiduciaries broad access to digital accounts. However, Delaware was the only state to adopt a version of the *Uniform Act*.⁶⁶ This first attempt at model legislation was heavily opposed by Internet Service Providers.⁶⁷ In response, the ULC changed its proposal and created the *Revised Uniform Fiduciary Access to Digital Assets Act* (the "*Revised Act*") which "requires account holders to affirmatively bequeath digital assets in order for those assets to be transferred upon their deaths."⁶⁸ If an individual makes no arrangements for their assets, then they are held to the standard procedures of individual service providers.

⁶⁴ Sheridan, *supra*, 367.

⁶⁵ White House, "FACT SHEET: President Biden to Sign Executive Order on Ensuring Responsible Development of Digital Assets" March 9, 2022, *WH.GOV*, online: <https://www.whitehouse.gov/briefing-room/statements-releases/2022/03/09/fact-sheet-president-biden-to-sign-executive-order-on-ensuring-responsible-innovation-in-digital-assets/>

⁶⁶ *Ibid*, at p. 368.

⁶⁷ Natalie M Banta, "Electronic Wills and Digital Assets: Reassessing Formality in the Digital Age" (2019) 71:3 Baylor L Rev 547, at 570 "They feared that transmitting data after an account holder's death to a decedent's heirs would violate the Stored Communications Act, a federal act that imposes civil liability on companies that share customer's electronic communications with unauthorized third parties." [Banta Feudalism]

⁶⁸ Banta Feudalism, *supra*, at p. 571.

It has been argued that the *Revised Act* provides unclear language in attempting to describe just what actions the fiduciary may take with respect to digital assets. Additionally, some critics have commented that the structure of the *Revised Act* means that custodians have complete discretion to insist on a fiduciary obtaining a court order before granting access to a digital asset (creating a potentially cost prohibitive access issue).⁶⁹ Additionally, the *Revised Act* permits the custodian to select the manner of disclosure, leading in the end to potential administrative delays in the settlement of estates.⁷⁰ Finally, questions remain regarding how much authority a fiduciary actually has, since the *Revised Act* requires custodians to disclose information to the fiduciary about the user's digital assets, yet, does not grant accompanying powers to engage in transactions with property.⁷¹

There has been a succession of recommendations to properly amend the *Revised Act*. First, it has been argued that in circumstances of non-protected digital assets "...a fiduciary should be able to take possession of, control, manage, use, distribute, transfer, or otherwise dispose of any digital assets of a deceased user not subject to protections under federal privacy laws."⁷² While the *Revised Act* mandates disclosure of any non-protected digital assets, there is uncertainty concerning notification of the default access that is provided to a fiduciary. Clarification in this process through legislation would provide better access for fiduciaries.⁷³

Additionally, it has been argued that the *Revised Act* ought to be amended so as to limit the ability of a custodian to request a court order prior to disclosing non-prohibited digital assets in unusual circumstances with some critics arguing that "Recent New York cases indicate that custodians will treat the court order as a de facto requirement for disclosure of non-protected digital assets to the fiduciary."⁷⁴

Finally, some have contended that the *Revised Act* or similar legislation should address the nature and extent of terms of service agreements,⁷⁵ arguing that, "Enforcing forum

⁶⁹ Sheridan, *supra*, at p. 377.

⁷⁰ *Ibid*, at p. 378 "custodians continue to include forum selection and choice of law provisions in their terms of service agreements in an attempt to override well-settled probate law and prioritizes the laws of the decedent's domicile in matters related to estate administration."

⁷¹ *Ibid*, at p. 379.

⁷² *Ibid*, at p. 380.

⁷³ *Ibid*, at p. 380 where the Sheridan argues that "In order to give full effect to this default provision and make non-protected assets automatically available to the fiduciary, a fiduciary's authority over non-protected digital property should be interpreted more broadly."

⁷⁴ *Ibid*, 382.

⁷⁵ *Ibid*, at 387-388 where the author argues that most Terms of Service Agreements are drafted in a manner that is advantageous to the custodian – viewed as contracts of adhesion – courts may find

selection and choice of law provisions in terms of service agreements may be contrary to public policy when the matter involves the estate proceeding of a deceased user.”⁷⁶ Some have argued that other states should follow the lead of Delaware, in addressing potential conflicts that may arise out of pre-emption clauses.⁷⁷ To date, 47 states have adopted the *Revised Act*.⁷⁸

- **Wyoming**

Wyoming is the only jurisdiction in the world to define digital assets in reference to the common law concept of ‘intangible personal property.’ On April 5, 2021, Wyoming enacted HB0043 (effective July 2021) which further defines a digital asset and identifies it as an intangible asset under the classification of UCC Article 9. In its 2019 legislative session, Wyoming authorized and passed 13 blockchain-friendly laws to become effective, including legislation that outlines property rights for digital asset owners. In contrast, the UCC only addresses the rights of digital assets owned through securities intermediaries,⁷⁹ whereas, Wyoming classified digital assets as property,⁸⁰ and divides these assets into three categories of intangible property within the Uniform Commercial Code.⁸¹ In response, the UCC asked the State of Wyoming to set aside SF 00125 (which deviates heavily from model legislation). Representative Tyler Lindhom, and Senator Ogden Driskell, as Co-Chairmen of Wyoming’s Blockchain Task Force, responded in kind with a letter clarifying the legislation and denying the request.⁸²

many terms unconscionable – frequently include broadly worded provisions in Terms of Service Agreements.

⁷⁶ *Ibid*, 392.

⁷⁷ *Ibid*, at 393, which looks at 12 DE Code § 5004 (2015), “(c) A choice-of-law provision in an end user license agreement is unenforceable against a fiduciary action under this chapter to the extent the provision designates law that enforces or would enforce a limitation on a fiduciary’s access to or control over digital assets or digital accounts that is void under subsection (b) of this section.”

⁷⁸ Uniform Law Commission, “Fiduciary Access to Digital Assets Act, Revised” 2022, online: <https://www.uniformlaws.org/committees/community-home?CommunityKey=f7237fc4-74c2-4728-81c6-b39a91ecdf22>

⁷⁹ Lacey Shrum, “Wyoming: Move over, Delaware!” (2019), Vela Wood blog, online: <https://velawoodlaw.com/wyoming-move-over-delaware/>

⁸⁰ An act relating to digital assets – 34-29-102 – Classification of digital assets as property; applicability to Uniform Commercial Code; application of other law – (b) Consistent with W.S. 34.1-8-102 (a)(ix), a digital asset may be treated as a financial asset under that paragraph, pursuant to an agreement with the owner of the digital asset. If treated as a financial asset, the digital asset shall remain intangible personal property.”

⁸¹ SF0125 – effective July 1, 2019 – The Act establishes the legal nature of digital assets within existing law, dividing these assets into three categories of intangible personal property and classifying these assets within the Uniform Commercial Code (UCC): (1) Digital Consumer Assets (UCC: general intangibles), (2) Digital securities (UCC: securities: investment property); and (3) Virtual currency (UCC: money).

⁸² In the letter it is stated that, “the indirect ownership regime is particularly risky for virtual currencies because it enables risky practices in intermediary omnibus accounts that can cause insolvency more

In May 2021, Two Ocean Trust partnered with Anchorage Digital⁸³ and announced their joint plans to deliver the first of its kind trust and estate planning solution for crypto asset holders – COIN (Crypto Optimized Irrevocable Non-grantor).

- **New York State**

In September 2016, New York State passed the *Revised Act*, which is now Article 13-A of the state's *Estates, Powers and Trusts Law* (the "EPTL"). The EPTL provides fiduciaries with the legal authority to access and manage digital assets of a deceased or incapacitated individual based on the model legislation.

In New York State Surrogate's Court, in the *Matter of Serrano*,⁸⁴ the court directed Google to provide the decedent's contacts and calendar information to the estate's voluntary administrator, but not to divulge the contents of any emails. In Suffolk County New York in the *Matter of White*,⁸⁵ the decedent did not address disclosure of his digital assets in his will and did not activate Google's online tool; the court therefore, limited disclosure to the decedent's contact information stored and associated with the account.⁸⁶ In what has been called a landmark case in the *Estate of Swezey*,⁸⁷ Apple was ordered to allow a grieving husband access to his deceased husband's Apple account. In 2017, Ric Swezey, a former champion gymnast and Hollywood stuntman, died unexpectedly. Ric was survived by two young children and his husband Nicholas Scandalios, Vice President of the Nederlander Organization.⁸⁸ Ric had left all property to Nicholas in his will. Ric was an avid photographer who's family and artistic photographs were taken on an iPhone and digital camera and stored in his Apple account. Nicholas petitioned that it was their intention to transfer the property to a joint account, however, Ric died. In a ruling that clarified how to treat the succession of personal digital assets, the court relied on section 13(a)⁸⁹ of the New York *Estates, Powers and Trusts Law* and ordered Apple to turn over the digital property stored in Ric's iTunes and iCloud account.

easily than other asset classes." And, that Wyoming believes the Model Acts are not ready to be considered in any state.

⁸³ Two Ocean Trust provides wealth management services to high-net worth individuals, family offices, and advisors and Anchorage Digital provides institutions with simple and secure participation in digital assets, all integrated with custody – it is America's first federally chartered crypto bank.

⁸⁴ 56 Misc. 3d 497 [N.Y. Surr. Ct. 2017].

⁸⁵ 2017 WL 8944064, 1 (N.Y. Surr. Ct. 2017).

⁸⁶ Joshua H. Epstein, "Recent Cases Highlight 'Digital Assets' as a New Frontier in Estate Planning and Litigation" May 1, 2018, *Davis Gilbert*, online: <https://www.dglaw.com/recent-cases-highlight-digital-assets-as-a-new-frontier-in-estate-planning-and-litigation/>

⁸⁷ NYLJ 1/17/19

⁸⁸ The Nederlander Organization was founded in 1912 and is one of the largest operators of live theatre and music in the United States of America. They currently operate a national network of nine theatres.

⁸⁹ EPTL-13-A-1(i) holds that Digital Assets are "electronic record[s] in which an individual has a right or interest."

- **Massachusetts**

The State of Massachusetts adopted the Model Act in 2020. However, before the state's legislation was amended, it saw a digital assets case work its way through all levels of its courts. In *Ajemian v Yahoo! Inc.*,⁹⁰ John Ajemian died in a bicycle accident, intestate. His two siblings were appointed co-personal representatives and subsequently sought access to his email account to identify assets of estate. Yahoo denied all requests pursuant to SCA and alternatively, to their own Terms of Service Agreement. In September of 2009, the personal representatives had their complaint in Norfolk Probate and Family Court dismissed. The representatives appealed, and the Massachusetts Appeals Court reversed the initial decision and sent it back to Probate Court.⁹¹ On remand, the Probate Court found that the emails were the property of the estate, however, the SCA prevented disclosure by Yahoo. The decision was appealed, and this time caught the attention of the Massachusetts Supreme Judicial Court who transferred the case to itself. The SJC concluded that the SCA in fact, did not prohibit Yahoo from disclosure and remanded the decision the Probate Court for further proceedings to make two determinations.⁹² In 2018, Yahoo filed a petition for writ of certiorari, with the U.S. Supreme Court requesting petition to correct the SCJ's "expansive, flawed, and dangerous interpretation of a federal statute." In March of that year, the Supreme Court declined to weigh in, denying the petition.

Germany

Germany has no legislation addressing digital assets. In the European Union ("EU"), the closest that legislation comes to addressing digital assets is through the definition of 'digital content' in legislation on consumer rights⁹³ and a directive on payment services. European legislators have recently noted that a unique definition is needed moving forward.⁹⁴

In both 2016 and 2017, German academics discussed digital assets at two important conferences.⁹⁵ In 2018, the governing political parties included the creation of a

⁹⁰ 478 Mass. 169, 170 (2017)

⁹¹ Rebecca Tunney, "Estate Administration in the Era of Digital Assets: *Ajemian v. Yahoo Inc.*, 478 Mass. 169 (2017)" (2019) 100:3 Mass L Rev 71, 71. [Tunney]

⁹² Whether a valid contract was created between the decedent and Yahoo through Yahoo's Terms of Service and whether Yahoo has unfettered discretion to deny personal representatives' access.

⁹³ Romana Matanovic Vuckovic & Ivana Kancelja, "Does the Right to Use Digital Content Affect Our Digital Inheritance?" (2019) 3 ECLIC 724, at 725. [Vuckovic]

⁹⁴ Vuckovic, *supra*, at 741.

⁹⁵ See Bashkatov, M., Heindler, F., Völkel, O., Yuksel, B., & Zimmermann, A., "A Comparative Analysis on the Current Legislative Trends in Regulation of Private Law Aspects of Digital Assets." (2019) Aberdeen Centre for Commercial Law, at p. 3 where the authors reference the 71st German Jurists'

blockchain-strategy into their coalition agreement. In the 2019 session of the German Bundestag, it was proposed but not adopted, that legislators draft a law on “regulating access to digital heritage and harmonising it in the EU.”⁹⁶ Between November 5-6 in 2020, the ERA’s Annual Conference on European Succession Law met in Germany with the focus being, national inheritance law and digital estates.⁹⁷ Unfortunately, no legislative changes came out of this conference.

In 2015, a seminal case began in the Berlin Regional Court in Germany. The case raised the question of, “whether an account on a social network with all its communication content can pass to the user’s heirs by way of universal succession, and, moreover, if and how access to the account has to be granted.”⁹⁸

The case involved fiduciary access to the social media accounts of a 15-year-old who died unexpectedly. On January 4, 2011, the deceased registered a Facebook account with the permission of her parents. On December 3, 2012, she was killed when she was struck by an incoming train at an underground station. It was assumed that she committed suicide, which led the driver of the train to bring action against the parents to compensate him for damages suffered as a result. To determine their daughter’s state of mind, and to establish a timeline leading up to her death, it was necessary to access her social media. The parents were told by Facebook that they were unable to access the account because it had already been set to ‘memorial’ status, initiated by a user whose name could not be revealed to them because of data privacy protection concerns. On December 17, 2015, the Berlin Regional Court ruled that the parents could access the account, holding that the memorial state was invalid and caused unreasonable disadvantage to the heirs of the estate.⁹⁹

In 2017, the Court of Appeal reversed the Berlin Court’s judgment and dismissed the parents’ action, holding that the contract between Facebook and the daughter concluded when she died and that the content of the account could not be passed to her heirs because of ‘secrecy of telecommunications’, a decision which has been met with much criticism.¹⁰⁰

Conference (Deutscher Juristentag) in 2016 for which digital ‘goods’ was a topic and the 2017 Association of Civil Law Teachers Conference (Tagung der Zivilrechtslehrervereinigung).

⁹⁶ Angelika Fuchs, “What happens to your social media account when you die? The first German judgments on digital legacy.” (2021) 22 ERA Forum 1, 6. [Fuchs]

⁹⁷ *Ibid*, 1.

⁹⁸ Fuchs, *supra*, 1

⁹⁹ *Ibid*, 2 where the Fuchs looks at the decision of the Berlin Regional Court in *LG Berlin*, 20 O 172/15, ECLI:DE:LGBE:2015:1217.20O172.15.oA.

¹⁰⁰ *Ibid*, 3 which looks at the Court of Appeal decision in *Kammergericht*, Judgment of 31 May 2017 – 21 U 9/16, ECLI:DE:KG:2017:0531”21U9:16.oA.

The parents' appeal was heard by the Federal Supreme Court (Bundesgerichtshof) in 2018. The Federal Supreme Court set aside the Court of Appeal's judgment and restored the Berlin Court's decision. The Bundesgerichtshof held that, user agreements for digital social media accounts are in fact inheritable; in this case, the user agreement between Facebook and the deceased was held to be a contract that passed to the heirs by operation of section 1922, para. 1 of the German Civil Code.¹⁰¹ The Court also held that the relevant German provision on secrecy of telecommunications only applied to individuals or institutions that are not involved with the protected communications process.¹⁰²

Six weeks after the 2018 judgment, Facebook provided the parents with the contents of the account in one massive 14,000-page file which was described as hardly readable and partially in English. The mother commenced a fresh action against Facebook. In 2019, the Berlin Regional Court released a decision in which it instructed that 'granting access,' meant that the mother could 'take note' of the contents of the account in the same way her daughter had in the past. The mother was subsequently granted access for a reasonable amount of time.¹⁰³ Facebook appealed, and in 2019 the Court of Appeal classified Facebook's behavior in delivering a 14,000-page document as 'brazen' but still found it's actions 'completely sufficient'. On appeal, the Federal Supreme Court explained its 2018 judgment, re-iterating that the mother had already been granted access to communication content and with that, the ability to 'take cognisance' of the user account itself in the same way as the original authorized person.¹⁰⁴

Since the 2020 decision of the German Federal Supreme Court, Facebook has updated and adapted its terms and conditions surrounding legacy content.¹⁰⁵

¹⁰¹ Library of Congress, "Germany: Federal Court of Justice Rules Digital Social Media Accounts Inheritable which references the decision of *BGH*, Judgment of 12 July 2018 – III ZR 183/17, ECLI:DE:BGH:2018:120718UIIZR183.17.0 which held that, "Upon the death of the account holder, the user agreement passes to the heirs by operation of law, and the heirs are subrogated to the rights of the deceased, in accordance with § 1922 of the Civil Code. Access to the account is precluded neither by the post-mortem personality rights of the deceased, nor by the confidentiality of telecommunications, nor by data protection law."

¹⁰² Fuchs, *supra*, at p. 3.

¹⁰³ *Ibid*, at p. 4 Fuchs discusses the decision of *LG Berlin*, Order of 13 February 2019 – 20 O 172/15, ECLI:DE:LGBE:2019:0213..20O172.15.00

¹⁰⁴ *Ibid*, at p. 5, Fuchs discusses the decision of *BGH*, Order of 27 August 2020 – III ZB 30/20, ECLI:DE:BGH:2020:270820BIIIZB30.20.0.

¹⁰⁵ See Facebook's Terms where it provides that "You may designate a person (called a legacy contact) to manage your account if it is memorialized. Only your legacy contact or a person who you have identified in a valid will or similar document expressing clear consent to disclose your content upon death or incapacity will be able to seek disclosure from your account after it is memorialized." Online: <<https://www.facebook.com/terms.php>>

France

In 2016, France enacted the *Digital Republic Act* (“DRA”), legislation which grants individuals significant rights to control what happens to personal data after death. Pursuant to this legislation, service providers must comply with an account holder’s expressed wishes. The purpose of the DRA, is to secure user’s rights to “consciously specify how they wish their personal data to be used after their death.”¹⁰⁶ The DRA permits users to make post-mortem arrangements for their data at any point in their lifetime and places a duty on Internet Service Provider’s to inform the user about what will happen to their data when they die and let them choose whether or not to transfer their assets to a third party of their choosing.¹⁰⁷

On May 22, 2019, France updated legislation further, enacting Law No 2019-486, Plan d’Action pour la Croissance et la Transformation des Entreprises, otherwise known as the Action Plan for Business Growth and Transformation (the “PACTE”).¹⁰⁸ According to the International Bar Association, the PACTE law introduces two new categories: ‘tokens,’ and ‘digital assets’ into France’s Monetary and Financial Code (“CMF”).¹⁰⁹ While the CMF at Article L54-10-1 does not actually define digital assets, it does enumerate the types of assets that fall within the category.¹¹⁰ The PACTE law is significant in that it further defines digital assets in France as including tokens,¹¹¹ and virtual currencies.

¹⁰⁶ Shelly Kreiczler-Levy; Ronit Donyets-Kedar, “Better Left Forgotten: An Argument against Treating Some Social Media and Digital Assets as Inheritance in an Era of Platform Power.” (2019) 84:3 Brook L Rev 703, 716. [Levy]

¹⁰⁷ Levy, *supra*, at 717 which looked at *The Digital Republic Bill – Overview*, La Republique Numerique, online: <http://www.republique.numerique.fr/pages/in-english> [https://perma.cc/A8JD-3XFC]

¹⁰⁸ See Sebastien Praicheux, “France introduces an innovative legal framework for digital assets.” April 6, 2020, DLA Piper Productions, online: <https://www.dlapiper.com/en/us/insights/publications/2020/04/finance-and-markets-global-insight-issue-18/france-introduces-an-innovative-legal-framework-for-digital-assets/>, where Praicheux shares that the PACTE law “allows entities, under certain conditions, to issue digital assets that may grant certain rights to customers (excluding shareholder rights such as voting rights or dividends). Digital assets include tokens (except those qualifying as financial instruments) and digitally registered assets, including cryptocurrencies, that are accepted as a means of exchange that can be transferred, stored or exchanged electronically through distributed ledger technology (DLT or blockchain).”

¹⁰⁹ International Bar Association, “A French point of view: from crypto assets to digital assets,” in Back to Banking Law Committee publications, online: <https://www.ibanet.org/article/f59c675e-e95e-4c74-bdc3-ea5a42e8ef9c>

¹¹⁰ IBA, *supra*, provides that, “The following are considered to be digital assets: (1) the tokens defined at Article L552-2 of the same code, apart from those that can be assimilated to financial instruments; and (2) any digital representation of a value that is not issued or guaranteed by a central bank or a public authority, is not necessarily attached to a currency being legal tender and does not have the legal status of a currency, but which is accepted by natural or legal persons as a means of exchange and can be transferred, stored or exchanged electronically.”

¹¹¹ *Ibid*, Article L552-2 of the CMF “defines the token as any intangible property representing, in digital form, one or more rights that may be issued, registered, retained or transferred through a shared

United Kingdom

Despite having no legislation dealing with digital assets, there has been a lot of recent attention given to the subject in the United Kingdom. On November 18, 2019, The Chancellor of the High Court, Sir Geoffrey Vos,¹¹² launched the UK's *Legal Statement on the Status of Crypto-assets and Smart Contracts* (the "*Legal Statement*"). The *Legal Statement* is based on public consultation undertaken by the UK Jurisdiction Taskforce ("UKJT"), one of six taskforces of the LawTech Delivery Panel, an "industry-led group supporting the digital transformation of the UK legal services sector."¹¹³

The *Legal Statement* concluded that crypto assets do in fact constitute valid property in the form of intangible property and that smart contracts would be valid under English law.¹¹⁴ The UKJT noted the impossibility of summarizing crypto assets into a single definition. However, in the *Legal Statement*, crypto assets are classified as possessing the following characteristics: intangibility, cryptographic authentication, use of a distributed transaction ledger, decentralization, and rule by consensus.¹¹⁵ The UKJT was careful to note that crypto assets may have different characteristics, adopting the adage, 'no one size fits all'. Even though a crypto asset may not fall within the traditional definition of property, the *Legal Statement* held that this does not mean that crypto assets cannot be considered property.

In response to global trends, the Law Commission of the UK was recently asked by the government to make recommendations for reform which would ensure English law recognizes and enforces decisions on crypto assets and digital assets. Specifically, the Law Commission sought to consider whether digital assets are 'possessable.' The Law Commission published a call for evidence on April 30, 2021, with the call closing on July 30, 2021. Next steps include the publication of a consultation paper intended to consider and elicit proposals for law reform.¹¹⁶

On October 25, 2022, British Parliament's Lower House voted in favor of recognizing cryptocurrency assets as regulated financial instruments and goods. The Financial

electronic recording device that makes it possible to directly or indirectly identify the owner of that property."

¹¹² Courts and Tribunals Judiciary, "The Chancellor of the High Court, Sir Geoffrey Vos, launches Legal Statement on the Status of Crypto assets and Smart Contracts" (2019), where Sir Geoffrey Vos states that, "the objective, of course, is to provide much needed market confidence and a degree of legal certainty as regards English common law in an area that is critical to the successful development and use of crypto assets and smart contracts in the global financial services industry and beyond."

¹¹³ Yulia Makarova & Alistair Maughan, "Legal Statement on Cryptoassets and Smart Contracts: A Step in the Right Direction." (2020) 37:5 The Computer & Internet Lawyer 1, at 1.

¹¹⁴ *Ibid.*

¹¹⁵ *Ibid.*

¹¹⁶ Law Commission, "Digital assets project" – Commercial and Common Law Team

Services and Markets Bill also includes a definition of ‘crypto asset’ and contemplates requiring all providers of crypto assets to be authorized by financial regulators. The Bill must proceed for a third reading before moving to the upper house for the final vote and subsequent approval.¹¹⁷ The United Kingdom’s newly appointed Prime Minister, Rishi Sunak has a positive history with digital assets. While serving as the Chancellor of the Exchequer, he proposed the creation of a task force to analyse the creation of a central bank digital currency. He has also called for a recognition of stablecoins as a legal form of payment.¹¹⁸

It has been recognized in the U.K. that digital assets have the potential to generate multiple (and potentially inconsistent) assertions of applicable law and jurisdiction. The U.K. government in response, has asked the Law Commission to undertake a project entitled *Digital assets: which law, which court*, which will aim to set out the current rules on private international law as they may apply in the digital context and, if appropriate, make recommendations for reform. The Law Commission aims to publish a consultation paper in the second half of 2023.¹¹⁹

In a case highlighting the reality of digital assets in modern commerce, applicants sought to obtain a Norwich-Pharmaceutical Order¹²⁰ alongside a proprietary injunction as part of proceedings brought to trace the payment in a recent case involving the paid extortion of a Canadian insurance company by hackers demanding a Bitcoin ransom. The decision in *AA v Persons Unknown*,¹²¹ focused on the applicability of a proprietary injunction and struggled with the problem of defining cryptocurrencies. This decision did, also however, define crypto assets (such as bitcoin) as property, holding that Bitcoin meets the four criteria set out in Lord Wilberforce’s classic definition of property, in *National Provincial*

¹¹⁷ Dylan Butts, “UK lawmakers vote to regulate digital assets as financial instruments” October 26, 2022, *Forkast*, online: <https://forkast.news/headlines/uk-lawmakers-vote-regulate-digital-assets-financial-instruments/>

¹¹⁸ Kathleen Marshall, “U.K. Lawmakers Vote to Recognize Crypto As Regulated Financial Instrument” October 28, 2022, *Investopedia*, online: <https://www.investopedia.com/uk-approves-crypto-regulations-6757694>

¹¹⁹ UK Law Commission, “Digital assets: which law, which court?” October 18, 2022, *UK Law Commission*, online: <https://www.lawcom.gov.uk/project/digital-assets-which-law-which-court/>

¹²⁰ A Norwich Pharmaceutical Order (“NPO”) is a disclosure order available in England & Wales which allows information to be obtained from third parties who have become involved in someone else’s fraudulent activity. It is often used where a victim does not know the identity of a wrongdoer but can point to a third party who has this information. (Pinsent Masons, “Disclosure: A Guide to Seeking Norwich-Pharmaceutical Orders,” December 15, 2020, online: <https://www.pinsentmasons.com/out-law/guides/disclosure-guide-seeking-norwich-pharmaceutical-orders>). The name was taken from the decision in the case of *Norwich Pharmaceutical Co. v. Commissioners of Customs & Excise*, [1974] A.C. 133 (H.L.) at 175 where the original NPO permitted a pharmaceutical company to obtain the identity of a party secretly importing the company’s patent-protected drug (Bennet Jones, “Norwich Orders,” August 11, 2011, online: <https://www.bennettjones.com/Publications-Section/Updates/Norwich-Orders>).

¹²¹ [2019] EWHC 3556 (Comm).

Bank v Ainsworth 1965 1 AC 1175.¹²² In reaching his final decision, the Honourable Mr. Justice Bryan canvassed the *Legal Statement* issued by the UKJT.¹²³

After the decision in *AA*, the High Court in the case of *Ion Science Limited & Duncan Johns v Persons Unknown & Others*,¹²⁴ ordered a proprietary injunction, worldwide freezing order, and an ancillary disclosure order against unknown persons alleged to have committed acts of fraud.¹²⁵ The High Court, recognizing that digital assets are considered property, granted the relief sought in an *ex parte* application.¹²⁶

In the decision in *Wang v Darby*¹²⁷, the High Court considered whether cryptocurrencies could be held on trust, for the purposes of establishing a proprietary right over those assets. The claimant (Mr. Wang) is a crypto asset trader based in Australia who disputed an arrangement with the defendant, an experienced trader. The dispute arose in the context of two contracts between the parties for the exchange of crypto currency.

On the facts of the case, the Court found that no form of trust, whether express, constructive or Quistclose arose. It was held that the agreement in question required the claimant to re-transfer certain cryptocurrencies to the defendant, thus characterizing the agreement in the case as one of sale and re-purchase (repo) and notably held it is well established that a repo does not create a trust agreement.

Similarly, in the decision of *Tulip Trading Limited v. Bitcoin Association for BSV*,¹²⁸ questions of fiduciary duties and a duty of care were put before the court. The home office computer of Tulip Trading Limited's CEO was hacked, and crypto assets stolen. Tulip Trading claimed the 16 defendant software developers owed it fiduciary and/or tortious duties which have the effect that they should assist it in regaining control and use of the assets. The Court held that crypto asset software developers and controllers owe neither fiduciary duties, nor, a common law duty of care to owners, and have no obligation to assist owners in accessing their crypto assets should control over them be lost.

¹²² In *AA v Persons Unknown* [2019] EWHC 3556 (Comm), the court looked at the four criteria established in *National Provincial Bank*: (i) definable, (ii) identifiable by third parties, (iii) capable in their nature of assumption by third parties, and (iv) having some degree of permanence.

¹²³ Bedell Cristin (blog), "Digital Assets in the BVI and the search for meaning: the argument in favour of statutory definition as 'intangible personal property'"

¹²⁴ (2020) Unreported, December 21, 2020, online: <https://hsfnotes.com/litigation/2021/02/24/high-court-considers-where-cryptocurrencies-are-located-and-compels-disclosure-of-information-by-cryptocurrency-exchanges-outside-the-uk/>

¹²⁵ *Ibid.*

¹²⁶ Martin Hevey, "High Court considers where cryptocurrencies are located and compels disclosure of information by cryptocurrency exchanges outside the UK" (2021) Herbert Smith Freehills (blog – Litigation Notes), online: <https://hsfnotes.com/litigation/2021/02/24/high-court-considers-where-cryptocurrencies-are-located-and-compels-disclosure-of-information-by-cryptocurrency-exchanges-outside-the-uk/>

¹²⁷ [2021] EWHC 3054 (Comm).

¹²⁸ [2022] EWHC 667 (Ch)

Ukraine

On December 2, 2020, Ukraine's parliament passed the Bill on Virtual Assets No. 3637. This legislation officially recognizes a virtual asset as an intangible good that has value and can be regulated by the civil law. One aspect of the legislation is the regulation of cryptocurrencies and the exchanges that allow users to buy, sell, and store cryptocurrencies. An important piece of this legislation involves the inclusion of know-your-client procedures which require individuals to provide identification including their bank account information and digital wallet information.

In April 2022, Ukraine updated this bill to allow foreign and Ukrainian cryptocurrencies exchanges to operate legally. According to the bill, Ukraine's National Securities and Stock Market Commission will regulate the cryptocurrency market. The Commission will oversee areas which include issuing licenses to crypto business and implementing state policy in the industry. The legislative amendments coincide with Ukraine's decision to accept donations for its military defense against Russia in the form of digital currencies.¹²⁹

In September, Ukraine announced that the Virtual Assets Law will be amended again. The new amendments will bring the legislation in accordance with the provisions of the European Union's Markets in Crypto Assets (MiCA) legislative package. This change comes on the heels of Ukraine receiving status as a candidate for EU accession in June.¹³⁰

Russia

On July 31, 2020, the President of the Russian Federation, Vladimir Putin, signed Federal Law No. 259-FZ on Digital Financial Assets and Digital Currencies ("DFA"). This law regulates the issuance, recording, and circulation of digital financial assets. At Article 1, the law provides that "Digital financial assets are recognized as digital rights, including monetary claims and the possibility of exercising rights under equity securities."¹³¹ Pursuant to Article 3 of the DFA, digital currency is defined as a digital code used for means of payment and as a savings tool.¹³² The law defines the concept of digital

¹²⁹ Arjun Kharpal, "Ukraine legalizes crypto sector as digital currency donations continue to pour in" March 17, 2022, *CNBC*, online: <https://www.cnbc.com/2022/03/17/ukraine-legalizes-cryptocurrency-sector-as-donations-pour-in.html>

¹³⁰ Lubomir Tassev, "Ukraine to Revise Virtual Assets Law in Line With EU Crypto Rules" September 20, 2022, *Bitcoin.com*, online: <https://news.bitcoin.com/ukraine-to-revise-virtual-assets-law-in-line-with-eu-crypto-rules/>

¹³¹ TAdvisor, "Legislation on Digital Financial Assets and Digital Currency in Russia (259-FZ)," online: [https://tadviser.com/index.php/Article:Legislation_On_Digital_Financial_Assets_and_Digital_Currency_in_Russia_\(259FZ\)#:~:text=On%20January%201%2C%202021%2C%20Law,cryptocurrency%20industry%20in%20our%20country](https://tadviser.com/index.php/Article:Legislation_On_Digital_Financial_Assets_and_Digital_Currency_in_Russia_(259FZ)#:~:text=On%20January%201%2C%202021%2C%20Law,cryptocurrency%20industry%20in%20our%20country)

¹³² Library of Congress, "Russian Federation: New Bill Defines Cryptocurrency, Proposes Tax Regulations," online: <https://www.loc.gov/item/global-legal-monitor/2021-01-11/russian-federation->

currency as, “the collection of electronic data contained in the information system ... in respect of which there is no person liable to each holder of such electronic data.”¹³³

New Zealand

New Zealand is another country with no digital assets legislation that has drawn global attention. In 2020, the New Zealand High Court held that cryptocurrencies, as well as digital assets, are a form of property capable of being held in trust. What’s important about this decision is that it provides a fully reasoned decision on whether digital assets such as cryptocurrencies are property (and can be the subject of a trust – no other jurisdiction addresses this directly) and addresses questions of the difference between “pure information” and “digital assets.”

In *Ruscoe v Cryptopia Limited (in liquidation)*,¹³⁴ a cryptocurrency exchange was placed in liquidation in May 2019 after suffering a serious hack and experiencing a loss of \$30 million worth of cryptocurrency from the exchange.¹³⁵ The application in *Ruscoe* concerned the liquidator’s request for guidance on the legal status of several cryptocurrencies held by Cryptopia, and particularly, whether these digital assets are held on trust by Cryptopia.¹³⁶ The court also held that the three elements which are required to give rise to a trust were all essentially met.¹³⁷ The court also examined a recent decision of the Supreme Court of Singapore,¹³⁸ which held that, “cryptocurrencies are not legal tender in the sense of being a regulated currency issued by government, but do have the fundamental characteristics of intangible property as being an identifiable thing of value.”¹³⁹

Australia

It has been commented that, “the growth of digital assets has outpaced state and Commonwealth legislation in Australia.”¹⁴⁰ With that being said, the Attorney General has asked the New South Wales Law Reform Commission to review and report on laws

[new-bill-defines-cryptocurrency-proposes-tax-regulations/#:~:text=The%20bill%20requires%20that%20citizens,informati%20about%20transacti%20with%20cryptocurrency](#)

¹³³ *Ibid.*

¹³⁴ [2020] NZHC 728. [*Ruscoe*]

¹³⁵ *Ruscoe*, *supra*, para 7.

¹³⁶ *Ibid.*, at para 15.

¹³⁷ *Ibid.*, at para 128.

¹³⁸ *Quoine Pte Ltd v B2C2 Ltd* [2020] SGCA(I) 02, online: <https://www.supremecourt.gov.sg/news/case-summaries/quoine-pte-ltd-v-b2c2-ltd-2020-sgcai-02>

¹³⁹ *Ibid.*, at para 80.

¹⁴⁰ New South Wales Law Reform Commission, “Access to Digital assets upon death or incapacity” (August 2018) Consultation paper 20, at p. 25.

concerning who can access a person's digital assets after death, or after becoming incapacitated and whether New South Wales needs new laws in this area. The report was informed by 15 preliminary submissions.¹⁴¹ The preliminary submissions included the Law Society of NSW who argued it was appropriate to include the US model legislation's classification of four types of fiduciaries and suggested adding a fifth which addresses small estates.¹⁴²

Alternatively, the Society of Trust and Estate Practitioners submitted its preference for the Canadian model, which they argue "makes fiduciary rights of access subject to the terms of the instrument appointing the fiduciary, not the terms of service agreement" and for its use of the 'last-in-time' priority system "ensuring a person's most recent instruction concerning the right to access a digital asset takes priority."¹⁴³

The Law Reform Commission concluded then that in Australia and NSW, it is unclear whether digital assets would constitute property under the *Succession Act* 2006 (NSW). The Commission argued that this could be resolved by simply amending the definition of property in the *Succession Act* or clarifying with legislation the circumstances surrounding digital assets and fiduciary access.¹⁴⁴

One of the most important aspects of the latest consultation paper is its look at the rise of digital registers and digital planning tools. A submission by the Australian Communications Consumer Action Network and the NSW Trustee and Guardian advocates for the use of digital registries,¹⁴⁵ however, offers caution against directly listing account information on a service, and saving it for a letter or legal instrument.¹⁴⁶ The Report also addressed the use of Digital Legacy Services, websites where users store passwords and instructions that allow appointed individuals to access their digital assets.

¹⁴¹ *Ibid*, at p. 1.

¹⁴² *Ibid*, at p. 29 where the suggestion to add a fifth: the executor or next of kin for small estates, also arguing that in these cases probate should not be required for small estates to enable a named executor or next of kin to access data

¹⁴³ *Ibid*.

¹⁴⁴ NSW recommends, "Clarifying in legislation what status instructions in a will have compared with other instructions in a will have compared with other conflicting directives that a person has made." Currently, "The *Probate and Administration Act* does not specifically address the question of access to a deceased person's digital assets."

¹⁴⁵ NSW Law Reform Commission shares that, "A digital register is an inventory of a person's digital assets, including those stored in online accounts and on devices in which they record their account numbers, usernames, and directions about what they want done with their digital assets ... In Australia, some service providers such as iiNet, Optus, and Telstra permit legal personal representatives to access someone else's account, provided they have permission from the account owner and can verify their identity."

¹⁴⁶ NSW, *supra*, at p. 9.

Hong Kong

In the Hong Kong decision of *Nico Constantijn Antonius Samara v Stive Jean Paul Dan*,¹⁴⁷ a plaintiff was granted relief to recover misappropriated Bitcoins. The Court in this case held that the defendant held on trust for the plaintiff, the unsold bitcoins, proceeds from the sale of the bitcoins and the fruits thereof. The plaintiff claimed after several months into an agency agreement to sell bitcoins, the defendant locked the plaintiff out of the account and ceased communications. The court found this was a case where the defendant had been in blatant breach of his fiduciary duties owed as agent. The Hong Kong Court granted both a *Mareva* injunction to freeze the fraudulent agent's assets as well as proprietary injunction to freeze the bitcoins in question.

Digital Planning Tools

Revealing results about the current demands for digital tools and asset planning which found that more than two-thirds (69 per cent) of estate and financial planners are now incorporating digital tools into their clients' estate plans were recently released.¹⁴⁸ The survey revealed that the leading digital asset being included in estate plans in 2022 included blogs, social media, and email accounts (71 per cent), followed by passwords (67 per cent). The survey reported that these figures are "consistent with an increased interest in digital assets like Bitcoin and other cryptocurrencies."¹⁴⁹ The results of the survey also indicated that 83 per cent of estate and financial planning use digital tools to support their client's estate planning using estate planning software (52 per cent) and online wealth and/or estate planning platforms (48 per cent).¹⁵⁰

A 2018 poll conducted by Angus Reid found that more than half of Canadians don't have a will and only 35 percent have one that is up to date, out of those without a will, 18 percent said it was simply too expensive.¹⁵¹ With this in mind, it may be helpful to explore ways that the digital revolution is making the process not only easier to maintain, but affordable as well.

¹⁴⁷ [2022] HKCFI 1254

¹⁴⁸ In April, TD Wealth released its fourth annual estate planning survey. See, TD Wealth, "Digital Tools and Assets on the Rise in Estate Planning, as Nearly 70% of Professionals are Incorporating Them into 2022 Plans" April 21, 2022, *Cision PR Newswire*, online: <https://www.prnewswire.com/news-releases/digital-tools-and-assets-on-the-rise-in-estate-planning-as-nearly-70-of-professionals-are-incorporating-them-into-2022-plans-301530086.html>

¹⁴⁹ *Ibid.*

¹⁵⁰ *Ibid.*

¹⁵¹ Aidan Macnab, "Innovations in estates law: How legal tech is revolutionizing law" (October 7, 2019), *Canadian Lawyer Magazine*, online: <https://www.canadianlawyermag.com/practice-areas/trusts-and-estates/innovations-in-estates-law-how-legal-tech-is-revolutionizing-death/306132>

One frequent insight, however remains, that is that online tools must be used in conjunction with an estate plan for cohesiveness.¹⁵² This can become overwhelming to manage. One of the best ways to ensure this task does not get out of hand is by employing the use of powerful digital planning tools that are still simple to use.

eState Planner¹⁵³

In 2014, Jordan Atin and Ian Hull of Hull & Hull created an AI-powered tool that allows the user to build a will. Jordan Atin recently described the tool, eState planner, as “a simple process but extremely powerful. It covers every kind of conceivable option. But for the client it is straightforward, simple and visual.”¹⁵⁴ The tool can be best explained in the three steps required to create a document. First, eState planner allows users to easily capture the necessary information through a digital questionnaire which is delivered through a secure portal. From here, the information is converted to a family tree in the portal. Next, the user can itemize, and drag and drop assets using a simplified interface. This is where a user (usually a Lawyer meeting with a client) will input the information on digital assets (for a full list of what to include see our checklist). In the final step, eState planner generates an easy-to-understand summary and exports editable legal documents. What’s notable about the tool are its versatile features. For example, the tool allows users to create One-Click Estate Plans for typical situations, which auto create the appropriate document.¹⁵⁵ The tool also allows for the creation of multiple wills, which is necessary to avoid paying excess probate fees on some assets.

In May 2017, Willful, another will-making app, was launched in Ontario. In 2019, it was reported that Willful has since expanded to cover all Canadian provinces. For consumers looking for a cost-effective tool to make a will, Willful offers packages that start at under 100 dollars and can be completed in twenty minutes, start to finish. Willful documents are also approved by lawyers in each province.¹⁵⁶

Registries

Another important tool in digital planning is the use of Registries. In Canada, some provinces offer will registry services. For example, in British Columbia, the Department of Vital Statistics maintains the will registry service. Applicants can use the registry to

¹⁵² Jennifer Zegel & Sharon Hartung, “Insight: Five signs that estate advisors aren’t getting with the digital program.” July 20, 2020, in Bloomberg Tax, online: <https://news.bloombergtax.com/daily-tax-report/insight-five-signs-that-estate-advisors-arent-getting-with-the-digital-program-61>

¹⁵³ See eState Planner, “Wills and Estate Planning Software” 2022, *eState Planner*, online: <https://www.e-stateplanner.com/>

¹⁵⁴ Macnab, *supra*.

¹⁵⁵ eState Planner, “All beneficiary designations, bequests, residue gifts and estate trustee appointments are auto created.” Online: <http://www.estateplanner.com/features>

¹⁵⁶ Willful, “Online wills made easy” (2021), online: <https://www.willful.co/>

register the location of a will by filling a notice or to search for a notice as part of probating an estate. Applicants can include lawyers, notaries, trustees, or individuals filing their own wills (provided they are 16 years or older, mentally capable of doing so). Anyone who provides the appropriate documentation and pays the \$17.00 fee can search for a notice in British Columbia. Searches can be done by mail, online, or in person.¹⁵⁷

In Quebec, the province makes frequent use of the Notary System. Quebec recognizes formal as well as holograph wills and notarial wills. A notarial will is drawn by a notary pursuant to articles 716 and 717 of the Civil Code of Quebec. The original will is kept by the notary and the Chambre des notaries maintains a register of notarial wills. In Quebec, notarial wills do not require probate and are reported to be more difficult to contest in court.¹⁵⁸

In Ontario, online registry has been simplified through the private company, NoticeConnect, which began in the practice of letting creditors know about estates being administered. Working within the legal community, NoticeConnect was able to launch a will vault management tool service. NoticeConnect's Canada Will Registry allows users to register information about wills they have. As an added level of comfort, if someone does a search for a will, the law firm gets notification of the search and has within 30 days to respond, ensuring that only the right parties are provided access. What's helpful about the Canada Will Registry is that people can register their own wills and have the option of pdf searchable files. The ability to have back-ups of actual records comes in handy in case the originals are ever destroyed. The Canada Will Registry offers a strong level of protection and piece of mind through its safeguards. When they last spoke to Canadian Lawyer Magazine in 2019, the Registry had 84,000 registered wills and 730 firms using the product.¹⁵⁹

Like NoticeConnect, is the United Kingdom's 'National Will Register' which was created by the private company Certainty in 2006. The National Will Register is the Law Society of United Kingdom's endorsed provider and maintains the longest-established and largest register in the United Kingdom. It's Will Search function provides a recommended and accredited search process that searches for registered and unregistered wills (for later will existence). The will Registration search function protects Testator's beneficiaries by

¹⁵⁷ British Columbia Department of Vital Statistics, "Wills Registry" Online: <https://www2.gov.bc.ca/gov/content/life-events/death/wills-registry>

¹⁵⁸ Sharon Davis, Hull & Hull LPP (blog), "Probate of a Quebec Notarial Will in Ontario," April 21, 2010, online: <https://hullandhull.com/2010/04/probate-of-a-quebec-notarial-will-in-ontario/>

¹⁵⁹ Macnab, *supra*.

registering their documents. There are in excess of 9.4 million wills now in the system which continues to grow daily.¹⁶⁰

Future Trends

Wills

One of the big future trends to consider is the use of Blockchain and Smart Contract technology in wills. In a recent study, authors proposed the use of a cryptocurrency mechanism (blockchain technology) and smart contract technology to facilitate an online will system. The authors argue that “the architecture considers effectiveness and cost reduction.”¹⁶¹ According to the authors, in this arrangement assets are saved in blocks, providing more comprehensive will security and security protection that is non-tamperable. This is then combined with the use of smart contract technology, which makes the distribution of property automatic. In 2020, Bridget J. Crawford explored how blockchain, “could be harnessed to create a distributed ledger of wills that would maintain a reliable record of a testator’s desires for the post-mortem distribution of estate assets.”¹⁶²

Developers of Digital Applications

One often overlooked area of digital assets concerns the estates of developers of digital applications. In his article, “The Digital Inheritance of Mobile Apps: Where’s the App for That?” Edwin Cruz highlights how, “law may not adequately address the issues that arise when an app developer fails to complete a formal transfer of his apps before death.”¹⁶³ Apple estimated that total revenue for developers on the App store in 2013 was over \$10 billion. In 2012-2013, the year-on-year growth of revenue from the global apps business was 62 percent.¹⁶⁴ With the growth of applications, and the complexity involved in their maintenance, developers should be planning their digital estates before it is too late.

Passive Income Opportunities

Crypto assets have become a popular way for individuals to grow their passive income – it has also become a popular way for investors to diversify their portfolios. One of the popular ways users and investors do this is through the practice of ‘staking’. According to

¹⁶⁰ The Law Society, “The National Will Register” August 31, 2022, online: <https://www.lawsociety.org.uk/membership/offers/certainty>

¹⁶¹ Chen C. et al., “Traceable Online Will System Based on Blockchain and Smart Contract Technology” (2021) 13 *Symmetry*, 466.

¹⁶² See generally Bridget J. Crawford, Blockchain Wills, 95 Ind. L.J. 735 (2020), online: <https://digitalcommons.pace.edu/lawfaculty/1158/>

¹⁶³ Edwin Cruz, “The Digital Inheritance of Mobile Apps: Where’s the App for That?” (2016) 14 NW J TECH & INTELL PROP 111, 114. [Cruz]

¹⁶⁴ Cruz, *supra*, at p. 117.

Krisztian Sandor, staking is basically the crypto equivalent of putting “money in a high-yield savings account.”¹⁶⁵ When funds are deposited in a savings account, the bank takes that money and lends it out to others. In return for locking up this money with the bank, the savings account holder receives a portion of the interest earned from lending. When digital assets are staked, coins are locked up to participate in running the blockchain and maintaining its security. In return, users received rewards calculated in percentage yields. This is only possible with the use of proof-of-stake consensus mechanisms, a specific method used by some blockchains to ensure only honest participants and verified blocks of data are added to the network. According to Sandor:

The stake, then, is the validator’s “skin in the game” to ensure they act honestly and for the good of the network. In exchange for their commitment, validators receive rewards denominated in the native cryptocurrency. The bigger their stake, the higher chance they have to propose a new block and collect the rewards. After all, the more skin in the game, the more likely you are to be an honest participant.

Users can ‘stake’ cryptocurrencies Ethereum, Cardano, Solana, Avalanche, and Polkadot.

The Rise of Decentralized Finance (DeFi)

Peer-to-peer financing options, enabled by Layer-1 blockchain protocols¹⁶⁶ include for example, Ethereum, Avalanche, Solana, and Cardano. Transactions in DeFi occur on peer-to-peer apps with the assistance of smart-contracts. This is distinguishable from traditional finance processes where buyers and sellers typically rely on intermediaries such as banks, brokers, custodians, and clearing firms.¹⁶⁷

DeFi is not a company, but rather, it is a code. The users on DeFi apps “self-custody” their assets in wallets protected by their private keys. These apps operate under the sphere of Decentralized Autonomous Organizations (“DAOs”) which manage the apps through decisions made by individuals known as validator nodes who own or handle enough tokens to approve blocks. According to Foley and Lardner, the vast majority of blockchain networks and smart-contract base apps are in fact, organized as DAOs. One of the appeals with DeFi is its lack of centralized authority. As a relatively new area of cryptocurrency, DeFi features very little regulation or oversight. Wyoming is the only state which has codified rules for DAOs which are domiciled in the state. This lack of regulation

¹⁶⁵ Krisztian Sandor, “Crypto Staking 101: What Is Staking?” November 22, 2022, *CoinDesk*, online: <https://www.coindesk.com/learn/crypto-staking-101-what-is-staking/>

¹⁶⁶ A “Layer 1” blockchain refers to the base-layer network such as Bitcoin, Solana, or Ethereum which are independent and fully operational networks.

¹⁶⁷ Foley & Lardner LLP, “Digital Assets White Paper” August 2, 2022, online: <https://www.foley.com/-/media/files/insights/publications/2022/08/digital-assets-white-paper--summer-2022.pdf>

and oversight, however, opens up DeFi users to the significant risk of theft. As a result, DeFi has been referred to as the “wild west” of banking and investing.

The Growth of Cryptocurrencies

Bitcoin continues to be the dominant cryptocurrency by the measures of market capitalization, user base, and popularity. However, according to Adam Hayes, several other virtual currencies such as Ethereum have risen in prominence, largely connected to their efficacy in DeFi protocols.

Ethereum (ETH) is a decentralized software platform which enables smart contracts and apps to be built and run. Applications on Ethereum are run on its platform-specific cryptographic token Ether. Ether was launched in 2015 and currently holds a market capitalization of \$169.5 billion (less than half of Bitcoin).¹⁶⁸

There has also been a rise in what are known as stablecoins. Stablecoins are cryptocurrencies which tie their market value to a currency or similar external reference. The goal with these crypto assets is to reduce price volatility. One of these stablecoins, Tether, was launched in 2014 and is tied directly to the price of the U.S. dollar. Tether users can easily make transfers from other cryptocurrencies back to U.S. dollars. As of September 18, 2022, Tether was the third-largest cryptocurrency by market capitalization at \$67.9 billion.¹⁶⁹

There has also been a rise in several innovative currencies which seek to revolutionize the industry. Cardano, for example, is a blockchain created through extensive experimentation and peer-reviewed research and offers solutions for voter fraud and legal contract tracing.

The Rise of Cyberattacks

In 2022, hackers have already grossed over \$3 billion dollars across 125 hacks which is on track to beat last year’s reported figure of \$3.2 billion.¹⁷⁰ Over the course of 2022, crypto entered a bear market with many speculators referring to the downturn as the ‘crypto winter.’ According to data pointed out by Chainanalysis, October was the worst

¹⁶⁸ Adam Hayes, “10 Important Cryptocurrencies Other Than Bitcoin” September 26, 2022, *Investopedia*, online: <https://www.investopedia.com/tech/most-important-cryptocurrencies-other-than-bitcoin/>

¹⁶⁹ *Ibid.*

¹⁷⁰ TRT World, “Digital asset heists: 2022 set to be biggest year for crypto hacks” October 18, 2022, online: <https://www.trtworld.com/magazine/digital-asset-heists-2022-set-to-be-biggest-year-for-crypto-hacks-61749>

month with a record \$718 million in recorded total losses occurring across several DeFi protocols in 11 separate attacks. In early November, over \$100 million in liquidity was drained from the popular Solana Mango Market trading protocol. In that attack, a rogue trader manipulated the price of spot tokens and borrowed the entirety of Mango Market's protocols against their position.

In September, documents were filed in two separate actions against 23-year-old 'Crypto King,' Aiden Pleterski after creditors were working at locating at least \$35 million provided to him and his company, AP Private Equity Limited and where it ended up.¹⁷¹ The initial claimant argues that Pleterski promised him a 70-30 per cent split on capital gains along with a 10 to 20 per cent biweekly growth target on his investments. After a year, the claimant, Mr. Singh, began making requests to withdraw \$1 million, \$300,000, and \$3.5 million installments over the span of a month. Pleterski told him he was having issues withdrawing the funds.¹⁷² So far, roughly \$2 million worth of assets have been seized, including two McLarens, two BMWs and a Lamborghini. In July, Justice Phillip Sutherland of the Ontario Superior Court of Justice granted a Mareva injunction, freezing Pleterski's assets and petitioning him into bankruptcy.¹⁷³

On November 12, just hours after filing for Chapter 11 bankruptcy in the United States, global exchange FTX fell victim to a \$477 million hack. Weeks later, lawyers for FTX disclosed that a "substantial amount" of assets had been stolen from accounts of the collapsed exchange. According to James Bromley, a partner with Sullivan & Cromwell, the law firm retained by FTX's debt holders to, "[t]his company was run by inexperienced, unsophisticated and potentially personally compromised individuals."¹⁷⁴

Conclusion

Having examined the development of digital assets across the globe, it is evident that the growth of online accounts, social media, and the emergence of new forms of digital property and currency require careful attention and planning. Since digital assets continue to gain prevalence, individuals and practitioners alike need to be mindful of digital estate

¹⁷¹ Nicole Brockbank, "Luxury cars seized from 23-year-old 'Crypto King' as investors try to recoup millions" September 20, 2022, *CBC News*, online: <https://www.cbc.ca/news/canada/toronto/luxury-cars-seized-crypto-king-investors-try-recoup-millions-1.6583982>

¹⁷² Hannah Alberga, "New details reveal how the alleged 'crypto king' scheme left investors out millions" October 25, 2022, *CTV News*, online: <https://toronto.ctvnews.ca/new-details-reveal-how-the-alleged-crypto-king-scheme-left-investors-out-millions-1.6123840>

¹⁷³ *Ibid.*

¹⁷⁴ Ken Sweet, "FTX lawyer: 'Substantial amount' of assets has been stolen" November 22, 2022, *The Canadian Press*, online: <https://www.cp24.com/world/ftx-lawyer-substantial-amount-of-assets-has-been-stolen-1.616402>

planning tools and legislation designed to protect digital assets and so too, fiduciary access.

This paper is intended for the purposes of providing information only and is to be used only for the purposes of guidance. This paper is not intended to be relied upon as the giving of legal advice and does not purport to be exhaustive. This paper was originally prepared by Kimberly A. Whaley and Ian M. Hull November 2021 for the Canadian Lawyer Magazine webinar and updated by Kimberly A. Whaley with the kind assistance of Jeff Kehoe, Director of the Enforcement Branch of the Ontario Securities Commission and is current as of December 2022.

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Glossary of Terms

<i>Artificial Intelligence</i>	<p>“It is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to methods that are biologically observable.”¹⁷⁵</p> <p>For an in-depth look at Artificial Intelligence, visit the IBM website on the subject.¹⁷⁶</p>
<i>Bitcoin and bitcoin (or BTC)</i>	Bitcoin with a capital ‘B’ refers to the network itself where the transactions are recorded whereas bitcoin with a small ‘b’ refers to the native digital asset which can be transacted on the Bitcoin blockchain
<i>Blockchain</i>	A distributed ledger recording transactions stored on computers around the world (i.e., distributed) and which is updated simultaneously on all copies of that ledger whenever blocks of transactions are added. This ledger or blockchain avoids the need for a trusted third party such as a bank to verify that a transaction has taken place.
<i>Central Bank digital currencies or CBDCs</i>	An extension of stablecoins, CBDCs are in effect a stablecoin issued by a central authority rather than by a private company. By way of example, the Bahamas has issued a CBDC for the Bahamian Dollar, and China is testing a digital yuan.
<i>Cryptocurrencies /crypto assets</i>	Crypto assets refer to the subclass of digital assets that operate using cryptography, which is an encryption technique that ensures the authenticity of the assets by preventing the possibility of counterfeiting or double spending. Cryptocurrency is a broad term used to describe digital assets such as bitcoin and ether, which has many financial market applications, and additionally it can be traded for goods and services as well as other cryptocurrencies or traditional fiat currencies. Each cryptocurrency is typically held in a wallet which has a public address (which can be viewed on the relevant blockchain), the ownership and

¹⁷⁵ John McCarthy, “What is Artificial Intelligence?” (2004) Online: https://homes.di.unimi.it/borghese/Teaching/AdvancedIntelligentSystems/Old/IntelligentSystems_2008_2009/Old/IntelligentSystems_2005_2006/Documents/Symbolic/04_McCarthy_whatissai.pdf

¹⁷⁶ IBM Cloud Learn Hub, “Artificial Intelligence (AI)” Online: <https://www.ibm.com/cloud/learn/what-is-artificial-intelligence>

	<p>control over which is governed by the possession of a private key associated with that wallet.</p> <p>Cryptocurrencies typically exhibit the following characteristics:</p> <ul style="list-style-type: none"> • they are decentralized (or not reliant on a central authority but rather managed by code) • they are built on a blockchain or other distributed ledger technology (DLT) network – this allows the user to enforce the rules of the system in an automated manner • they utilize cryptography to secure the currency structure and network system¹⁷⁷
<i>DeFi</i>	DeFi is shorthand for “decentralised finance” and generally refers to financial services such as lending and borrowing which takes place without a central intermediary such as a traditional bank (sometimes referred to as CeFi for centralised finance).
<i>Ethereum and Ether (or ETH)</i>	As with Bitcoin/bitcoin, Ethereum is the network and ETH is the native digital asset on the Ethereum blockchain
<i>NFTs</i>	NFTs or non-fungible tokens are unique tokens that are not exchangeable for other tokens in the same way that other fungible tokens (such as bitcoin or dollars) can be exchanged. NFTs have become popular in tokenising art and other media where the ownership of the corresponding token is trackable and tradeable on a Blockchain. The most famous NFT to date was created by the artist known as Beeple and was sold at a Christies auction for US\$69m. The NFT market has crashed and most NFT’s have lost all of their value. Trading volumes in nonfungible tokens recorded on blockchains have tumbled 97% from a record high in January this year. They slid to just \$466 million in September from \$17 billion at the start of 2022.
<i>Proof of Work (POW) and Proof of Stake (POS)</i>	POW and POS describe the two main ways transactions on a blockchain are verified.
<i>Stablecoins</i>	Stablecoins are cryptocurrencies which attempt to peg their value to some external reference point. The most common Stablecoins are pegged to the US dollar (such as USDT and USDC) but stablecoins. Most

¹⁷⁷ Gemini, Cryptopedia, “Digital Assets: Cryptocurrencies vs. Tokens” (2021) Online: <https://www.gemini.com/cryptopedia/cryptocurrencies-vs-tokens-difference>

	stablecoins utilise the Ethereum network and for each Stablecoins issued or minted, a corresponding amount of the reference or pegged currency is held by the issuer in reserve.
<i>Staking</i>	Staking is a way of earning rewards by confirming a blockchain transaction, such as bitcoin. The reward is often a small percentage of the type of token that you have assisted confirming on a blockchain. A related concept is bitcoin mining.
<i>Tokens</i>	Tokens are a digital representation of interests or rights to certain assets. They are typically issued to raise capital for new entrepreneurial projects or start-ups.
<i>Yield farming</i>	Yield farming describes the process of generating a yield on a particular token or cryptocurrency by temporarily lending it to a DeFi platform in return for (by way of example) a portion of the platform's fees for providing that liquidity.

Names of the Most Widely Used Types of Different Crypto Assets	
<i>Bitcoin</i>	Bitcoin is the original crypto asset created in 2009
<i>Cardano</i>	A coin created by the co-founder of Ethereum. Cardano allows for smart contracts and other technologically superior uses of blockchain technology.
<i>Dogecoin</i>	A meme coin popularized by social media networks and influencers.
<i>Ethereum</i>	The cryptocurrency <i>Ether</i> is transacted on the Ethereum blockchain, which processes transactions faster than the original blockchain.

<i>Litecoin</i>	A coin that transacts using ultrafast technology and gained popularity when Paypal allowed transactions to be made in Litecoin.
<i>Solana</i>	A coin that has enhanced the growth of smart contracts. Solana allows for self-executing smart contracts based on blockchain technology.
<i>Tether</i>	A <i>Stablecoin</i> with a value pegged to the U.S. Dollar.
<i>XRP</i> (formerly known as Ripple)	A coin built for enterprise use that aims to be a fast, cost-effective cryptocurrency for cross-border payments.