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Using Precedent Thinking to Develop Pathways to Innovative Solutions

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I. Introduction

Though it has been long known that the American health system is burdened by significant and wasteful administrative costs, the last decade has featured new research that both quantifies those burdens and has put them into perspective.[2] One study, for example, found that a primary care physician spends $20.49 to receive payment for a service that generates approximately $100 in revenue.[3] Other scholars have identified administrative costs as the largest source of waste in U.S. healthcare systemError! Bookmark not defined. and estimate a potential to save at least $265.6 billion each year. Comparative studies have demonstrated that administrative costs in the United States far exceed those in other Organization for Economic Cooperation and Development ("OECD") nations.[4]

One source of high administrative costs in the United States is its mixed financing model of public and private payers, with each payer establishing its own network of contracts with healthcare providers for the delivery of clinical care. Recent data highlight the enormous complexity of this market, counting some 317,987 different health plans.[5] This complexity is a major driver of administrative costs, as each health plan can impose its own set of contracts, covered benefits, documentation standards, data structures, payment processes, and payment rules.[6]

For this reason, many policy researchers suggest that adopting a single-payer system is the solution to high administrative costs.[7] However, some nations with multi-payer financing systems, such as the Netherlands, exhibit transaction costs that are as low as one tenth of those in the United States.[8] Moreover, recent analysis suggests that certain reforms to the current multi-payer market can dramatically reduce administrative costs without wholesale reform.[9]

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[2] Himmelstein DU, Jun M, Busse R, Chevreul K, Geissler A, Jeurissen P, et al. A Comparison Of Hospital Administrative Costs In Eight Nations: US Costs Exceed All Others By Far. Health Affairs 2014;33(9):1586-1594.; Shrank WH, Rogstad TL, Parekh N. Waste in the US Health Care System: Estimated Costs and Potential for Savings. JAMA 2019;322(15):1501-1509; Cutler D. Reducing Administrative Costs in U.S. Health Care. the Hamilton Project 2020.

[3] Tseng P, Kaplan RS, Richman BD, Shah MA, Schulman KA. Administrative Costs Associated With Physician Billing and Insurance-Related Activities at an Academic Health Care System. JAMA: the journal of the American Medical Association 2018;319(7):691-697.

[4] Papanicolas I, Woskie LR, Jha AK. Health Care Spending in the United States and Other High-Income Countries. JAMA: the journal of the American Medical Association 2018;319(10):1024-1039.

[5] Wang Y, Xu J, Meiselbach M, Wang Y, Anderson G, Bai G. Insurer Price Transparency Rule: What Has Been Disclosed? Health Affairs Forefront 2023.

[6] Schulman KA, Nielsen PK Jr, Patel K. AI Alone Will Not Reduce the Administrative Burden of Health Care. JAMA. 2023 Dec 12;330(22):2159-2160.

[7] Woolhandler S, Himmelstein DU. Single-Payer Reform—"Medicare for All". JAMA. 2019;321(24):2399-2400.

[8] Richman BD, Kaplan RS, Kohli J, Purcell D, Shah M, Bonfrer I, et al. Billing And Insurance–Related Administrative Costs: A Cross-National Analysis. Health affairs (Millwood, Va.) 2022;41(8):1098-25.

[9] Scheinker D, Richman BD, Milstein A, Schulman KA. Reducing administrative costs in US health care: Assessing single payer and its alternatives. Health services research 2021;56(4):615-625.

Other efforts to reduce administrative costs in the U.S. health sector similarly reflect a tendency to propose centralized, top-down solutions. The Health Insurance Portability and Accountability Act ("HIPAA") of 1996 mandated the adoption of standards for electronic health transactions such as claims and payment,[10] and the Affordable Care Act ("ACA") of 2010 implemented new regulations designed to streamline healthcare administrative transactions with standards.[11] Yet these efforts have done little to address the underlying complexity of the system driving administrative costs.

We set out a different approach to this challenge, one that is inspired by the business literature on innovation processes. That literature recognizes that innovation begins with a unique framing of a business challenge in a market or by a firm. Once the challenge is fully developed (the problem statement), Precedent Thinking is a systematic exploration of existing solutions to the challenge, examining how business and organizations in different markets and sectors have addressed the business challenge.[12] Once the precedents are identified, the innovation process can adapt or combine insights from these precedents to the business challenge at hand.

This paper starts with a clear framing of a business challenge, how to standardize the complex transaction processes in U.S. healthcare system to substantially reduce billing- and insurance-related costs. We then develop three specific precedents from financial and technical industries in which administrative complexity was meaningfully reduced through the standardization of transaction processes. Further, we wanted to explore precedents in the public sector, the private sector, and public-private partnerships, suggesting that standardization can be successfully achieved across different market environments.

We examine standardization of mortgage contracts in the 1970s, over-the-counter ("OTC") financial derivatives in the 1980s, and industry-wide technical standards for mobile phones in the 1990s. These three precedents reveal how standardizing transactions can generate enormous market-wide efficiencies and illustrate the benefits of the Precedent Thinking approach to innovation. These lessons have significant implications for the health sector, offering pathways to novel solutions to what has been the otherwise unsolvable problem of billing- and insurance-related costs.

II. Public Model: The Federal Government Mandated Standard Mortgage Contracts

A. Mortgages Before Standardization

The Great Depression caused severe strains on market liquidity that dramatically constrained the ability of the middle class to obtain home loans. In response, in 1938, Congress created a new federal government agency called the Federal National Mortgage Association, also known as Fannie Mae. It acted as a secondary mortgage market facility by purchasing and selling FHA-insured loans, thereby stabilizing the market and providing access to home loans.[13] From the mid-1940s to mid-1960s, the strategy worked beyond expectation. One key feature was that mortgage markets were able to draw upon bank deposits. The Federal Deposit Insurance Corporation and the Federal Savings and Loan Insurance Corporation set caps on interest rates for depositors, thereby ensuring that savings accounts were an inexpensive source of funds for mortgages.

In 1966, however, the 3-month treasury yield rose above 4% and caused deposits to shift from private bank savings to treasury bonds. At around the same time, the advent of new savings vehicles, such as pension funds and mutual funds, drew additional capital from

[10] Health Insurance Portability and Accountability Act of 1996. U.S. Department of Health and Human Services 1996.

[11] CMS. HHS Adopts Operating Rules For Electronic Funds Transfers/Remittance Advice. 2012; Available at: https://www.cms.gov/newsroom/fact-sheets/hhs-adopts-operating-rules-electronic-funds-transfersremittance-advice. Accessed October 19, 2023.

[12] Iyengar S. Think Bigger: How to Innovate. New York Chichester, West Sussex: Columbia University Press; 2023.

[13] Federal Home Finance Agency. A Brief History Of The Housing Government-Sponsored Enterprise. Office of Inspector General 2011.

traditional bank accounts.[14] These developments decreased the funds available for mortgages, and consequently, the market lacked sufficient capital to finance mortgages just as baby boomers began to seek homeownership.[15]

B. Government-Mandated Standardization

In response to the mortgage crisis, the Housing and Urban Development ("HUD") Act of 1968 reorganized Fannie Mae into a publicly traded for-profit company that was chartered by Congress. This removed Fannie Mae from the federal budget while giving HUD regulatory authority over Fannie Mae. Congress further expanded the secondary mortgage market with the Emergency Home Finance Act of 1970, which created Freddie Mac to help savings banks and loans associations manage interest rate risk. The Act authorized Fannie Mae and Freddie Mac to buy and sell mortgages not insured or guaranteed by the federal government.

Despite this legislation, it was difficult to set up this new secondary market. One recurring challenge was the lack of standardization: different states had their own laws around mortgage requirements, and trade associations had their own standard mortgage forms. Large lenders had to create their own unique forms for each state where they conducted business. Industry experts, including a member of the Board of Governors of the Federal Reserve System, agreed that standardizing home mortgage documents would facilitate the transfer of state loans to a national secondary market without imposing new administrative costs per contract. Without standardization, any new mortgages and securities available might have remained just as costly and inaccessible as before, thus perpetuating the capital shortage.[16]

As government-sponsored enterprises that were also major buyers of mortgages, Fannie Mae and Freddie Mac became key partners for standardization across the market. In 1971, the two held the first public meeting to begin their efforts to standardize. This proved to be an iterative process with public meetings and community comment periods. In the end, Fannie Mae and Freddie Mac could not agree on prepayment privileges and due-on-sale provisions across the two agencies, so they each created their own version of standardized mortgage forms.[17] Both versions of mortgage forms were divided into 2 components: those that every state accepted were called "uniform," and those that could not reach consensus were called non-uniform. Today, the two organizations originate almost $2 trillion in home mortgages annually,[18] and more than 90 percent of residential mortgage loans are documented on Fannie Mae or Freddie Mac uniform mortgage instruments.[19]

III. Private Model: Financial Firms Standardized OTC Derivative Agreements

A. The Advent of OTC Derivatives

A derivative is a security whose value is derived from changes in price of an underlying asset, such as stocks, currencies, and interest rates. Derivatives are commonly sold and cleared in a centralized market located in an exchange, but an over-the-counter ("OTC") derivative is a customized agreement that is not listed on an asset exchange. Trades for OTC derivatives are conducted by banks and other sophisticated financial entities, which typically engage in derivatives to manage their exposure to risk

[14] Green RK, Wachter SM. The American Mortgage in Historical and International Context. Journal of Economic Perspectives 2005;19(4):93-114.

[15] Wells M. A Short History of Long-Term Mortgages. Econ Focus 2023(First Quarter).

[16] Carrozzo PM. Marketing The American Mortgage: The Emergency Home Finance Act Of 1970, Standardization And The Secondary Market Revolution. Real Property, Probate, and Trust Journal 2005;39(4):765-805.

[17] Jensen RA. Mortgage Standardization: History Of Interaction Of Economics, Consumerism And Governmental Pressure. Real Property, Probate and Trust Journal 1972;7(3):397-434.

[18] Duncan D, Palim M, Brescia E, Embrey N, Drake N, Goyette R. Housing Faces Mortgage Rate Headwinds as Economic Growth Likely Tempers. Fannie Mae 2023; Freddie Mac. FORM 10-K. United States Securities And Exchange Commission 2022.

[19] Randolph P. The Future of American Real Estate Law: Uniform Foreclosure Laws and Uniform Land Security Interest Act. Nova Law Review 1996;20(3):1113.

from fluctuating interest rates, foreign exchanges, commodity prices, and credit markets. Because these institution-based OTC derivative clearinghouses are not subject to the same regulatory oversight as public exchanges, they create greater counterparty credit risk, which can be offset by negotiating collateral or "margin" requirements.[20]

As the volume of OTC derivatives started to rise dramatically in the 1980s and 1990s, the administrative burdens of negotiating individual agreements became increasingly costly.[21] First, the derivative complexity imposed additional costs in negotiating, reviewing, and executing custom agreements. Second, complexity reduced the value of derivatives as a financial product. In comparison to more tried-and-true products like bonds, customized OTC derivatives included convoluted provisions and clauses that decreased transparency and limited the transferability of these securities.[22]

To mitigate the complexity of OTC derivative negotiations, major dealers first standardized their own agreements. Although these contract templates simplified some dealings between each bank and its clients, they perpetuated complex terms and agreements among dealers, which continued trying to impose their respective models on each other. In this setup, clients had to dedicate significant resources to reviewing terms in depth whenever engaging with a new firm. This "battle of the forms" became frustrating and costly for all parties.[23]

B. Private Firms Standardize OTC Derivative Dealings

The lack of standardization and oversight, in combination with the fast-growing popularity of OTC derivatives, raised a risk of federal intervention in the market. Faced with this threat, security dealers focused on an expanded effort at self-regulation. The industry felt that self-regulation would lead to more responsive market governance. Self-regulation had already functioned in this way for decades in other industries, such as the cotton industry,[24] so there was a precedent for this model.

In 1984, eleven financial firms that participated in the swaps market decided to establish market-level standardization. They collaborated under the guidance of lawyers to draft standard contract forms for OTC derivatives. Because each firm had their own unique set of forms already, they used multiple rounds of feedback to reach consensus for finalizing decisions. In 1985, the working group evolved into the nonprofit corporation, the International Swaps and Derivatives Association (ISDA), and published a list of agreed-upon definitions and terms for contracts,[25] covering a wide range of topics including floating amounts and default and termination provisions. ISDA also published a Master Agreement ("MA") template in 1987, with updates in 1992 and 2002.[26] The MA is an agreement between a dealer and the counterparty that establishes all the relevant terms for handling multiple OTC derivatives transactions over a long period of time. It comprehensively outlines all areas open for negotiation, including events of default, termination events, and immunity issues. Since 92 percent of the OTC derivatives market was controlled by 4 major US banks, their participation in ISDA guaranteed that ISDA became the de facto trade organization for OTC derivatives and legitimized the ISDA MA as a market-wide standard template.[27] From 1986, the value of these instruments grew at an

[20] 1.3 Derivative categories. Derivative and hedging guide: PwC; 2020.

[21] Cornut St-Pierre P. Legal Documents as Means of Financial Abstraction: How Bankers' Lawyers Constructed Swaps and Changed Finance. European Journal of Sociology / Archives Européennes De Sociologie 2021 2 Sept;62(2).

[22] Sandling J. OTC Derivatives [Personal interview, 26 Jul]. 2023 (unpublished).

[23] Golden J. Setting Standards in the Evolution of Swap Documentation. International Financial Law Review 1994;13(18):18-19.

[24] Bernstein L. Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms, and Institutions. SSRN Electronic Journal 2001.

[25] Flanagan S. The Rise of a Trade Association: Group Interactions within the International Swaps and Derivatives Association. Harvard Negotiation Law Review 2001;6:237.

[26] Biggins J, Scott C. Public-Private Relations in a Transnational Private Regulatory Regime: ISDA, the State and OTC Derivatives Market Reform. European Business Organization Law Review 2012(13):309–346.

[27] Acker I. Strength In Transparency: Mitigating Systemic Risk Through Harmonization Of Reporting Requirements For OTC Derivatives. The George Washington International Law Review 2017;4(49):947-981.

estimated 40 percent each year to reach more than $6 trillion by the end of 1991.[28]

One major weakness of the ISDA MA, however, is that it failed to specify technical requirements to implement the agreements. ISDA began addressing this problem in 2018 with the release of its Common Domain Model,[29] a single, universal digital representation of derivatives trade events and actions designed to enhance consistency and facilitate interoperability. In addition, a digital version of the ISDA Master Agreement became available in 2021. The lag in technology to support business practices suggests that future standardization efforts, in finance or other industries, should explicitly anticipate the implementation pathway including detailed technical specifications to increase efficiency and decrease implementation costs.

IV. Public-Private Partnership Model: Standard Setting Organizations (SSOs) with Government Agencies Drove Industry-Wide Adoption of Computer Chips

A. Setting Industry-Wide Standards

Over 1 billion smartphones are sold globally each year.[30] However, the underlying technology to build these phones has become progressively more complex and demands more capabilities from hardware components designed and built by different manufacturers. The absolute scale of the market would be untenable without standardization across the industry. For example, modem chips must work in the same way across all phones and integrate with the other technologies on a phone in the exact same manner. In other words, this market must constantly innovate while at the same time maintaining standardization across the supply chain.

To enable such widespread coordination, Information and Telecommunication ("ICT") standardization efforts have transcended individual firm-level supplier relationships to apply standards across the entire industry through the work of standard-setting organizations ("SSOs").[31] SSOs are self-governed industry associations of competing firms that collectively select and adopt uniform technical standards to ensure compatibility and interoperability among products.[32] SSOs have evolved since the late 19th with a focus on reaching economies of scale by reducing heterogeneity where appropriate.[33] In 2021, there were 1,120 documented SSOs globally.[34]

To set a new standard, SSOs typically require members to disclose their intellectual property that may be related to the prospective standard. The SSO then establishes a process to determine the best solution to serve as the common standard across the market. The novel feature of this process is the pre-determined method for sharing intellectual property. When one firm's technology is selected, their relevant patents are deemed standard-essential patents ("SEPs"). Because owning an SEP license essentially guarantees the patent owner a steady revenue stream until the patented technology is replaced with a newer standard, inclusion into an SSO's standards is rather competitive.[35] In return, SSOs typically demand fair, reasonable, and non-discriminatory ("F/RAND") licensing of those SEPs to lower the risk that a patent owner will abuse the market power gained through inclusion in the standard. With this structure, telecommunications SSOs

[28] Remolona E. The Recent Growth of Financial Derivative Markets. Federal Reserve Bank of New York Quarterly Review 1992;Winter 1992 - 1993:28-43.

[29] O'Malia S. The Shift to a Digital Master Agreement. ISDA 2021.

[30] Kharpal A. Global smartphone market to hit decade low in 2023 but Apple could take top spot, research shows. CNBC 2023.

[31] Layne-Farrar A, Llobet G, Padilla J. Payments and Participation: The Incentives to Join Cooperative Standard Setting Efforts. Journal of Economics & Management Strategy 2014;23(1):24-49.

[32] Anton J, Yao DA. Standard-Setting Consortia, Antitrust, And High-Technology Industries. Antitrust Law Journal 1995;64(1):247-249.

[33] Weitzel T. Economics of Standards in Information Networks. 1st ed. Heidelberg: Springer-Verlag Berlin Heidelberg GmbH; 2004.; Institution of Civil Engineers. Establish technical specifications for business and industry to improve quality. 2023; Available at: https://www.ice.org.uk/what-is-civil-engineering/what-do-civil-engineers-do/british-standards-institution. Accessed Nov 2, 2023.

[34] Updegrove A. Standards Setting Organizations List. 2021; Available at: https://www.consortiuminfo.org/sso-list/. Accessed Oct 15, 2023.

[35] Wright J. SSOs, FRAND, and Antitrust: Lessons from the Economics of Incomplete Contracts. Center for the Protection of Intellectual Property Inaugural Academic Conference: The Commercial Function of Patents in Today's Innovation Economy 2013.

achieve scale while incentivizing individual innovators to compete in the creation of better technology.

B. SSOs Standardize Telecommunications Computer Chips

Two specific telecommunication SSOs are the Alliance for Telecommunications Industry Solutions ("ATIS") and Telecommunications Industry Association ("TIA"). Both ATIS and TIA are U.S.-based organizations accredited by the American National Standards Institute ("ANSI") that are committed to technical and operations standards for telecommunications technologies.[36] Organizations like ATIS and TIA are crucial for delivering next generations of telecommunication technology to consumers. For example, these SSOs were responsible for the industry-wide adoption of Qualcomm's code-division multiple access technology in 1995, which was less well known than competing technologies but supported a higher volume of call data. For each subsequent generation of cell phone technology, Qualcomm has continued to contribute key patents for transmitting telecommunications data. It is currently impossible to make a cell phone without one of Qualcomm's SEPs.[37]

SSO processes are continually revised and improved with government input, through membership of multiple agencies as well as commentary and enforcement actions from the DOJ and FTC. Government agencies that are TIA members include the U.S. Department of Homeland Security, the Department of Justice, and Department of Defense.[38] ATIS members include the Department of Justice's Operational Technology Division, Department of Defense, and the Department of Commerce via the National Institute of Standards and Technology ("NIST") and National Telecommunications and Information Administration.[39] The Interagency Committee on Standards Policy ("ICSP"), which reports to NIST, brings together these different federal agencies' standards offices for routine discussion of standards and related concerns. It also assists federal agencies in adopting new standards. Lastly, the ICSP participates in meetings with ANSI regarding the standards development community at large. In 2011, a letter from ATIS to NIST stated that the ICSP is "a working example of the existing effective public/private industry partnership."[40]

V. Discussion

Using the Precedent Thinking framework from the business literature, we were able to identify different industries that were burdened by high administrative costs or scaling challenges due to market-wide complexity. In the end, each industry addressed this challenge by standardizing transactions - orchestrated by the public sector, the private sector, and through public-private partnerships – offering valuable insights for the potential evolution of the U.S. healthcare system.

Each industry had highly customized transaction processes that were identified as inefficient. Standardization was implemented to improve efficiency and reduce costs, but the transition was never simple. Adjusting to new forms and practices incurs switching costs before improvements are realized.[41]

Before standardization, complexity that characterized each market was originally thought to be a core business strategy. For example, banks customized mortgages to attract consumers much like health insurers "customize" health plans today for employers, but that complexity drove up borrowing costs and decreased the availability of capital. In the end, banks were able to transition to a standard

[36] Alliance for Telecommunications Industry Solutions - About. 2014; Available at: https://www.linkedin.com/company/atis/. Accessed Oct 15, 2023; Telecommunications Industry Association. 2023; Available at: https://www.linkedin.com/company/tia-telecommunications-industry-association-/about/. Accessed Oct 16, 2023.

[37] Miller C. Chapter 36: The Fabless Revolution. Chip War: The Fight for the World's Most Critical Technology: Scribner; 2022.

[38] TIA. Our Members. 2020; Available at: https://tiaonline.org/membership/our-members-new/. Accessed Oct 16, 2023.

[39] ATIS. ATIS Members. 2017; Available at: https://www.atis.org/about/membership/members/. Accessed Oct 16, 2023.

[40] ATIS Response to NIST RFI. Response of the Alliance of Telecommunication Industry Solutions to Request for Information of the National Institute of Standards and Technology concerning the Effectiveness of Federal Agency Participation in Standardization and Conformity Assessment Activities. Docket No. 0909100442-0563-02 2011.

[41] van Wegberg M. Switching costs and the choice of a standard setting process. SIIT 2001:206-216.

mortgage contract and product. In the derivatives market, individual contracts added complexity, increased transaction costs, and reduced the value of these financial instruments for customers. Standardization initially focused on contract standardization and now is focused on the digital infrastructure to reduce transaction costs even further. One could easily imagine standard health plan designs and contracts allowing more direct price competition and driving down transaction costs in the healthcare market. Similarly, patents are a competitive advantage for individual technology companies, but the lack of standardization was a barrier to scale in the mobile phone market. Standardization in this market led to a unique system of rewarding and sharing innovation across the industry. Here, one could imagine health insurers competing to offer up their proprietary standards for core functions such as prior authorization or value-based payment processes for industry-wide adoption. Importantly, the cell phone market offers an example of how standardization drives technology innovation at scale.

Given the mixed public-private financing system in the United States, we were specifically interested in the role of the public sector in these precedents. Here, we provide a contrast between the role of the public sector in standardization of the mortgage market and standardization in the technology sector. In the mortgage market, standardization was necessary for what became syndication of mortgages. Since the public sector stood up Fannie Mae and Freddie Mac, standardization became an essential pathway to success for these programs, and the government served to drive standardization. In health care, the Centers for Medicare & Medicaid Services (CMS) has insight into the public and private market including oversight of private Medicare Advantage plans and private health plans through the Affordable Care Act exchanges. CMS could easily use this purview to drive standardization in the market, even if the Medicare program is only a secondary beneficiary of these changes. In fact, efforts to standardize prior authorization application programing interfaces (APIs) in Medicare Advantage is a step in this direction.[42] These precedents illustrate how a government agency, whether federal, state, or local, can lead a chaotic market towards a streamlined solution.

The mobile phone standardizing experience offers particularly useful lessons for the health sector. In setting technology standards, government agencies serve many different facilitation and oversight roles for the SSOs. Government can provide technical expertise, ensure transparency and fairness in the standard setting process, and provide enforcement if the market is not functioning correctly. Similarly, multiple different agencies could be involved in streamlining healthcare financing, including creating a healthcare SSO. Potential leaders include CMS or the Assistant Secretary for Planning and Evaluation ("ASPE") in HHS to manage healthcare entities, the Departments of Commerce or Labor to manage new technologies or employee risk pools, and the FTC and DOJ to ensure that this process complies with the antitrust laws.

VI. Conclusion

Administrative costs in the U.S. healthcare market have been identified as an enormous cost and a substantial area of financial waste. We have identified market-wide transactional complexity as a major driver of these costs, our core business challenge in the Precedent Thinking framework. Our review of these three markets suggests that there are multiple solutions to address what seems to be an otherwise intractable challenge in healthcare. Business precedents in complex markets outside of healthcare reveal how a standardization process reduced administrative and transaction costs. This finding validates our original identification of the business challenge driving high transaction costs in the US market. Interestingly, each of these precedents had different levels of participation from government in driving this process forward. The common thread in examining these precedents is that standardizing highly customized transaction

[42] https://www.cms.gov/priorities/key-initiatives/burden-reduction/implementation-guides-standards/application-programming-interfaces-apis-and-relevant-standards-and-implementation-guides-igs. Accessed February 8, 2024.

processes was possible, even when complexity was initially considered a core business strategy by firms in the market. Standardization unlocked tremendous value, achieving scale not previously imaginable. As one technology reporter once said, “without standardization there wouldn't be a modern economy.”[43]

Obviously, this set of precedents is not an exhaustive application of the Precedent Thinking approach. Further definition of the problem statement, and assessment of a broader library of precedents, could provide a broader menu of proven solutions. Using the Precedent Thinking framework, a careful combination of these precedents could unlock novel approaches to reducing administrative costs in the U.S. healthcare market.

[43] Surowiecki J. Turn of the Century. 2002; Available at: https://www.wired.com/2002/01/standards-2/. Accessed Oct 20, 2023.