CONVEYANCING AT A CROSSROADS:

THE TRANSITION TO E-CONVEYANCING APPLICATIONS IN THE U.S. AND ABROAD

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INTRODUCTION

A real property interest is arguably the most sacred form of ownership, and is "the largest and most important transaction in most people's lives" A home or business is not only of personal importance for many but also the most significant financial asset they possess. Society, therefore, has an interest in ensuring that conveyances of real property are undertaken in a controlled and predictable manner. However, in an increasingly digital world focused on speed and efficiency, the papercentric U.S. real estate conveyance process has become archaic. This has resulted in an uncomfortable position for parties to real estate transactions, as the transition to new electronic processes is sometimes viewed as undermining the reliability of the past. Despite the significance attached to a real estate transaction, the pending digital conversion cannot be ignored. How society reacts to these changes will determine the ease with which the transition to e-conveyances occurs.

Part One will begin with a brief discussion that highlights the international support of e-conveyance applications and the general embrace of "secure, paperless, electronic, end to end, pre-sale to post-completion conveyancing." This section will specifically address conveyancing applications in Canada, Scotland, Ireland, Denmark, and Australia. Part Two will then provide a detailed analysis of the comprehensive English e-conveyance system, including how it operates, the problems associated with it, the legal implications of the system, and where England stands today in implementing e-conveyance applications. Part Three will address U.S. barriers to e-conveyance applications, the enactment of enabling laws, and how the digital age and new technology are working against these barriers. This section will also discuss some of the key issues and concerns U.S.

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^{1.} Sam Stonefield, Symposium: Choosing the Digital Future: The Use and Recording of Electronic Real Estate Instruments, 24 W. NEW ENG. L. REV. 205, 220 (2002).

^{2.} The eConveyancing Task Force of the Law Soc'y of Ir., eConveyancing: Back to Basic Principles, PROP. VALUER 26, 26 (Aug. 2008), available at http://www.magico.ie/files/admin/uploads/W153_Field_2_33070.pdf.

jurisdictions face in their inevitable transition to increased e-conveyance applications.

Perhaps the most important objective of this Note is not to highlight the inefficiencies of the current U.S. land conveyance system or the benefits of e-conveyancing applications, but rather to emphasize that the switch to increased e-conveyancing is inevitable. To these ends, Part Four of this Note will provide an overview of how the digital age has already impacted practitioners in the United States, and will recommend steps to prepare for the increasing legal and technological impact e-conveyancing will have. Only by embracing the pending transition can the benefits of e-conveyancing applications be fully realized.

PART ONE: A GLOBAL TRANSITION TO INCREASED E-CONVEYANCING APPLICATIONS

Numerous changes in both technology and culture are forcing the real estate conveyance process to change. Greater interconnectivity brought by advances in technology and the internet, for instance, has rendered the paper-centric models of conveyancing outdated.³ Dictated by societal preferences and demand, technology is reshaping international conveyance processes.⁴ As John A. Gose states:

The real estate conveyancing world has experienced more changes during the past 15 years than in the prior 300 years. After 450-plus years, the real estate conveyancing world is going through a major change brought on by a new electronic world—a world that could not be imagined by the creators of the parchment, paper world.⁵

Ontario, Canada

Ontario, Canada has responded to this transformation by developing an electronic conveyancing system. Ontario's electronic system began in the 1980s when the Ontario Ministry of Consumer and Business Services started working with Teranet, a private company based in Toronto, on the development of an e-registration system.⁶ As stated on the Teranet website:

The task involved updating a complex 200-year-old paperbased system and creating a database containing records for

^{3.} JOHN SPRANKLING ET AL., GLOBAL ISSUES IN PROPERTY LAW 116 (2006).

^{4.} See generally id.

^{5.} John A. Gose, Real Estate Conveyances from Livery of Seisin to Electronic Transfer: Real Estate Transactions Enter the Digital/Electronic World, 33 REAL EST. ISSUES, No. 2, 59, 64 n.2 (2008), available at http://www.cre.org/publications/33_2.pdf.

^{6.} Id.

more than five million parcels of land. Teranet not only operates the system on behalf of the Ontario government but also enables remote electronic access via streamlined and secure operations, primarily for lawyers, conveyancers and financial institutions. The need to physically visit local Land Registry Offices has been eliminated in many cases.⁷

Lawyers and other accredited agents of a party are able to submit electronic documents through the system. These documents are then regarded as official records. Other electronic "applications include transaction-based e-commerce operations, enterprise systems management, risk management solutions, records conversion, imaging, land registration, parcel mapping and data mining." Teranet also offers a closure service whereby an agent has control over funds and instructs the service to execute and forward payments to an appropriate party. ¹⁰

Generally, innovative legislation has prevented major setbacks and allowed for continued progress, including legislation that provides that "electronic documents that create, transfer or otherwise dispose of an estate or interest in land are not required to be in writing or to be signed." By August 2005, approximately five million electronic transactions had been completed on the system. 12

British Columbia, Canada

In British Columbia, OneMove Technologies, Inc. ("OneMove") offers a similar system. OneMove utilizes "one web-based platform that serves all those involved in a real estate transaction, [as opposed to Teranet's] separate platform for each professional." This approach has greatly reduced the time it takes to purchase a home in British Columbia. Instead of physically traveling to the land registry office, "all you have to do 'is push submit' and the title is transferred, the money is released from trust and the deal is done...." OneMove's convenience has made it a

^{7.} Teranet Inc., Fast Facts, http://www.teranet.ca/corporate/history.html (last visited Apr. 26, 2010) [hereinafter Teranet Fast Facts].

^{8.} PAUL BUTT, ELECTRONIC CONVEYANCING: A PRACTICAL GUIDE 1 (2006).

^{9.} Teranet Fast Facts, supra note 7.

^{10.} Teranet Inc., Solutions for the Legal Profession, http://teranet.ca/services/legal.html (last visited Apr. 26, 2010) [hereinafter Teranet Solutions].

^{11.} BUTT, supra note 8, at 2.

^{12.} Id.

^{13.} Eric Shackleton, Software Tames Tangle of Paperwork, THE GLOBE AND MAIL (Toronto), July 11, 2008, available at http://www.theglobeandmail.com/real-estate/article49142.ece.

^{14.} *Id*.

^{15.} *Id*.

^{16.} *Id*.

popular tool for conveyancers. With only 300 transactions per month six years ago, OneMove currently facilitates 6,000 transactions per month.¹⁷ Possibly because of OneMove's success, Teranet appears to be moving towards greater interconnectivity among its users.¹⁸ Although both OneMove and Teranet have reduced the time and effort needed for a real estate transaction, it is unclear how much money has been saved.¹⁹

Scotland

Scotland's Automated Registration of Title to Land ("ARTL") project²⁰ was also developed in response to societal preferences in favor of electronic commerce.²¹ ARTL will allow e-registration²² and will be available on the internet.²³ Using ARTL, an authorized conveyancer is able to register deeds electronically by answering a series of online questions,²⁴ and owners will be able to pay some taxes online.²⁵

Potential benefits of ARTL include decreased costs for paper and postage, less bureaucracy and more control for users, reduced risk associated with delayed registration, and potentially discounted registration fees. Paper documents will initially still be acceptable, as there are security concerns with the new system. Certification processes, accreditation requirements for direct e-registration users, and an auditing system may help mitigate these concerns.

By 2001, forty-one solicitor firms and numerous lenders were participating in an ARTL pilot program.²⁹ The participants gave generally positive feedback.³⁰ In part because pilot participants were initially required to use both the standard paper process and ARTL's electronic process, the number of participants was rather low.³¹ Nonetheless, the incentive to

^{17.} Id.

^{18.} *Id*.

^{19.} Id.

^{20.} Registers of Scotland, History of ARTL, http://www.ros.gov.uk/artl/history.html (last visited Apr. 26, 2010) [hereinafter History of ARTL].

^{21.} See generally Alistair Rennie et al., The Age of e-Conveyancing?, J. ONLINE, June 1, 2001, available at http://www.journalonline.co.uk/Magazine/46-6/1000947.aspx.

^{22.} History of ARTL, supra note 20.

^{23.} Registers of Scotland, What is ARTL?, http://www.ros.gov.uk/artl/what_is_artl.html (last visited Apr. 26, 2010).

^{24.} Rennie et al., supra note 21.

^{25.} Id.

^{26.} Id.

^{27.} Id.

^{28.} Id.

^{29.} *Id*.

^{30.} *Id*.

^{31.} See generally id. (for the proposition that the "electronic registration is merely an experimental replication of the paper-based registration" and that more participation is required to fully test the system).

submit feedback and shape the development of ARTL helped make the pilot program a success.³² Legislative support was also crucial.³³ The legislature responded to ARTL positively and modified the law regarding the validity of digital deeds.³⁴

By the end of 2008, ARTL was transitioning from design to a live application.³⁵ In fact, "[t]he first full live transfer of a property title . . . successfully took place . . . [using ARTL on] Thursday 17th April 2008, marking a key milestone for the ARTL project."³⁶ The success of ARTL seems to be Scotland's first major step towards comprehensive e-conveyancing.³⁷

Ireland

Like Scotland, Ireland plans to increase the availability of e-conveyance applications. The Law Society of Ireland has expressed concern that the "current [conveyance] process is not adapted to deal with modern society." Specifically, paper-based conveyancing cannot handle the increased volume, diversity, and modern expectations for speed and transparency. Further, Irish conveyancing "is hampered by a complex, cumbersome legislative framework and thus inherent delay."

The Law Society of Ireland suggested that simply making the paper-based system digital was not enough and that the entire process needs to be re-engineered to fit with the electronic environment.⁴¹ Ultimately, "[u]nder e-conveyancing, the Law Society believes the total transaction time for the conveyance of a family home from initial viewing of the property to completion, registration of ownership and discharge of the prior mortgage could be five working days."⁴²

Denmark

Also overburdened by paper documents, Denmark's conveyancing process requires numerous hardcopies for "purchase agreements, loan

^{32.} Id.

^{33.} Id.

^{34.} History of ARTL, supra note 20.

^{35.} Law Society of Scotland, ARTL-Automated Registration of Title to Land, http://www.lawscot.org.uk/Members_Information/convey_essens/artl (last visited Apr. 26, 2010).

^{36.} Id.

^{37.} Rennie et al., supra note 21.

^{38.} Law Soc'y of Ir., supra note 2, at 26.

^{39.} Id.

^{40.} Id.

^{41.} Id. at 26, 29.

^{42.} Conveyance Overhaul Proposed to Speed Up Property Deals, IRISH EXAMINER, July 23, 2008, available at http://archives.tcm.ie/irishexaminer/2008/07/23/story68023.asp.

The Danish Bankers Association and the Danish Mortgage Banks have been instrumental in preparing a common infrastructure for the system.⁴⁷ The Danish Court Administration is also moving forward and developing e-conveyancing processes.⁴⁸ The Bankers Association and Mortgage Banks are working closely with the court's information technologies providers to ensure a seamless transition.⁴⁹

Eventually, Denmark hopes to create a common arena for conveyancing professionals, including various agents, lawyers, and insurance companies. Ocmmunication between interested parties is crucial for the e-conveyance system to maximize its potential. In order to foster communication and reduce information gathering costs, conveyancing professionals can access documents online, instead of coordinating and communicating information with all interested parties over the phone or by post. Even the Danish loan process will be streamlined with e-conveyancing applications capable of removing old loans and creating new ones. Denmark expects its system to make the conveyancing process easier for all involved, as well as promote Denmark as a global leader in applying technology to real estate transactions.

Australia

Likewise, the Commonwealth of Australia has responded to excessive amounts of paper documents and the underutilization of new technologies⁵⁶ by planning to implement an extensive form of e-conveyancing. As one

^{43.} Danish Bankers Ass'n, Summery of Annual Report 2006 8 (2006).

^{44.} Id. at 9.

^{45.} Id. at 11.

^{46.} Id. at 8.

^{47.} Id. at 6.

^{48.} Id. at 8.

^{49.} Id. at 10.

^{50.} *Id.* at 8.

^{51.} See generally id.

^{52.} See generally id. at 9.

^{53.} See generally id.

^{54.} Id. at 9-10.

^{55.} Id. at 6.

^{56.} See generally Angus Kidman, The End of the Paper Trail, LAW. WKLY., Sept. 15, 2006, available at http://www.legalconsult.com.au/News/Technology/The-end-of-the-paper-trail.html.

Australian legal publication noted:

Just a glance at the number of 'stakeholders' involved in the national e-conveyancing project gives a sense of its scale and complexity. The list runs to not only lawyers' representatives, state government land registries and banks, but a range of service providers that assist law firms and the state to deal with the huge number of transactions involved.⁵⁷

However, the Australian system has been slowed by internal disputes. The National Electronic Conveyancing System ("NECS") was a cooperative arrangement between industries and state governments for a national e-conveyance system by 2010.58 Despite the NECS, some states are not willing to adapt their individual systems to the NECS criteria.⁵⁹ Initially, the State of Victoria's e-conveyance pilot (a system which eventually would make cross-border real estate transactions easier) was to serve as a model for other states. 60 However, Victoria, has declined to share any of its conveyancing software with other Australian states unless they agree to certain conditions.⁶¹ Specifically, Victoria and the State of Oueensland prefer "a state-centric approach with each jurisdiction using similar software but without the nationwide interoperability."62 In any event, "[t]he fate of the \$44 million e-conveyancing project is uncertain since the major banks pulled out . . . [based, in part, on] frustration over Victoria's flagging commitment to NECS."63 Although debate rages over what form of e-conveyancing is best in Australia, global demand for econveyance applications cannot be denied.

PART TWO: COMPREHENSIVE E-CONVEYANCING IN ENGLAND

A. Historical Overview

Compared with other nations, England's e-conveyance system is fairly comprehensive. To best understand the system's development, it is crucial to keep in mind the historical underpinnings of the English land

^{57.} Shaun Drummond, Legal Constraints Slow e-Conveyance Victoria, LAW. WKLY., Sept. 15, 2006, LEXIS, News Library, LWYRWK File.

^{58.} Kidman, supra note 56.

^{59.} Drummond, supra note 57.

^{60.} Kidman, supra note 56.

^{61.} Karen Dearne, *Rebellion Frustrates e-Conveyance*, THE AUSTL., Oct. 30, 2007, available at http://www.theaustralian.com.au/australian-it/rebellion-frustrates-e-conveyance/story-e6frgamo-1111114752889.

^{62.} *Id*.

^{63.} Id.

transfer system, which ultimately is the system that gave rise to U.S. land conveyance processes.⁶⁴ Under the English feudal system, real property transfers were performed in a ceremony called the "livery of seisin," which was essentially a transfer of interest by possession.⁶⁵ The transferee's possession of the property notified any third party of the real estate transaction⁶⁶ and established a legally recognizable claim to the land.

As English society developed, a system of notice by possession was no longer adequate and a new method of conveyancing was needed.⁶⁷ England responded through its Statute of Uses, which allowed for the use of deeds.⁶⁸ Subsequently, the Statute of Enrolments was added to mandate that sales of freehold estates must be put in writing.⁶⁹ Additionally, the Statute of Enrolments required the payment of a tax and was arguably the first statutory recording law.⁷⁰ The Statute of Wills, permitting a testator to devise real property in a will,⁷¹ and the Statute of Frauds, requiring that "all transfers of interests in real property be in writing and signed 'by the party to be charged,'"⁷² also facilitated the development of a formal conveyancing system.

Although English laws required conveyances to be written, they did not require use of a single, original document.⁷³ As stated by authors David E. Ewan, John A. Richards, and Margo H.K. Tank:

Indeed, real property conveyances often used indenture (the practice of writing two or more copies of the document on a single large sheet of parchment, which was then cut apart with a jagged or wavy line-the indenture-into two parts) to document the transaction. This created more than one original document. . . . In other words, there may be many original deeds. Originality was not important because there was a talismanic effect of having one original document; instead, originality was important only insofar as it allowed one to be confident of the accuracy of the information displayed in the medium.⁷⁴

As a result, a written agreement was utilized simply as the best way to

^{64.} David E. Ewan et al., It's the Message, Not the Medium!, 60 Bus. LAW 1487, 1499 (2005).

^{65.} *Id*.

^{66.} Id.

^{67.} *Id*.

^{68.} Id.

^{69.} Id. at 1499-1500.

^{70.} Id. at 1500.

^{71.} *Id*.

^{72.} *Id*.

^{73.} Id.

^{74.} Id.

guarantee trustworthiness given the technological constraints on early conveyancers.⁷⁵ The laws developed as a response to concerns over accuracy and were not based "on the form in which it is presented."⁷⁶ This conception supports the application of modern technology to the conveyancing process.

B. Modern Inefficiencies and the Transition to E-Conveyancing

The traditional English conveyance system harbors many of the same inefficiencies as the prevailing U.S. conveyance system. Not only does the English process rely heavily on paper documents and standard mail, but purchasers and sellers of real property also suffer from common transaction anxieties. One such anxiety is the registration gap: the "inevitable hiatus between the completion of the transaction in the solicitors' office and the actual registration of that transaction"⁷⁷ This apprehension is compounded because of the multiple parties that are often involved in a real estate transfer and the numerous ways a transaction can fail. The length of time to complete a transaction, the general absence of transparency, and the potential for "poor conveyancing standards" are also problematic. With the advent of new technology, the English Land Registry, a government agency in charge of recording property dealings, decided to overhaul the existing system.

As a result, the Land Registry decided upon a comprehensive system of electronic conveyancing as the best solution. According to some, econveyancing has the potential to "radically reshape the process of land conveyancing, not only to work better but to work in a way which can be handled . . ."⁸¹ The system aims to correct many problems that plague the English system such as the length of time from an offer's acceptance to completion, a lack of transparency and uncertainty, and general risks and anxieties faced by those involved in a transaction.⁸²

The proposed e-conveyancing applications, however, would require a

^{75.} Id.

^{76.} Id. at 1501.

^{77.} BUTT, supra note 8, at 8.

^{78.} P.V. RAJASEKHAR, INT'L CONF. ON ENHANCING LAND REGISTRATION & CADASTRE FOR ECON. GROWTH INDIA, E-CONVEYANCING: CHALLENGES AND AMBITIONS 14 (2006), available at http://www.fig.net/commission7/india 2006/papers/ts03_02_rajashekhar.pdf.

^{79.} TED BEARDSALL, FIG INT'L SEMINAR, E-CONVEYANCING A CHALLENGE AND A PRIZE 5 (2004), available at http://www.fig.net/commission7/innsbruck 2004/papers/beardsall.pdf.

^{80.} Land Registry, About the Land Registry, http://www.landreg.gov.uk/about_us/ (last visited Apr. 26, 2010).

^{81.} RAJASEKHAR, supra note 78, at 2.

^{82.} LAND REGISTRY, E-CONVEYANCING, THE STRATEGY FOR THE IMPLEMENTATION OF E-CONVEYANCING IN ENGLAND AND WALES 10 (Oct. 12, 2005), available at http://www.landreg.gov.uk/assets/library/documents/e-conveyancing_strategy_v3.0.doc [hereinafter Strategy for the Implementation].

substantial investment of time and capital. The Land Registry's e-conveyance system has been in development for over a decade. ⁸³ The system focuses on "listening to potential users and meeting their needs, learning the lessons available from previous projects, and addressing the fears and concerns raised." ⁸⁴ Unfortunately, cost estimates were unclear from the beginning due to uncertainties. ⁸⁵ Some costs were definite, such as IBM's winning contract bid to oversee development and to design the information technologies system, which was estimated to cost £21 million over five years. ⁸⁶ But it was clear that hidden costs were going to be significant. Further, when implementing the system, "it is not prudent to switch from a tried and tested system of conveyancing unless it can be demonstrated that any proposed system will reduce or banish many, if not all, of the negative aspects of the current system."

Despite these uncertainties, the e-conveyance project continued. Shifting from a concept to a functioning model, however, required significant effort. "[F]or most jurisdictions the laws relating to property transfer are extremely complicated, and so it is not a simple matter to convert paper-based systems built up over several centuries to straightforward electronic processes." Feedback, proposals, suggestions, and questions were sent to and from concerned parties, and slowly, England's model of comprehensive e-conveyancing, set out in detail below, began to emerge.

C. Laying the Legal Foundation

Of course, without the support of Parliament, the legal foundations needed for the Land Registry's e-conveyancing applications would have been impossible. In 1998, the Law Commission and Land Registry published a report titled "Land Registration for the Twenty First Century," setting out preliminary proposals. ⁹⁰ The Land Registration Act 2002 "came into force on 13 October 2003, [and] contain[ed] legislative provisions to enable the implementation of e-conveyancing in the form envisaged." ⁹¹

^{83.} Ian Grant, Land Registry e-Conveyancing System to Include PKI, COMPUTERWEEKLY.COM, Jan. 17, 2008, http://www.computerweekly.com/Articles/2008/01/17/228972/land-registry-e-conveyancing-system-to-include-pki.htm.

^{84.} LAND REGISTRY, E-CONVEYANCING: A LAND REGISTRY CONSULTATION REPORT 17 (2003), available at http://www1.landregistry.gov.uk/assets/library/documents/eccir.pdf [hereinafter Consultation Report].

^{85.} BUTT, supra note 8, at 5.

^{86.} IBM Bags £21m E-Conveyancing Deal, GHOSTDIGEST, July 14, 2005, http://www.ghostdigest.co.za/code/A 723.html.

^{87.} RAJASEKHAR, supra note 78, at 14.

^{88.} Id. at 6.

^{89.} *Id.* at 3-4.

^{90.} STRATEGY FOR THE IMPLEMENTATION, supra note 82, at 8.

^{91.} Id.

This was "an attempt to reshape conveyancing to ensure its compatibility with the commercial world of the twenty-first century." By 2003, and after the passage of supportive legislation aimed at "dematerialisation," a plan for the "implantation of e-conveyancing was approved."

D. Components and Operation of E-Conveyancing

With legal backing, the Land Registry's proposed e-conveyance applications incorporate numerous components that collectively constitute the system. One component is the central service, which links conveyance participants and helps coordinate contracting and registration. Another is a method of electronic funds transfer ("EFT"), which is connected to the central service. The EFT service "will enable the whole nexus of payments associated with a property transaction to be agreed in advance and then settled electronically and with immediate effect at the time when all the funding is confirmed as being available and the transaction is completed. Finally, there is a channel access service, which will allow users to access both the central service and the EFT. The actual interface, however, may be customized by individual users.

User access to the full array of e-conveyance applications may be limited, with "[t]he highest level of access . . . given to conveyancing professionals so that they can produce documents and carry out online all the transactions necessary for a valid conveyance of land or property." As stated by authors Robert Abbey and Mark Richards:

The relationship with the [land] registry will be contractual, under a 'network access agreement[,]' and the registry will be obliged to contract with any solicitor or licensed conveyancer who meets specified criteria. 102

The criteria for use will be based on feedback from an extensive

^{92.} Barbara Bogusz, Bringing Land Registration into the Twenty-First Century – The Land Registration Act 2002, 65 Mod. L. Rev. 556, 557 n.4 (2002).

^{93.} Beardsall, supra note 79, at 3.

^{94.} BUTT, supra note 8, at 4.

^{95.} Id. at 8.

^{96.} Id.

^{97.} Id.

^{98.} STRATEGY FOR THE IMPLEMENTATION, supra note 82, at 17-18.

^{99.} BUTT, supra note 8, at 4.

^{100.} Id.

^{101.} The Introduction of E-Conveyancing, DIY Conveyance (UK), http://www.diyconveyance.co.uk/introduction-econveyancing.html (last visited Apr. 26, 2010).

^{102.} Robert Abbey & Mark Richards, A Practical Approach to Conveyancing 53 (9^{th} ed. 2007).

consultation project.¹⁰³ One objective of the access agreements might be to raise overall conveyancing standards, and conveyancers who consistently delay the process might lose their right to use the system.¹⁰⁴ In one consultation study, which focused largely on interested conveyancers and stakeholders, "[n]early 83% of respondents stated that they would be interested in offering e-conveyancing services."¹⁰⁵

At certain transactional stages, such as when a client authorizes the conveyancer to act or when the conveyancer is investigating title, searching local records, or seeking mortgage offers, a progress report must be sent to a "chain manager." Chain managers "provide information on the progress of all transactions in a chain and . . . facilitate [the] simultaneous exchange of contracts and completion of all transactions in a chain." This enables the chain manager or conveyancers to spot potential delays in the process. Importantly, "the information that a practitioner will be required to supply will relate to progress only and not to personal or financial information." Therefore, "it will be necessary to confirm whether or not a purchaser has received an acceptable mortgage offer where a mortgage is needed, but there will be no need to disclose the contents of that offer."

A chain matrix "will . . . allow buyers, sellers, their legal representatives, estate agents and lenders to view the progress of every transaction . . ." in a property chain, 111 and is expected to "highlight where a bottleneck exists" by notifying those responsible. 112 The hope is that "[a]nyone who has had their life expectancy shortened by the peculiar torture of the English system of property conveyancing will cheer . . . [because there will be] no more heartbreaking calls announcing that the biggest financial transaction in your life has just been wrecked" The

^{103.} *Id*.

^{104.} Id.

^{105.} CONSULTATION REPORT, supra note 84, at 17.

^{106.} BUTT, supra note 8, at 11.

^{107.} Land Registry, Doesn't the Idea of a Chain Management Matrix Take Away Control Over Exchange and Completion from the Practitioner?, http://landregistry.org.uk/kb/Default.asp?ToDo=view&questId=120&catId=27 (last visited Apr. 26, 2010).

^{108.} See generally Interview by April Stroud with Mr. Sahib Sehrawat, Chief Land Registrar, http://www.palgrave.com/law/stroud2e/resources/transcripts/sahib.html (last visited Apr. 26, 2010) (for the proposition that "a chain manager will be appointed to monitor the chain").

^{109.} Land Registry, The Proposed System of Chain Management Appears to Require Practitioners to Provide Information to the Central System that Clients May Instruct Them not to Divulge. Will this Create a Conflict of Interests for Practitioners?, http://www.landreg.gov.uk/kb/default.asp?ToDo=view&questId=128&catId=27 (last visited Apr. 26, 2010).

^{110.} *Id*.

^{111.} The Free Library, E-Conveyancing, http://www.thefreelibrary.com/E-conveyancing -a0189505541 (last visited Apr. 26, 2010).

^{112.} See id

^{113.} Michael Cross, Technology: Inside IT: Has Land Registry Bitten Off More than it

Land Registry contends that pinpointing those responsible for delays in the conveyancing process "gives them the impetus to get things moving again for fear of damage to their reputations." It is hoped that a chain matrix "will facilitate a simpler, more co-ordinated exchange of contracts and completion." Thus, a buyer theoretically will not be left in the position where he has contracted to buy a new home, but then his current home sale fails, leaving him financially distressed. Therefore, "[f]or buyers and sellers, this should mean better information, greater certainty and less stress." 117

Reaction to the chain matrix idea has been mixed. Although "[t]wothirds of respondents [to a consultation study] supported the overall concept of a chain matrix, with almost a third giving a strong endorsement[,] . . . 20% of respondents did not support the concept." As discussed in more detail below, the chain matrix prototypes, in practice, faced significant, if not prohibitive, hardships.

Under the proposed system, a buyer and seller would electronically communicate, as well as send or receive any documents, like a contract draft. The conveyancer will still "have to study these documents and make any further enquiries or negotiate any amendments to the draft contract in exactly the same circumstances as now." The hope is that under e-conveyancing, any amendments will be incorporated and approved electronically, without involving traditional post. Similarly, mortgage preparations will also be conducted online.

In addition to having a chain manager facilitate the transaction, the Land Registry will also have a greater role in the pre-contract stage of the transaction. For instance, when "the seller's conveyancer uses the E-Conveyancing service to transmit the draft contract from his case management system to the buyer's conveyancer, automatic validation checks would compare contract data with Land Registry data and electronic messages would indicate any discrepancies." Theoretically, this check will be beneficial in spotting problems; however, its effectiveness has not been proven in practice. There is concern that the validation checks will improperly find errors when the contract is fine, resulting in unneeded

Can Chew Entering the Matrix, GUARDIAN, Apr. 12, 2007, Technology Guardian section, at 6, available at http://www.guardian.co.uk/technology/2007/apr/12/comment.egovernment [hereinafter Bitten Off].

^{114.} Getting Ready to Go Digital, FIN. TIMES ADVISER, Nov. 1, 2007, 2007 WLNR 21968346, available at http://www.ftadviser.com/FinancialAdviser/Archive/Supplements/article/20071101/dd9a95ec-ea4b-11dc-abcd-0015171400aa/Getting-ready-to-go-digital.jsp.

^{115.} STRATEGY FOR THE IMPLEMENTATION, supra note 82, at 16 (emphasis removed).

^{116.} BUTT, supra note 8, at 14.

^{117.} STRATEGY FOR THE IMPLEMENTATION, supra note 82, at 16.

^{118.} CONSULTATION REPORT, supra note 84, at 163.

^{119.} BUTT, supra note 8, at 12.

^{120.} Id. at 13.

^{121.} ABBEY & RICHARDS, supra note 102, at 52.

^{122.} STRATEGY FOR THE IMPLEMENTATION, supra note 82, at 18 (emphasis removed).

delays.¹²³ A similar concern is that the checks will give the conveyancer a false sense of assurance that the contract is sound when, in fact, the automatic checks simply missed an error.¹²⁴

At the point when both parties agree to the contract, it would need to be signed electronically and then exchanged electronically. For this reason, a secure and reliable method of electronic signatures cannot be overlooked. As previously discussed, a deed historically had to "be signed, witnessed and delivered . . ." and "an electronic contract or transfer could not comply with these requirements." However, the Electronic Communications Act 2000 now supports "the use of electronic communications" and allows documents to be validly signed with electronic signatures. 128

In addition to legislative support, the high financial stakes involved in a real property transfer require exceptional reliability and security with regard to electronic contracting. To these ends, "[e]lectronic signatures are the key to the process. These are not fancy graphics or jokes at the end of emails, but the use of mathematically complex encryption keys to guarantee the authenticity of a document." With each electronic document, there is a digital signature file that is transferred with it that "verifies that the document was signed by a particular person, and the content of the document hasn't been changed in anyway, not even a single character, since it was signed." Utilizing such technologies, the expectation is that both the general public and conveyancers will be able to use the system without concern of fraud.

Moreover, a "pre-completion search at the Land Registry will not be required as there will no longer be a registration gap to worry about . . ." thereby reducing the possibility of priority disputes involving a subsequent purchaser. This simultaneous registration mitigates problems caused by third-parties who claim an interest in a recently purchased or sold property. However, there is some initial concern over duplicate paper and electronic lodgments, or of multiple paper and electronic mortgages, which may result in complicated priority disputes. The the system operates as

^{123.} BUTT, *supra* note 8, at 13.

^{124.} Id.

^{125.} RAJASEKHAR, supra note 78, at 5.

^{126.} BUTT, supra note 8, at 17-18.

^{127.} Office of Public Sector Information, Electronic Communications Act 2000, http://www.opsi.gov.uk/acts/acts2000/ukpga_20000007_en_1 (last visited Apr. 26, 2010).

^{128.} BUTT, supra note 8, at 17.

^{129.} Emma Slessenger et al., Apologies for Any e-Conveyance, PROP. WK., June 6, 2001, available at http://www.propertyweek.com/story.asp?storyCode=3007849.

^{130.} BUTT, *supra* note 8, at 18.

^{131.} Id. at 16.

^{132.} Bogusz, supra note 92, at 558, 564.

^{133.} LAND REGISTRY, REPORT ON RESPONSES TO E-CONVEYANCING SECONDARY LEGISLATION PART Two 37, available at http://www1.landregistry.gov.uk/assets/library/

expected, mortgage names will be changed automatically at the completion of a transaction, increasing the convenience to the parties. ¹³⁴ Many practitioners support the idea of increased standardization in the mortgage process. ¹³⁵

Crucial to the full benefit of an electronic system is a method of EFT. ¹³⁶ As author Paul Butt has explained:

All the parties to a chain will pay all necessary funds required to complete the transaction . . . as well as the purchase price - into the Agent Bank prior to the day fixed for completion. . . . The Agent Bank will then be able to confirm that all monies necessary to complete all transactions in the chain are in its hands. Assuming this to be the case, at the time fixed for completion, the Central Service will instruct the Agent Bank to make all the necessary payments.¹³⁷

Although the EFT provides convenience, such as reducing anxiety about whether financing will arrive, ¹³⁸ there is concern that having finances available prior to the transaction will result in lost interest payments, which could be substantial. ¹³⁹ Nonetheless, per the consultation report, "[a]bout 60% of respondents agreed that an EFT system could reduce costs and improve accuracy." ¹⁴⁰

E. E-Conveyancing Today

Currently, the Land Registry has passed the point of proposal and is now actively implementing its e-conveyance applications. The system is being introduced on an incremental basis in order to be more manageable to users. A variety of e-services already exist, including Information Services and Network Services. Information Services include Land Charge searches, and Network Services relate to the creation and lodgement of documents. Users can apply for adverse possession notifications,

documents/secondary_legislation.pdf (last visited Apr. 26, 2010) [hereinafter REPORT ON RESPONSES].

^{134.} BUTT, supra note 8, at 17.

^{135.} REPORT ON RESPONSES, supra note 133, at 13.

^{136.} See Strategy for the Implementation, supra note 82, at 17.

^{137.} BUTT, *supra* note 8, at 21-22.

^{138.} Id.

^{139.} Id.

^{140.} CONSULTATION REPORT, supra note 84, at 16.

^{141.} BUTT, supra note 8, at 23.

^{142.} Land Registry, Current E-Services, http://www1.landregistry.gov.uk/e-conveyancing/currservice/ (last visited Apr. 26, 2010).

^{143.} Id.

upgrade title, and utilize other online services.¹⁴⁴ A validation system for electronic signatures is also scheduled to be implemented.¹⁴⁵ The validation system was developed, in part, by government defense research agencies, and also with input from lawyers, mortgage professionals, and other governmental organizations.¹⁴⁶

In September of 2005, "Easy Convey Ltd. . . . a leading developer of electronic conveyancing products and services . . . announced that one of its clients . . . filed the UK's first online Stamp Duty Land Tax return." The process was openly supported by its user, who stated the paperless econveyance application greatly reduced the time and effort involved in the process. 148 By 2006, the National Land Information Service had performed over seven million searches for electronic information. 149

Even some of the true innovations of e-conveyancing, like the chain matrix, have been prototyped. The chain matrix pilot took place in three separate cities between autumn of 2006 and spring of 2007, and the Land Registry planned to apply user feedback and adapt the matrix accordingly. Having a sufficient number of chain participants was a key element in the proper measurement of the chain matrix's utility. The expectation was that "[a]round 900 potential users [would] have access to the prototype, with numbers expected to rise during the trial period. Potential users included "solicitors and estate agents who, along with support staff, completed their Chain Matrix training . . . as [the] Land Registry's team of instructors went on the road visiting the three trial areas of Portsmouth, Fareham and Bristol."

The prototype launched on March 29, 2007,¹⁵⁴ and the English law firm Coffin Mew LLP was the first to enter a chain during the Land Registry's testing.¹⁵⁵ Speaking for the firm, Conveyance Manager John Blake stated that the firm was "delighted to be the first to use the Land Registry's new Chain Matrix." The intention is to test the system, which

^{144.} BUTT, supra note 8, at 25-26.

^{145.} Grant, supra note 83.

^{146.} *Id*.

^{147.} Press Release, Easy Convey Ltd., e-Conveyancing Now a Reality as Easy Convey Client Files First Online Stamp Duty Land Tax Return 1 (Sept. 6, 2005), http://www.easyconvey.com/PR/060905SDLTPR.pdf.

^{148.} Id. at 2.

^{149.} BUTT, supra note 8, at 26.

^{150.} Id. at 28.

^{151.} Id. at 29.

^{152.} Land Registry, Chain Matrix, http://www1.landregistry.gov.uk/ar07/services/chainmatrix (last visited Apr. 26, 2009).

^{153.} *Id*.

^{154.} Id.

^{155.} Coffin Mew LLP, Chain Matrix First for Coffin Mew LLP, http://www.coffinmew.co.uk/currenttopics/archive/ct%20chain%20matrix.htm (last visited JApr. 26, 2010).

^{156.} Id.

will eventually incorporate an Electronic Funds Transfer system . . . [and] replace the existing slow and cumbersome system used at present to transfer money on the day of completion." The prototype was to be evaluated both at the midway and ending point of the testing. ¹⁵⁸ A voluntary trial of the complete e-conveyance system, minus the EFT service, was then scheduled for October 2007, the housing market's slowest period. ¹⁵⁹

Unfortunately, the chain matrix and subsequent pilots were unsuccessful. Much of its failure was because the chain matrix pilot "attracted less than half the participants originally hoped for." As a result, the chain matrix development and use of the EFT service has been indefinitely postponed. Michael Cross stated that:

One reason for failure was apathy from the people expected to use it. Conveyancers were reluctant to try it out, partly because their own case management systems did not plug in The trial also found no evidence that people would pay to use the service, undermining the business case. Privacy may also have been a worry: 'Many citizens were either not aware or not convinced of the benefits of Chain Matrix and many prevented their conveyancer from entering their transactions onto Chain Matrix,' the [Land Registry] evaluation says. In the event, only 200 out of 1,467 clients who signed up to view the matrix did so. While the technology worked well, with the system available 99.5% of the time, the pilot covered only 229 chains instead of the 500 hoped for. A knock-on casualty of the postponement was the procurement of an [EFT] service to pass money from buyers to sellers as the e-conveyancing system transferred title to the property. Although solicitors had raised concerns about the system's security, the Land Registry denied that this was a reason for cancellation. The registry hopes to revive the matrix concept in some form fand believes the market wants increased transparency1.162

^{157.} Id.

^{158.} Land Registry, supra note 152.

^{159.} Butt, *supra* note 8, at 31; *see also* Land Registry, Electronic Conveyancing Pilot Launches in October 2007, http://www.landreg.gov.uk/about_us/pressoffice/notices/default.asp?article_id=8426 (last visited Apr. 26, 2010).

^{160.} Michael Cross, Technology: Web Plan for Property Sales After Lack of Interest in Pilot, The Guardian (U.K.), Apr. 10, 2008, Technology Guardian section, at 3, available at http://www.guardian.co.uk/technology/2008/apr/10/property.

^{161.} *Id*.

^{162.} Id.

One additional reason for failure was the pilot's non-compulsory status. 163

Following the failure, the complete e-conveyancing trial was put on hold. He Land Registry opted instead to focus on e-discharges, e-charges and e-transfers in line with its e-registration services, which "will be the Land Registry's priorities in its e-conveyancing programme in 2008 and 2009." He Land Registry also seeks to consolidate its services had continue to evaluate and comment on its consultations. Although the lack of support has delayed some of England's key e-conveyance applications, the transition nonetheless continues.

F. Barriers to Implementation

There are concerns over England's e-conveyance applications beyond the lack of support for the pilots. One anxiety is that the process is proceeding too slowly. As noted by Cross, caution itself can be risky, and "like medieval cathedral builders, the people running the programme will be long gone by the time it is complete [which will decrease continuity and accountability]." Another concern is that the e-conveyancing system's relatively low political profile may cause a degree of change that will result in public outcry and criticism when the system is fully implemented. He all, "the introduction of e-conveyancing will be a huge change for everyone involved in the homebuying process which makes it even more important that its introduction is managed in controlled steps and in accordance with a clear timetable."

Furthermore, the computer system that runs the system is a cause for hesitation. Although computers are able to operate airplanes, trains, and missile systems, ¹⁷¹ the fear with e-conveyancing is that an initial failure might result in the entire program being deemed too risky and result in further delay. ¹⁷² Adding to this concern is that the system relies on connecting to an integrated network, which involves not just the Land Registry's system but also the internet service providers for the conveyancers who are accessing it. ¹⁷³ In fact, "[a]ll communication between

^{163.} Minutes from City of London Law Society, Land Law Committee Meeting 2 (Mar. 26, 2008), http://www.citysolicitors.org.uk/FileServer.aspx?oID=389&IID=0.

^{164.} *Id*.

^{165.} Id.

^{166.} Id.

^{167.} Id.

^{168.} Bitten Off, supra note 113, at 6.

^{169.} Id.

^{170.} Getting Ready to Go Digital, supra note 114.

^{171.} BUTT, supra note 8, at 40.

^{172.} Id. at 41.

^{173.} *Id.*; see generally Land Registry, E-Conveyancing: Realising the Vision, Item A: Planning Book 1, Where are you Starting From? (2005), available at

practitioners, lenders, Land Registry and other organisations involved in the conveyancing process will be capable of being electronic, as will all exchanges of formal documentation." Moreover, "there are problems of risk . . . allocation." Thus, "increasing the speed of conveyancing has to be balanced by the need for reliability." As Cross states:

The registry's core function, to provide a definitive proof of title, is by definition a monopoly, based on absolute trust. Becoming a middleman in every single property transaction is another function entirely, and one that may not fit as easily with monopoly status. The system itself, handling transactions worth £1m every minute, will have to be bulletproof.¹⁷⁷

Any mishaps with the conveyancing system could cast doubt on the entire system and also disrupt the UK economy. Moreover, "[a]n electronic system might be more vulnerable for hackers and electronic fraud or disruption . . . [and the] use of technology . . . may encourage the development of new methods for defrauding individuals." 179

The Land Registry hopes to combat these fears with advanced security technology, increased dependence on private systems instead of the internet, use of network access agreements, ¹⁸⁰ and audit trailing software. Additionally, every six months, the Land Registry will commission an independent firm to test the system security. ¹⁸¹ If a system weakness is discovered, it will be corrected and then retested. ¹⁸²

Nonetheless, concerns over any resulting liability due to fraud remain. 183 As stated in a Land Registry consultation study:

[One] respondent did not see why solicitors (and their insurers), if they were forced to use electronic signatures, should be expected to bear the liability for any fraudulent

http://www1.landregistry.gov.uk/assets/rft_downloads/workshop1/planningbk1_final.pdf [hereinafter PLANNING BOOK].

^{174.} STRATEGY FOR THE IMPLEMENTATION, supra note 82, at 17 (emphasis removed).

^{175.} Raymond Perry, *E-conveyancing: Promise and Reality*, INTERNET NEWSLETTER FOR LAWYERS, Sept./Oct 2003, http://www.venables.co.uk/n0309econveyancing.htm.

^{176.} Electronic Conveyancing Is Just a Click Away, Kaltons Tech. Solic., http://web.archive.org/web/20060926215041/www.kaltons.co.uk/articles/240.cfm (last visited Apr. 26, 2010).

^{177.} Bitten Off, supra note 113, at 6.

^{178.} Id.

^{179.} Haim Sandberg, Real Estate E-Conveyancing: Vision and Risks 6 (C. of Mgmt. Sch. of Law, Isr., Working Paper), available at https://lawlib.wlu.edu/works/516-1.pdf (last visited Apr. 26, 2010).

^{180.} BUTT, supra note 8, at 46.

^{181.} REPORT ON RESPONSES, supra note 133, at 25.

^{182.} *Id*.

^{183.} See Interview by April Stroud, supra note 108.

clients who manage to beat the system. Indeed, the Law Society agreed that when a solicitor's PC has been unknowingly hacked to perpetrate fraud it is essential that it should be very clear that the burden of proof should be on the Land Registry to show that there was carelessness or fraud on the part of the conveyancer. Conveyancers were, of course, willing to be responsible for security within their own offices to prevent signature theft and for adherence to whatever protocols are laid down for the use of an electronic conveyancing system.¹⁸⁴

In response, the Land Registry has proposed an indemnity fund to compensate parties who suffer a loss in certain situations. However, this does not mean that the Land Registry will not require a negligent solicitor to compensate the fund for any payments made. The effect is that "[t]he future will clearly require conveyancing practitioners to be experts in 'software updates and virus warnings' as well as in the law and practice of conveyancing." 187

Despite the general public's familiarity with using electronic personal identification numbers with debit or credit cards, a form of a digital signature, much skepticism remains regarding other forms of digital signatures. Is In fact, "48% of respondents expressed concern over the use of an e-signature." As the Land Registry points out, however, the current system is far from being free of abuse, and e-conveyancing may actually reduce the risks. With increased use of electronic documents, forgery will be more easily detected, resulting in a forged document's invalidation. Further, "the password and other security measures that will be needed for [an electronic signature means forgery] is not likely to happen without the knowledge of [an authorized user]" In any event, the use of electronic signatures and e-conveyancing applications as a whole must find an appropriate balance between usability and security. In any event, the use of

Another concern is that some users disfavor the additional transparency that the chain matrix might create. 194 After all, some parties

^{184.} Consultation Report, supra note 84, at 147.

^{185.} BUTT, supra note 8, at 46.

^{186.} ABBEY & RICHARDS, supra note 102, at 54.

^{187.} Id.

^{188.} BUTT, supra note 8, at 47.

^{189.} Consultation Report, supra note 84, at 18.

^{190.} BUTT, supra note 8, at 46.

^{191.} REPORT ON RESPONSES, supra note 133, at 26.

^{192.} Id.

^{193.} RAJASEKHAR, supra note 78, at 7.

^{194.} See The Free Library, supra note 111.

may prefer that the transaction is delayed. Similarly, there is concern about "contract races." Essentially, if there are multiple buyers or sellers pursuing the same property, they will be able to monitor their rival's progress in the conveyance. The problem with contract races may be mitigated to some extent by solicitor disclosure requirements. Thus, and even though the chain matrix will result in transparency, "whether . . . it will also improve conveyancing standards . . . is difficult to say." 198

Critics have also questioned whether electronic conveyancing will be more efficient than the traditional system. Although the current paper-based system is cumbersome, "many of the delays we experience will not be eradicated by the application of advanced technology. Sellers and buyers all have their own agendas and a standardised procedure cannot even hope to accommodate each individual's whim." After all, contracts will still need drafting, and indemnity insurance policies will still need to be negotiated. Some of the largest delays in a conveyance, such as obtaining a mortgage, will not be reduced. Similarly, though electronic documentation seeks to remove paper, initial uncertainties about the system will likely result in conveyancers printing paper copies to keep a record for themselves, in part because of liability fears. Moreover, a transaction "is always only as fast as the slowest party." ²⁰³

There is also a concern that, while England's e-conveyancing model might work as planned for residential or small business transactions, it could fail when faced with complex commercial dealings. After all, "electronic systems are notoriously bad at handling anything out of the ordinary. The great majority of conveyancing transactions are more or less standard; but occasionally there will be complex property transfers, particularly in the commercial sector, where contracts can easily run to 100 pages." It therefore seems that sales "characterised by uniformity of process and fees charged on a per unit basis . . . [are] the basis of the Land

^{195.} Id.

^{196.} BUTT, supra note 8, at 61-62.

¹⁹⁷ See generally Chain Matrix, Conveyancer's Deskaid, http://www.cofrestrfatir.gov.uk/assets/library/documents/cm_conveyancerguide.pdf (last visited Mar. 6, 2010); see also E-Conveyancing-Solicitors.co.uk, Jargon Buster, http://www.e-conveyancing-solicitors.net/alljargons.php#Contract Race (last visited Apr. 26, 2010).

^{198.} Cripps Harries Hall LLP, *E-Conveyancing-Hit or Miss?*, http://www.crippslaw.com/index.php?option=com_content&view=article&id=386:e-conveyancing-hit-or-miss&catid=149:conveyancing-publications-archive&Itemid=477 (last visited Apr. 26, 2010).

^{199.} Id.

^{200.} BUTT, supra note 8, at 50.

^{201.} Id. at 52.

^{202.} Id. at 58.

^{203.} The Free Library, supra note 111.

^{204.} E-Conveyancing the Next Generation, CAIN ASSOCIATES, http://www.cain-associates.co.uk/news_story.php?id=44&a=a (last visited Apr. 26, 2010).

Registry e-conveyancing model," and more complex deals are perhaps outside its scope. Although e-conveyancing applications face many challenges, the potential benefits of applying new conveyance methods to an outdated and unfit process cannot be ignored.

PART THREE: U.S. E-CONVEYANCING APPLICATIONS

A. Overview & Barriers

Although "the current US system of transferring interests in real property is rooted in the English feudal system . . . ,"²⁰⁷ significant (if not prohibitive) barriers exist to comprehensive domestic e-conveyance applications. Some of these complications include the lack of a national land market in the United States, ²⁰⁸ the jurisdictional nature of U.S. conveyances, and the government's role in the process.

U.S. land records are often locally controlled and maintained, and property and contract laws are state dependent.²⁰⁹ Further, because of unique common law interpretations, "[t]hough one might see certain similarities in state interpretations, the law of conveyancing remains particularly state-dependent."²¹⁰ This acts as a barrier to comprehensive, uniform e-conveyance applications. After all, a comprehensive e-conveyance system would have difficulty gaining support if it simply discarded decades of state common law which was tailored to the specific preferences of individual states.²¹¹

Intrastate diversity also acts against a comprehensive e-conveyance system because, in addition to the fifty states, there are 320 unique recording jurisdictions. Further, Federal and Native American laws must also be considered. In the United States, "diversity is the word" when it comes to real estate transactions. Designing comprehensive e-conveyance applications that account for these many variables would require tremendous flexibility, and perhaps undermine efficiency. This is unlike the United Kingdom where "the lack of state-based complications there simplifies the prospect of introducing a national system "215"

Similarly, a lack of standardized land description and mapping

^{205.} Carolyn Owen, Is e-Conveyancing Coming Home?, 152 NEW L.J. 1900 (2002).

^{206.} ABBEY & RICHARDS, supra note 102, at 54.

^{207.} Ewan et al., supra note 64, at 1499.

^{208.} SPRANKLING ET AL., supra note 3, at 116.

^{209.} Id.; see also Gose, supra note 5, at 60 n.2.

^{210.} Gose, supra note 5, at 60 n.2.

^{211.} *Id*.

^{212.} Id. at 62 n.2.

^{213.} Id. at 60 n.2.

^{214.} Id.

^{215.} Kidman, supra note 56.

techniques presents another barrier to a uniform, comprehensive U.S. conveyance system (e.g., "we still use metes and bounds descriptions").²¹⁶ Further, the conveyance and sale process is still paper centric and may require physical signatures and transportation of paper documents, and most sale listings are local in scope.²¹⁷ Professional reluctance to change, discussed in detail below, is yet another significant impediment to implementation.

B. Impact of Technology

Despite these diverse and powerful barriers, recent technology has resulted in changes that seem to favor the development of increasingly standardized e-conveyancing applications. The availability of new forms of transportation and online real estate websites allowing access to property listings, for instance, have contributed to an increase in the purchase of out-of-state vacation homes.²¹⁸ This, in turn, undermines the jurisdictional nature of the current U.S. system.

Further, private online websites like "Zillow.com," launched in February 2006, ²¹⁹ have reshaped information gathering techniques. This is significant because it represents a national electronic real estate resource that "attempts to consolidate all residential real estate information and is designed to be used by all members of the industry [such as brokers and appraisers], including the consumer."

Zillow lists home sale prices, provides comparable home sales data, incorporates satellite imagery, estimates monthly payments, provides relevant school districts based on the home location, lists the number of days the home has been listed on Zillow.com, provides property taxes from prior years, the date and price of the last home sale, and contact information. In fact, Zillow has mortgage information, an "advice" link, and local information tabs to learn about the surrounding area. Another service provided by Zillow is its property value "Zestimates," which are "estimates of the market value of the residence." Although the reliability of the Zestimates has been heavily criticized, the popularity of these features evidence general U.S. support of electronic real estate applications. In fact, Zillow.com receives approximately four million

^{216.} SPRANKLING ET AL., supra note 3, at 116.

^{217.} Id. at 116.

^{218.} Id.

^{219.} Gose, supra note 5, at 61.

^{220.} Id.

^{221.} Zillow.com, http://www.zillow.com (last visited Apr. 26, 2010).

^{222.} Id.

^{223.} Gose, supra note 5, at 62.

^{224.} See id.

visitors every month.²²⁵ Even though the U.S. has numerous barriers, "[t]he electronic tide simply cannot be held back."

C. Legal Support

Legislation has been enacted that is both in support of electronic commerce and essential for increased e-conveyance processes. The Electronic Signature in Global and National Commerce Act, for instance, was adopted on June 30, 2000.²²⁷ This Act addresses the problem of state diversity and "transforms the traditional State Contract Law requiring 'written' signatures binding parties to certain contracts, to a new federal [electronic signature] mandate."

The Electronic Signatures Act ("ESA") was seemingly long overdue, as there was already a strong international movement towards similar legislation. The United Nations Commission on International Trade Law adopted the Model Law on Electronic Commerce in 1996, and in the same year the American Bar Association-Digital Signature Guidelines were drafted. Germany passed the Digital Signature law in 1997, Singapore adopted the Electronic Transactions Act in 1998, and the Directive of the European Parliament and of the Council on a Community Framework for electronic signatures was adopted in 1999, among other directives. Finally, "[u]nder the Electronic Signature Act, the USA joins the rest of the world in moving contract creation, modification and storage into a non-paper environment." Similarly, changes to the Federal Rules of Civil Procedure and Federal Rule of Evidence also support a paperless, electronic world.

In addition to the ESA, the National Conference of Commissioners on Uniform State Laws ("NCCUSL") proposed the Uniform Electronic Transactions Act ("UETA").²³³ UETA, in part, lays the foundation for electronic property recording.²³⁴ Under UETA, a scanned document is the legal equivalent of a paper document, electronic records have the legal effect of paper records, and scanned documents may satisfy originality requirements.²³⁵ At the start of 2008, "forty-six states, the District of Columbia and the U.S. Virgin Islands had enacted UETA. Only Georgia,

^{225.} Id. at 61.

^{226.} Id. at 62.

^{227.} Martha A. Broderick et al., *Electronic Signatures: They're Legal, Now What?*, 11 INTERNET RES. 423, 423 (2001).

^{228.} Id.

^{229.} *Id.* at 424-25.

^{230.} Id. at 425.

^{231.} Id. at 423.

^{232.} See Ewan et al., supra note 64, at 1495.

^{233.} Gose, *supra* note 5, at 63.

^{234.} Id.

^{235.} See Ewan et al., supra note 64, at 1490.

Illinois, New York, and Washington had not, but these states did have laws recognizing electronic signatures."²³⁶

Further, the majority of U.S. states now provide open and easily accessible public records.²³⁷ In the state of Washington, for instance, electronic availability of public records, such as sale prices, is required by statute.²³⁸ However, in a minority of states, access to public records is limited based on privacy concerns.²³⁹ Even these limits to otherwise available information have been met with criticism. Specifically, the lack of transparency has been said to decrease consumer awareness of the value of property and therefore result in "tax inequities, tax revenue leakage and administrative inefficiencies."²⁴⁰ In any event, the trend towards more electronic real estate applications is clear.

D. Gaining Momentum

Despite a large percentage of U.S. national recording still being paper-based, "electronic recording is gaining momentum because it is more accurate, reduces costs, and dramatically reduces turnaround on time-sensitive transactions.²⁴¹ Given these benefits and the digital age at hand, the question for most U.S. recorders is not if e-recording will occur, but when.²⁴² In fact, approximately sixty-five counties have already commenced e-recording.²⁴³

In addition to the increased use of e-recording applications, states are also moving toward expanded e-conveyance systems. In November of 2006, Pennsylvania conducted its first fully electronic real estate transaction, which was one of the first in the nation.²⁴⁴ As stated in a local newspaper:

[T]oday's buyer and sellers needed to sign their names only once. They used an electronic pen and signature pad similar to what's used at a supermarket checkout, after reviewing documents on a laptap computer. The transaction, conducted by HomeSale Settlement Services . . . [and] was notarized electronically, the first use of an e-notary in the state. Documents were encrypted -- meaning they were

^{236.} Gose, *supra* note 5, at 63.

^{237.} Id. at 60.

^{238.} Id.

^{239.} *Id*.

^{240.} Id.

^{241.} Id. at 64.

^{242.} See id.

^{243.} Ewan et al., supra note 64, at 1498.

^{244.} Tim Mekeel, *Home Sales: Forget the Paper*, LANCASTER NEW ERA (Pa.), Nov. 13, 2006, at A1, available at 2006 WLNR 19776240.

given a kind of coding that hides the content from all but authorized users, to keep them secure -- then transmitted to the courthouse. At the courthouse, the documents were authenticated by an employee, then electronically stamped and recorded in a matter of minutes. Next the recorded documents were transmitted back to the settlement table, where they were copied onto compact discs and memory sticks -- information-storage devices about the size of a thumb -- that were given to the buyer and sellers. . . . The Pennsylvania Department of State, the National Notary Association and the Lancaster County Office of recorder of Deeds, all of which support the e-notary technology, had officials on hand.²⁴⁵

Although this transaction involved no mortgage and was simply a cash deal,²⁴⁶ it still remains a significant step in the evolution of conveyancing in the United States.

Also evidenced in the Pennsylvania transaction was the support of certain interested stakeholders, such as HomeSale Settlement, which is the nation's tenth largest title agency and handles over five thousand transactions per year. HomeSale supports the efforts in Pennsylvania and elsewhere to switch to e-conveyancing because it reduces the time period for documents to be delivered to the Recorder of Deeds. This, in turn, reduces HomeSale's exposure time for which they may be liable and reduces the risks associated with their business. The significance of such user support cannot be understated. As the failed English chain matrix prototype demonstrated, without general user and practitioner support, the inevitable transition to greater e-conveyance applications will be delayed and sporadic.

Other U.S. organizations have also shown a willingness to be "early movers" when it comes to electronic systems. ²⁵⁰ Specifically, with regard to electronic signatures, some of these organizations include DLJdirect, "which uses digital certificates to verify customer identities," IBM Global Financing, "which is using technology by eOriginal to facilitate Web-based commercial lease transactions," Salt Lake City, Utah courts, "which have accepted digitally signed documents since March 2000 through a system from iLumin Inc.," and the Securities and Exchange Commission, "which is using PureEdge software to accept 10K and other regulatory filings via the

^{245.} Id.

^{246.} Id.

^{247.} Id.

^{248.} Id.

^{249.} Id.

^{250.} Broderick et al., supra note 227, at 423-34.

web."²⁵¹ These entities likely recognize the benefits of early familiarity with new technologies, as well as the general market perception of expertise that comes with utilizing the newest tools.

Although e-signatures are not the common practice among conveyances, "the next wave of technological reliability and confidence in electronic data . . . will see a leap toward the promised 'paperless society' as e-signatures and e-records usurp the role of ink and paper." Even though it is unclear precisely what form e-conveyancing applications will take in the United States, or whether England's system will act as its ultimate model (adapted accordingly), there can be no doubt that the use of electronic conveyancing applications will increase.

PART FOUR: READY OR NOT

A. Embrace the Transition

Practitioners should carefully monitor the progression towards increased U.S. e-conveyance applications in order to properly advise clients and to best prepare for the changes that lie ahead. After all, changes in technology can greatly influence both substantive law, such as the passing of the ESA and the adoption of UETA, as well as the daily work of impacted stakeholders. As noted in the Financial Adviser, "It will be interesting to see how e-conveyancing develops in the future. If embraced by the industry and implemented in the right way, it has the potential to revolutionise the home-buying process."

As discussed in Part Three, user acceptance is as important as scope and design are to the success of U.S. e-conveyance applications. For instance, the Land Registry's evaluation report of why its chain matrix, and arguably EFT service prototypes failed, specifically mentioned a reluctance of conveyancers, including attorneys, to use the prototype.²⁵⁴ At one point, the disdain in England for the use of new technologies became so severe that its application resulted in large numbers of retirement among English real estate lawyers.²⁵⁵ To reject U.S. e-conveyancing applications without due consideration fails to recognize changing client preferences and may result in a disservice. As author Neil Kinsella poignantly stated:

A salutary' example of a failure to face up to seismic change is the music industry, which is finally moving on from the traditional format of signing artists, making

^{251.} Id.

^{252.} Stephen Murphy & John Trott, *The E-Sign Act and the Paperless Society*, 66 J. PROP. MGMT. 4, 6 (2001), available at 2001 WLNR 12210220.

^{253.} Getting Ready to Go Digital, supra note 114.

^{254.} Cross, supra note 160, at 3.

^{255.} See BUTT, supra note 8, at 32.

records and selling them. Instead the industry is now looking to give music away for free, but with advertising built in to replace the lost revenue. . . . If the sexy, youth-orientated music industry was slow to react, how then will the stereotypical fuddy-duddies of the legal profession faremuch less their regulators?²⁵⁶

It is important to note that the value of services is not diminished by these changes. Even in England's comprehensive e-conveyance system, for instance, attorneys "still play a big part in the process making sure that everything is up to legal standards and that the parties involved get a fair and legal treatment as stipulated in the contracts that were mutually agreed upon."²⁵⁷

Further, technology that has been embraced by the legal profession has improved legal services, and e-conveyance applications have the potential to do the same. The use of digital scanning, digital document storage, and remote access are just a few examples.²⁵⁸ Technological developments have also produced new sources of client communications. such as email and videoconferencing, which allow firms to reduce travel costs and save time.²⁵⁹ Similarly, professionals can now access their computers from home via the firm's network, utilize advanced phone capabilities (for instance, having a client dial the office phone which is then automatically routed to an attorney's cell phone), conduct online research through services such as LexisNexis and Westlaw, and even blog or podcast to clients.²⁶⁰ By utilizing these new technologies, practitioners regularly work with local counsel and members of the legal community in different states or cities as needed.²⁶¹ This is especially true for national law firms, where legal professionals of one office have little physical contact with some of their most relied upon co-workers.²⁶²

B. Realize the Benefits

As conveyancing transitions to the digital age, firms that successfully implement change are more apt to thrive. After all, "[i]t is not the strongest

^{256.} Neil Kinsella, *Traditional Law Firms Need to Embrace Technology to Survive*, LAWYER, Feb. 11, 2008, at 6, *available at* http://www.thelawyer.com/traditional-law-firms-need-to-embrace-technology-to-survive/131153.article.

^{257.} Hunter Blyth, *E-Conveyancing*, Dec. 27, 2007, http://www.artipot.com/articles/82555/e-conveyancing.htm.

^{258.} George N. Saliba, Technology and Law Firms: Is Your Attorney Up to Speed?, N.J. Bus., Jan. 2008, at 2.

^{259.} Id.

^{260.} Id.

^{261.} Joe Kashi, Building a Virtual Law Firm Changes and Opportunities, LAW PRAC. TODAY, Jan. 2004, http://www.abanet.org/lpm/lpt/articles/ftr01042.html.

^{262.} Id.

of the species that survive, nor the most intelligent, but the one most responsive to change."²⁶³ As the Canadian Teranet Inc. advertises: "No solution should be static; it should evolve, expand and develop as you do. That's why we continue to set the standard for e-services by anticipating and promptly implementing change."²⁶⁴ As electronic transactions increase, ²⁶⁵ there are ways to ensure a smooth transition.

Ideally, jurisdictions that offer U.S. e-conveyance applications will take an incremental approach.²⁶⁶ This will permit users to try each step as it becomes available so that they may benefit from staggered implementation. As stated by English author Paul Butt, impacted stakeholders "need to take advantage of this and make use of each new procedure, each step forward, as soon as it is available. Otherwise, [if] . . . e-conveyancing does become compulsory, it will all be new to us."²⁶⁷ In the age of e-conveyancing, only the practitioners that invest the effort to master the electronic services will prosper.²⁶⁸ To these ends, procedures will need to be put in place to proactively mitigate potential hurdles, such as a technological glitch on the day of a closing.²⁶⁹

The Land Registry's "Planning Book 1" is a good reference for identifying a firm's current working environment.²⁷⁰ The planning book identifies five levels towards e-enablement for England's comprehensive e-conveyance system.²⁷¹ Level one, and unlikely an issue for many, is the use of unlinked computers.²⁷² For individual practitioners, level two may be more burdensome.²⁷³ Specifically, level two requires an active network linking a firm's computers to one another, ²⁷⁴ and is more troublesome where there are "different machines of different ages running different operating systems"²⁷⁵ Level three requires a firm's business structure

^{263.} Martindale-Hubbell, *Managing Change in a Law Firm*, http://www.martindale-hubbell.ca/managing-change-law-firm (last visited Apr. 26, 2010) [hereinafter Managing Change].

^{264.} Teranet Solutions, supra note 10.

^{265.} Blyth, supra note 257.

^{266.} See generally E-Conveyancing the Next Generation, supra note 204 (for the proposition that "the apparently glacial progress of the [English] e-conveyancing programme is undoubtedly the best way to approach the issue").

^{267.} See BUTT, supra note 8, at 36.

^{268.} Press Release, Easy Convey Ltd., New Version of Easy Convey's e-Conveyancing Software Set to Tempt Legal Experts into the Electronic Age 1 (Dec. 6, 2005) (On file with Easy Convey Ltd.), available at http://www.easyconvey.com/PR/061205CASAversion5.pdf.

^{269.} BUTT, supra note 8, at 37.

^{270.} PLANNING BOOK, supra note 173.

^{271.} Id.

^{272.} See id.

^{273.} See BUTT, supra note 8, at 34.

^{274.} PLANNING BOOK, supra note 173.

^{275.} LAND REGISTRY, LANDNET, E-CONVEYANCING: A GUIDE TO PREPARATION 3, available at http://www.landreg.gov.uk/assets/library/documents/landnet14_insert.pdf (last visited Mar. 6, 2010) [hereinafter A GUIDE TO PREPARATION].

to be revamped to take advantage of the network.²⁷⁶ Finally, level four, the baseline for the English e-conveyance system, requires connecting a firm's internal network to an outside network.²⁷⁷ The highest level of e-enablement as defined by the Land Registry is level five, which involves redesigning a firm to reflect its numerous networks.²⁷⁸ A survey of English practitioners found that 80% had achieved level four or higher.²⁷⁹ Analyzing feedback from practitioners helps assess whether e-conveyancing applications are being introduced at the right pace, ²⁸⁰ and provides a helpful benchmark for users and administrators.

Users of e-conveyance applications will also need to have some way to ensure the reliable performance of their internal systems, and be able to maintain a network and to amend electronic documents. Outside technical consultants, who may respond within twenty-four hours, might not be fast enough to prevent the failure of a pending transaction. To the extent practical, U.S. jurisdictions that allow for e-conveyancing should attempt to emulate the Land Registry's efforts of offering extensive online training modules to mitigate last minute crises. Even after the implementation of e-conveyancing applications, continued training is crucial. Internal auditing procedures and a system to archive a mixed collection of paper and electronic documents will also be needed.

Internal support is also necessary for the successful use of e-conveyance applications, including explaining to staff the what, the how, and the why for e-conveyancing.²⁸⁶ After all, "[o]nly by establishing a valid and meaningful motif for change, will genuine appetite for change be achieved and your audience engaged."²⁸⁷ In a typical law firm, the adaptation to a new technology "is 5 percent about the software and 95 percent about personnel."²⁸⁸ It is also important to emphasize how e-conveyancing will alter their daily work, including its impact on billable time.²⁸⁹ After all:

^{276.} PLANNING BOOK, supra note 173.

^{277.} Id.

^{278.} Id.

^{279.} A GUIDE TO PREPARATION, supra note 275, at 2.

^{280.} Id.

^{281.} See Planning Book, supra note 173.

^{282.} BUTT, supra note 8, at 34.

^{283.} PLANNING BOOK, supra note 173; see also generally Land Registry, Education & Training, http://www1.landregistry.gov.uk/education_and_training/ (last visited Mar. 6, 2010).

^{284.} PLANNING BOOK, supra note 173.

^{285.} Id.

^{286.} Managing Change, supra note 263.

^{287.} Id

^{288.} David Gialanella, *New Tech, Old Problem, A.B.A. J., Aug. 2008, at 35, available at http://www.abajournal.com/magazine/article/new_tech_old_problem.*

^{289.} See Managing Change, supra note 263.

[L]aw firm changes have been identified as a potential cause of crisis for attorneys. Attorneys can be argumentative and skeptical, and are too busy to change for the sake of change. Converting them to your cause and winning them over is half the battle. The other half requires a good deal of common sense and a bit of hard yakka.²⁹⁰

The embrace of U.S. e-conveyance applications will go a long way towards their successful implementation, and the problems that plague many of the Land Registry's prototypes can be proactively mitigated. Only by embracing the pending transition can the efficiencies of e-conveyancing be more quickly realized.

CONCLUSION

The most sacred form of ownership is undergoing unprecedented changes during the digital age transition. Similar to nations throughout the world, new technology and electronic preferences in the United States, as well as new legislation, will inevitably result in increased use of econveyance applications. Whether or not the applications will take the uniform and comprehensive form of the English system, or be jurisdictionally dependent, e-conveyancing capabilities will develop as an alternative to the slower, less efficient, paper-centric undertaking of today.

Individual law firms and real estate practitioners should prepare for e-conveyance applications, as it will directly affect their practice. Proactively investing and training for these applications will ease the transition and reassure clients of transactional reliability. Truly, "law firms are finally at a point where their investments in technology are making a difference across the board to productivity, client service, and profitability."²⁹¹

In the end, however, "[t]his transition from paper to electronic documents will occur for the same reasons that papyrus rolls replaced clay tablets several thousand years ago: as familiarity and acceptance builds and the technology improves, the advantages of the newly available medium will far outweigh the costs and disadvantages." With increased globalization and interconnectivity, the limits of e-conveyancing are uncertain. Although the last few decades have spawned unprecedented advances in e-conveyancing applications, perhaps the next systemic shift may be a move from local or national uses to standardized global

^{290.} Id.

^{291.} BARBARA DUNN & DOUGLAS ZUCKER, ISSUES & TRENDS IN LAW FIRM MANAGEMENT, TECHNOLOGY, AND WORKPLACE 4 (2005), available at www.hildebrandt.com/PublicDocs/ Doc_ID_2285_5312005955562.pdf.

^{292.} Stonefield, supra note 1, at 204.

applications.²⁹³ With the fast pace of technological development, this next step may not be that distant and is just another incentive to become familiar with e-conveyance applications as they become available. After all, e-conveyancing is here to stay.