

Reimagining the future of securities operations

The time for change is now

August 2018

Introduction

Operations leaders in the securities industry have an unprecedented opportunity to be transformation agents for their organizations, with rapidly advancing technology, constrained margins, challenging macroeconomic factors, and increasing service demands on operations driving this transformation. Progressive operations leaders already recognize the possibilities of the digital age and have mapped out an ambitious vision for the future state. Concrete action plans are helping their organizations successfully navigate uncertainty and transform operations into a more strategically focused, technologically modern, and operationally agile function that can:

- Deliver a seamless experience for clients and constituents
- Support business growth strategies
- Drive efficiency improvements to self-fund new business capabilities and drive margin expansion
- Operate effectively within the organization's risk appetite

These forward-thinking leaders understand the urgency and are making strategic shifts to effectively capitalize on digital capabilities that will be fundamental to surviving and thriving in the era of digital disruption.

Drivers for change

Current operating models in the securities industry require modernization to effectively keep up with evolving client demands, regulatory requirements, and business growth strategies. Since the financial crisis, operations functions have been significantly underfunded as spending was allocated to the regulatory agenda. To meet immediate business and compliance objectives, operations leaders executed tactical initiatives that have collectively contributed to the current inflexible operating environment.

Over the span of more than a decade, end-user applications (e.g., Excel macros) have proliferated, and processes have fragmented with the rise of nearshore and offshore operations. While this has reduced costs, operations teams are still spending significant time performing core client and transaction processing in a disconnected and manual manner (hands-on keyboard, manual data movement across systems, manual reconciliations, etc.), embedding errors, rework, and inconsistent service delivery throughout their processes. While the current operating environment is rife with opportunities, these opportunities have been available for years. The following factors are pushing organizations to the “future of operations” digital journey **now**, more than ever before.

- **Margins are under attack**—Conversion to decimalization, the reduction in market volatility, and focus on risk-weighted assets have resulted in a decline in trading spreads. Advisory businesses,

while growing rapidly, are under considerable fee-structure pressure resulting in profit-margin deterioration of nearly a third over the past decade.¹ Due to increased competition from low-cost providers, commoditization of advice by “robo advisors,” and new transparency standards and enhanced investor protection measures imposed by regulators, fees charged to clients are decreasing while the costs to serve and comply are rising. Despite the recent market correction in profitability, many believe return on equity will never reach pre-crisis levels.²

- **Exhaustion of traditional cost-reduction levers**—Traditional cost-cutting has been taken to its limit (process reengineering, lean workforce, layoffs, low-cost location-based strategies, etc.); organizations will no longer be able to pull these traditional levers to realize material cost benefits.
 - Location strategies no longer offer the cost arbitrage they once did. Business process outsourcing locations have undergone significant market correction; the cost of an offshore resource has increased three times over the past decade.
 - The operations workforce has been reduced substantially; the six largest US financial institutions decreased their combined workforce at the fastest rate in two years during the final quarter of 2017, with 8,000 jobs eliminated. Staffing levels are down significantly from their pre-financial-crisis peak.
 - Organizations have already reaped the incremental benefits of process-excellence initiatives (simplification efforts, span-of-control reviews) to reduce organizational waste and inefficiencies.
- **Evolving internal and external client demands**—The current technology-driven environment is giving rise to a new breed of internal and external clients who are tech savvy, well informed, and highly connected and who desire immediacy in activities and outcomes. These connected clients have more data and choices and are demanding services consistent

This is the first in a series of articles on how the securities operations function can leverage digital disruption to fundamentally transform to better address evolving client needs, changing organizational models, and increasing global regulatory compliance requirements.

This initial point of view highlights the drivers for change in the era of digital disruption and provides insights into tools, approaches, and techniques that progressive operations leaders are adopting.

with their daily retail interactions. They are demanding experiences that are centered on simplicity, self-service, and transparency throughout the journey, forcing institutions to transform their traditional portfolio of offerings and services and to modernize internal operational processes to meet current and future service expectations with speed and agility.

- **Looming talent shortage**—Historically low unemployment rates and a mass exodus of Baby Boomers due to retirement have created a highly competitive job market and a talent shortage for skilled labor.
- **Historically low unemployment rate**—In 2018, the US unemployment rate fell to 3.8 percent, an 18-year low. Over the next decade, an estimated 10,000 Baby Boomers are expected to retire each day, leading organizations to face a significant talent gap. Economists expect the low US unemployment rate to go even lower over the next year, reaching levels not seen in a half-century.³

Despite the recent market correction in profitability, many believe return on equity will never reach pre-crisis levels.²

- **Low-cost locations are at full capacity**—Traditional lower-cost brokerage hubs in the United States (e.g., Jacksonville, St. Louis, and Nashville) have effectively reached full employment. As of May 2018, Jacksonville’s unemployment rate dropped to 3.4 percent,⁴ the lowest unemployment rate in more than a decade. Nashville’s unemployment rate dropped to a historic low of 2.2 percent in April 2018,⁵ the lowest unemployment rate of any major metro area in the United States. Lastly, the unemployment rate in St. Louis fell to 3.5 percent in May 2018, one percent higher than the lowest rate ever recorded for the city.⁶
- **Subject-matter brain drain**—The financial services industry is struggling to attract the talent pool it once did, leaving operations with a growing shortage of skilled workers with operations subject-matter expertise and core institutional knowledge. Key processes and legacy infrastructure knowledge are being lost as Baby Boomers retire.

What the future looks like

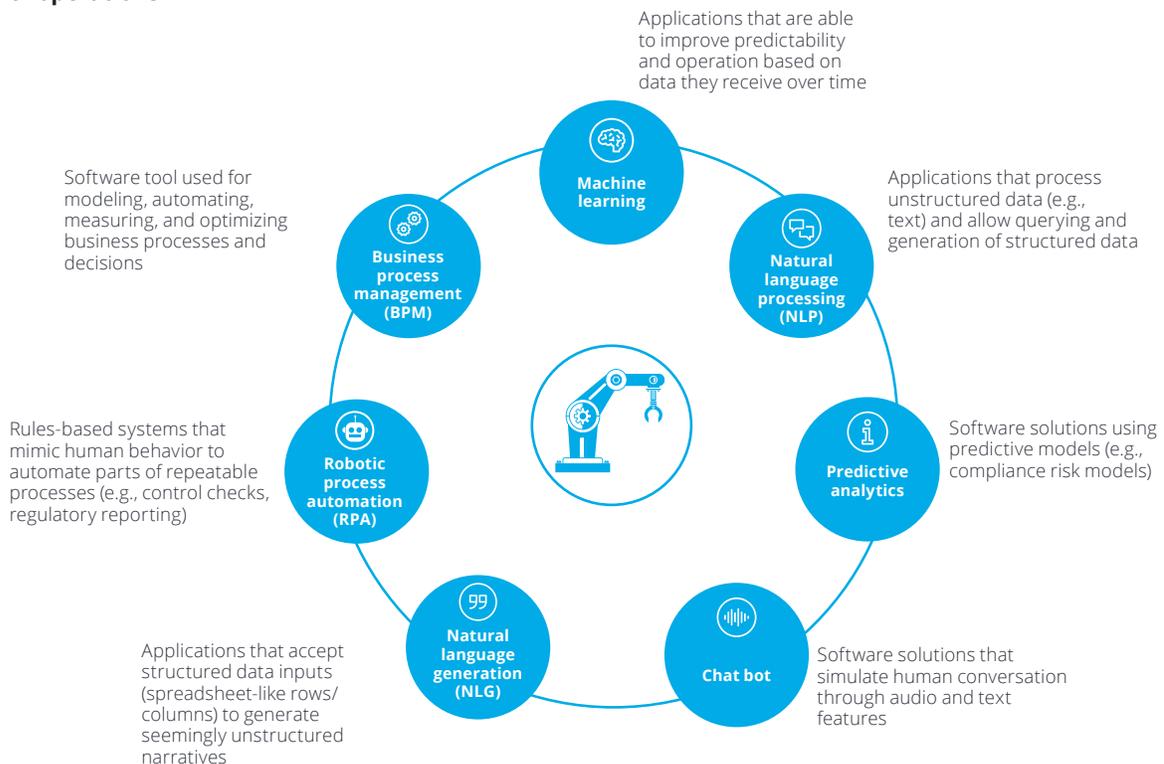
The future of operations will be drastically different from the current model. The current operating model leverages a specialist labor force with a discrete set of expertise in domain areas (e.g., corporate actions) and complex legacy systems and infrastructure. The future of operations will move away from departmental processing to managing an evolving ecosystem. In this ecosystem, a large number of core processing functions will be supported by external vendors and collaborative technologies, enabling operations to unlock value across multiple dimensions including cost, service, and risk. The operating environment will shift from legacy platforms and end-user computing tools to innovative technologies hosted on scalable and distributed platforms. Technologies such as cloud computing, business process management, robotics process automation, cognitive intelligence tools, and predictive analytics will enable operations to eliminate work, execute near real-time processing, and provide transparency consistent with

internal and external clients’ evolving expectations. Operations leaders who are able to more effectively manage in this new environment will benefit from greater agility, responsiveness, and resilience.⁷

The next-generation operations ecosystem will consist of the following:

- **Augmented workforce**—The operations workforce of the future will comprise human and digital labor working symbiotically to perform core processing. This new operating environment will be driven by new skill sets. Human labor will be more technology and data fluent and will include subject-matter experts, bot engineers, operators, and data scientists. In addition, human labor will move away from performing repeatable processes and will focus on continuous process improvement to drive efficiencies and focus on generating insights. In parallel, digital labor will comprise simple processing bots, virtual agents, and advanced algorithms to augment decision making, process large data sets, identify patterns, and predict outcomes.

The future of operations



- **Focus on client centricity**—Financial institutions are initiating human-centric client experience transformation to respond to evolved client expectations and to address competitive pressures. Many are launching multiple programs to improve the client journey and provide a positive client experience—launching digital client and front-office-associate experience journeys and enhancing front-office workstations, for example. To deliver service in the digital era, the scope of these efforts is expanding from front-office client journeys to end-to-end, front-middle-back-office operational processes.

- **Network of strategic and innovative vendors**—In the future, operations will pivot from costly, internally developed platforms to standardized best-in-class solutions provided by external vendors, market collaborators, and innovative technology providers. The external partnership model will allow operations to access standardized and best-in-class solutions for performance optimization, while transferring the burden of maintenance to the providers and mutualizing the cost of industry-wide competitive and regulatory changes across the provider user group.

- **Next-generation evolutionary architecture**—The technology landscape of the future will comprise a complex network of internally developed applications, vendor products, and ecosystem platforms. In this complex landscape, applications and supporting business capabilities will have to be orchestrated effectively using forward-looking architectural principles such as the application programming interface (API) imperative.⁸ The API imperative involves leveraging APIs, often as microservices, to deploy services and platforms both within and beyond the enterprise. An API-based architecture will enable business capabilities to evolve independently and rapidly, and with minimal dependency constraints, with upstream or downstream

software components. Combining a product focus with evolving business capabilities will enable operations to cocreate products in faster, iterative sprints with technology teams.

- **Best practices from other industries**—To enable this transformation, operations functions will look beyond financial services and take inspiration from the retail sector to redesign their core processes. For example, operations could aspire to emulate the Amazon experience in which both the client and front office have transparency into the order life cycle from point of sale to point of delivery and post-order processing is automated.

The digital future of operations is imminent

The vast majority of executives in the securities industry have recognized that change is imminent for the operations function. A poll conducted at the most recent Securities Industry and Financial Markets Association (SIFMA) Operations Conference indicated that the majority of operations leaders believe their work will be transformed by emerging technologies within three to five years. The progressive leaders in this space have developed a holistic vision for the future of operations and are adopting a modularized approach to execute on their vision. Many have started with proof of concepts for various tools and technology to gain familiarity, launching scaled transformation programs that encompass:

- Hiring of new skill sets (e.g., data scientists, bot engineers) and realigning existing “superstar” resources to a lean team to pilot transformation in a limited area
- Launching processes and data improvement initiatives to standardize the current operating environment to take advantage of new and traditional technologies

- Training their current operations workforce to be more data and technology savvy to create a workforce of the future
- Partnering with external providers or vendors to build out their knowledge base and establish an ecosystem network

These leaders have recognized that the critical success factor to any major transformational change is not technical abilities—it’s a mind-set change. These leaders have embraced the fact that they are uniquely positioned to be change agents for their organizations. This modernization journey will not be easy, but organizations that avoid the journey risk being displaced in the era of digital disruption. The digital future of operations is imminent, a theme we will continue to demystify through the *Reimagining the future of securities operations* series.

Endnotes

1. Hugo Greenhalgh and Laura Noonan, "Profit margins squeezed at global health managers," *Financial Times*, June 13, 2017, <https://www.ft.com/content/07339a4c-5032-11e7-bfb8-997009366969>.
2. Laura Noonan, "Investment banking: stronger franchises emerge 10 years after crisis," *Financial Times*, June 11, 2018, <https://www.ft.com/content/5ee4ba72-6356-11e8-90c2-9563a0613e56>.
3. Ben Leubsdorf, "Economists think U.S. unemployment is headed to a 50-year low," *Wall Street Journal*, July 12, 2018, <https://www.wsj.com/articles/economists-think-u-s-unemployment-is-headed-to-a-50-year-low-1531404000?emailToken=cf35ccc6916fe45eb98b027b5ebe96965im9ahKZPYVY8vY/fVNn/>.
4. "Jacksonville, Florida Unemployment" (web page), <https://www.deptofnumbers.com/unemployment/florida/jacksonville/>, accessed August 6, 2018.
5. Jamie McGee, "Time to ask for a raise: Nashville hits historically low unemployment rate," *Tennessean* (USA Today Network), last updated June 4, 2018, <https://www.tennessean.com/story/money/2018/05/31/nashville-hits-historic-unemployment-rate-leads-major-metro-areas/660641002/>.
6. Deptofnumbers.com, "St. Louis, Missouri Unemployment" (web page), <https://www.deptofnumbers.com/unemployment/missouri/st-louis/>, accessed August 6, 2018.
7. *Thriving in a world of business ecosystems*, Deloitte University Press, 2015, <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/strategy/us-cons-business-ecosystems-overview-booklet-041615.pdf>.
8. Larry Calabro, Chris Purpura, Vishveshwara Vasa, and Arun Perinkolam, "API imperative: From IT concern to business mandate," Tech Trends 2018, Deloitte Insights, December 5, 2017, <https://www2.deloitte.com/insights/us/en/focus/tech-trends/2018/api-program-strategy.html>.

Contacts

Mike Wade

Managing Director
Deloitte Risk and Financial Advisory
Deloitte & Touche LLP
miwade@deloitte.com
+1 804 301 0112

Sriram Gopalakrishnan

Managing Director
Deloitte Consulting LLP
sgopalakrishnan@deloitte.com
+1 646 228 0844

Contributors

Vibha Patil

Senior Manager
Deloitte Risk and Financial Advisory
Deloitte & Touche LLP

Narayanan Raman

Senior Manager
Deloitte Consulting LLP

David Rose

Senior Consultant
Deloitte Risk and Financial Advisory
Deloitte & Touche LLP



About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the "Deloitte" name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/about to learn more about our global network of member firms.

This publication contains general information only and Deloitte is not, by means of this publication, rendering business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional adviser. Deloitte shall not be responsible for any loss sustained by any person who relies on this publication.