KPMG

Transforming client onboarding

Strategic approaches to address business, regulatory, and technology imperatives

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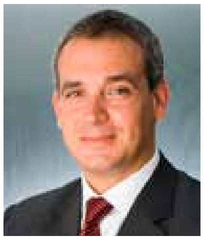
Letter to the reader

Getting better at the client onboarding process is an essential goal for financial institutions that expect to enhance their relationship with institutional and retail customers and grow the business. But that goal remains elusive for virtually every financial institution, primarily because advances in technologies have not been properly leveraged to address the core challenges in onboarding. Reliance solely on human capital no longer is an option in this "do-it-right-now'' world driven by instant access to digital information and communication.

In offering this paper to the marketplace, we present ideas to make the technology-based approach logical and strategic. The timing could not be more critical, with demands for transparency from regulators and the clamor from customers of all types for an easier, quicker way to start conducting business.

The foundation of our thesis is that transformation of onboarding should be rooted in an integrated approach that recognizes business, regulatory, and technological imperatives if market participants expect to reshape the client experience for the better. At the same time, using an automated approach creates an electronic audit trail, which can be effective for both internal audit purposes and for review by external regulators. It's something that no people and work-flow-based operation is likely able to do.

Our message addresses questions we regularly encounter in the C-suite and at the board level. We invite your feedback on our ideas and stand ready to provide in-depth details for those who ask.



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Client onboarding: get going and get it right

Client onboarding in financial services needs fixing. By definition, it is a process by which a market participant determines, through detailed examination of related risks, whether to do business with a counterparty. But the process in place is anachronistic in today's digital, do-it-now, lightning-quick world, bogged down by many technological and process issues.

"A large, Tier 1 bank can spend more than $100 million a year on client onboarding, when you take into account the information technology and operations considerations. Yet the process largely remains manual, error prone, time consuming, and risky in terms of compliance with global regulations and the client experience."

Bill Cline, *KPMG*
National Account Leader,
Capital Markets

Client onboarding is a largely manual, error-prone, time-consuming, expensive, incomplete, and ineffective process. It often aggravates consumers and financial firms alike, and regulators have found it to be a process rife with ineffective controls that allow breaches of Anti-Money Laundering (AML), Know Your Client (KYC), Foreign Account Tax Compliance Act (FATCA) regulations, as well as a host of other global laws and rules aimed at protecting consumers and lowering the risk profile of financial services institutions.

With multi-billion-dollar fines being imposed against institutions that have run afoul of the regulations, we believe market participants should aggressively pursue innovative, technology-based onboarding solutions built on modernized platforms. It must leverage big data to improve the onboading client experience, reduce cycle time, and embed stronger operational controls.

There is no quick fix, however. The transformation process will take time and plenty of patience, but it is a job that should begin now.

In our view, getting much better at client onboarding is nothing less than a transformational necessity. The stakes are too large. In general, being big is a huge advantage for financial services institutions. "Bigness'' offers the benefits of scale and the ability to leverage enormous assets. But, there is a significant downside, too.

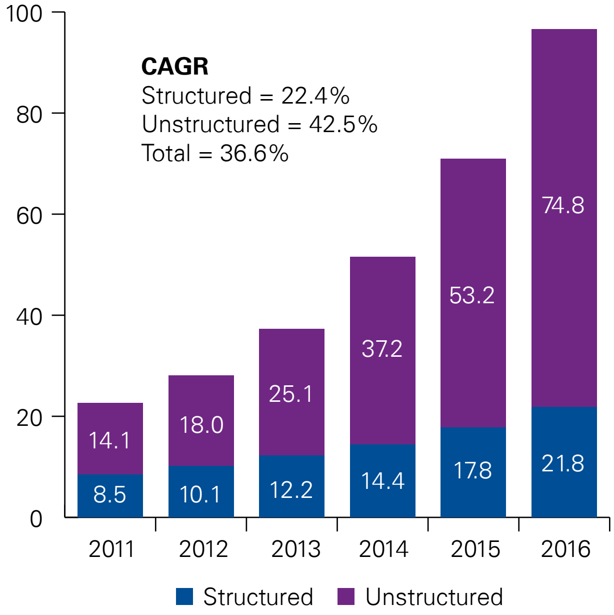
" Gartner defines big data as "high volume, high velocity, and/or high variety information assets that require new forms of processing to enable enhanced decision making, insight discovery and process optimization."

Many of the world's largest banks struggle with agility—a prerequisite for client onboarding excellence. Blame this onboarding clumsiness on organizational complexity, bureaucracy, and maybe even a cultural resistance to change. Regardless, it is fair to suggest that many of the largest institutions are having a tough time transcending legacy thinking to embrace and adapt to transformational onboarding technologies.

Explosive growth of data

The rapid rate of growth in data makes management and analysis of it one of the industry's most complex and demanding jobs. Profitable growth can hinge on quick and compliant onboarding of clients, for which reliable information is essential.

Precise information about the amount of structured and unstructured data in a financial institution is elusive, however. But, let's consider data storage capacity across industry lines, in order to gain context about the overall growth rate of data. We can assume that the rate shown in other industries mirrors that in financial services. The below chart shows the growth in government and business use of new storage capacity (in petabytes) for structured and unstructured data.



In petabytes

Source: IDC, 2014; used with permission

Rates for 2014, 2015, and 2016 are estimated

Much of the challenge today in onboarding centers around the extreme difficulty in identifying, collecting, and managing data on customers, whether it is structured or the much more ubiquitous unstructured variety of data.

Such advances in client onboarding technology will need to be taken up at financial institutions if for no other reason than the need to manage the steadily increasing workload produced by regulators' demands. There are no signs of a slowdown in that regard.

Improving the onboarding process, however, cannot be viewed solely from a regulatory perspective. A technology-based solution to onboarding can:

- Enhance and reshape the customer experience
- Reduce operational costs
- Address gaps in regulatory compliance processes
- Improve operational efficiency and controls
- Create a "policy engine'' that uses metadata to model policies for complying with regulations
- Foster consistency in policies and data quality across organizational and geographic silos
- Advance data quality and governance
- Positively influence both the bank's top and bottom lines.

We suggest a thorough transformation in thinking and in how organizations approach onboarding operations. At its core, this transformation relies on a recognition by an institution's leaders that technology has put the consumer in the position of control, and that clients will demand that market participants improve the onboarding process. If a bank dawdles, customers will simply go elsewhere with their business. Done well, client onboarding can produce significant business-improvement benefits, not the least of which is making clients happier—and happier clients tend to use more of a bank's products and services.

The imperatives

The business imperative

In examining onboarding as the keystone for long-lasting and profitable client relationships, we hold the view that market participants can take a strategic and integrated approach to address business, regulatory, and technological imperatives in order to transform onboarding. These imperatives form the foundation in any bid to create stronger onboarding capabilities, improve the client experience, enhance advisor productivity, and overcome internal processing constraints.

Since the start of the recovery from the financial crisis in 2008, the financial services industry continues to hear the same refrain: Maintain a relentless focus on customer satisfaction. To suggest that customer demands have changed in the past several years grossly understates the obvious.

Many industries have adopted much higher standards for customer service, thus greatly increasing customer expectations for all industries. The question remains whether the financial services industry has adequately addressed rising consumer expectations. Since consumers are demanding more connections and have little patience for businesses that do not meet those "all-day, every-day'' demands, traditional financial institutions have quite a way to go to create more effective connections with customers.

Only by using advanced and modern big data technologies can market participants truly transform the client experience in an operationally efficient manner and fulfill their enterprise-wide regulatory mandates.

Connecting with consumers as a means to tap into growth potential in financial services has taken on more importance with the expectation that competition surely will intensify in all markets around the globe. The competition will come from new entrants, unencumbered by legacy technology systems, and from established organizations that will ramp up efforts to retain existing customers and seek new customers.

Onboarding, therefore, will have a quantifiable impact on key variables, such as customer loyalty, profitability, referrals by existing customers to new customers, reputation, and brand equity. Done well, client onboarding can affect consumers' attitudes, behaviors, and results. It is interesting to note a recent report that found significant results along those three dimensions:

— 89 percent of consumers began doing business with a competitor following a poor experience.

— A customer is four times less likely to defect to a competitor if the service-related problem is handled effectively.

— "A 5% reduction in the customer defection rate can increase profits up to 95%."[1]

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[1] "Bain & Company Oracle Customer Service Impact Report/Oracle Buys LiveLOOK," June, 2014

> *There is a "stark disconnect between C-suite executives who realize the value of big data, but are unsure of how to effectively implement their existing resources.''*
>
> ***Mark Toon,***
> *CEO, KPMG Capital*
> *"Going Beyond the Data: Achieving Actionable Insights from Data and Analytics,'' 2014*

We believe that, as onboarding gains a higher profile, financial service institutions must approach the process holistically, employing technology in a much more aggressive manner. In 2013, when Aite Group surveyed 500 U.S. financial advisors, it discovered that more than a third still relied on "filling out paperwork by hand to be their primary method of opening accounts.''[2]

The business imperative requires that onboarding exceed expectations of customers, especially in terms of remaining relevant when it comes to delivering on the "right-now" basis.

For far too long, client onboarding has been viewed as a back-office function, tangential to fostering a positive client experience. Throwing people at the job cannot continue, especially as regulators ratchet up the pressure.

The greatest opportunity for sustainable revenue growth in the financial services industry does not come from just new products or geographical expansion, but rather from the industry's ability to deliver a high-quality and differentiating customer experience. Those that get it right will not only capture a greater share of new customers, they will also be better placed to keep their customers and extend their existing relationships.[3]

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[2] "Client Onboarding, Move to Channel of Choice and Reap Reward," Aite Group/Kofax Inc., April, 2013

[3] "Customer Experience Barometer," KPMG, May 26, 2014

The imperatives *(continued)*

The regulatory imperative

There isn’t too much that hasn’t already been said about the fines, reputation damage, and credibility risks that accompany noncompliance with the bevy of regulations around the world affecting client onboarding and relationship management imperatives.

The errors and omissions that are part of the current manually intensive onboarding processes heighten regulatory risks, whether relating to KYC, AML, FATCA, the European Market Infrastructure Regulation (EMIR), the Markets in Financial Instruments Directive (MiFID II), or any of the other regulations affecting the industry.

During the past five years, more than a dozen major banks doing business globally collectively have paid fines in excess of $15 billion after being cited for violations of KYC and AML laws. Penalties in 2009 reached about $800 million. As we near the end of 2014, the amount is closing in on $10 billion for the year. With figures of that magnitude, it is no wonder that banks and other financial institutions are now more interested in how they are onboarding clients than in how many they are onboarding.

In nearly all cases where fines were imposed, it involved U.S. and European regulators. Published reports in 2014 indicate, however, that regulators in India, Hong Kong, and Singapore—among other jurisdictions—either already have created or are preparing to institute similar KYC and AML regulations. The list of nations embracing FATCA also continues to grow.

With each major incident, the industry’s reputation—already poor among many consumers—takes another hit. Virtually every major media outlet in world has carried news of the multi-billion-dollar fines against individual banks. Further, some banks are passing on doing some business out of fear that their compliance processes and capabilities are inferior. A Hong Kong-based banker recently said, “With potential multibillion fines on the table for dealing with the wrong forms, it’s simply much easier not to do the business.’’[4]

From our perspective, institutions that attack the issue of regulatory risk at its core improve the chances of managing this demanding imperative. A technology-based solution is central to resolution of challenge, but attacking the core also means that the institution can simultaneously focus on governance, people, process, and the customer.

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[4] “Banks Struggle to Meet Know-Your-Customer Requirements,” Risk.net, June 17, 2014

> *"When we consider the regulatory imperative, we include a number of variables. Yes, technology is extremely important; especially when you understand that a Tier 1 bank spends as much as $100 million annually on client onboarding because of the manual nature of that process. But, the regulatory imperative also includes the bank's level of talent in terms of managing and analyzing its data, its operational maturity, and the processes it uses to establish the suitability of its clients.''*
>
> ***Prabhakar Jayade,***
> *KPMG, Principal, Advisory,*
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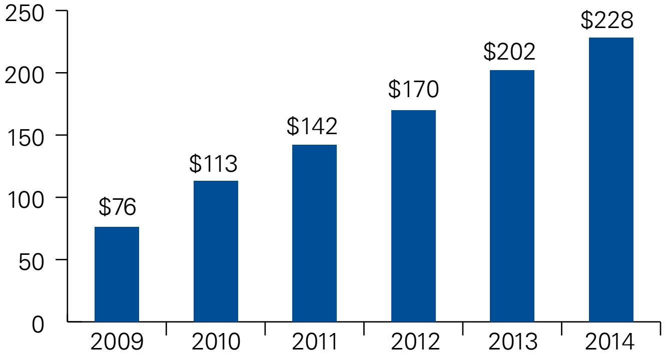
The imperatives *(continued)*

The technology imperative

It is only a slight exaggeration to suggest that client onboarding has been the neglected function in the financial services industry, at least in terms of spending on technology. If we were to look at the capital markets, the prime brokerage, and the securities businesses, the bulk of capital spending on technology has been directed to the front-office, rather than to the middle- or back-office functions where onboarding functions are performed.

Estimated Global Spending on Unstructured Data for Electronic Trading ($U.S. Millions)



Source: Aite Group, 2014; "Big Data in Capital Markets: At the Start of the Journey''. 2014 is an estimate.

What's a petabyte?
It is 1,000,000,000,000,000 (one quadtrillion; a.k.a., one million billion) bytes of digital information. There are names for even larger numbers:

- — An exabyte is 1,024 petabytes
- — A zettabyte is a 1,024 exabytes
- — There are yotobytes, brontobytes, and even geopbytes.

That needs to change if institutions intend on being able to ingest petabytes of structured and unstructured data into specialized databases that can distinguish between acceptable and unacceptable clients and properly assess the risk of transacting.

The technology imperative, therefore, should be viewed against the astounding growth in the amount of data collected by a financial institution. EMC Corporation and market research giant International Data Corporation (IDC) predict the "digital universe'' (the global volume of data) comprises about 5 trillion gigabytes of data, and that the size is doubling every two years.[5]

While the precise amount of data inside the financial services industry is incalculable, a Tier 1 bank typically is dealing with petabytes of data (equivalent to 1,000 terabytes of data). With data volume that large, a significant reduction in today's manual approach to onboarding is essential. The sheer volume of work required to meet regulators' demands regarding transparency and counterparty risk is so large that humans and work-flow tools cannot do all of the work.

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[5] "The Digital Universe of Opportunities: Rich Data and the Increasing Value of the Internet of Things," April 9, 2014

An advanced IT-based solution that automates policy execution can reduce the likelihood of errors and omissions in client onboarding, while also creating an “auditable’’ trail to satisfy regulators and provide the organization with context and clarity around the data.

A fundamental technology challenge in onboarding involves the identification, storage, and management of unstructured data—such as the tax forms, articles of incorporation, e-mails, customer call center records, and client due diligence documents. An essential capability in next-generation onboarding programs will be the ability to quickly (and with a minimal amount of error) capture and extract data from image scans of the identification and trading documents clients must submit to their financial institutions in order to comply with counterparty risk regulations. There also is very high competitive value, even beyond client onboarding, for a financial institution to bring unstructured data into mainstream computing. We estimate that as much as 65 percent of the data pouring into banks and other financial services organizations is unstructured.

Managing massive amounts of unstructured data will require the ability to understand unstructured content through natural language processing (NLP) and render it amenable to mainstream computing via semantic models. Semantic models by design retain the original context and meaning throughout the life-cycle of the content, laying the foundation for experiential learning, thus enabling a self-learning system.

Emerging “data utilities,’’ which are designed to create cleaner repositories of new client and entity data, have often been touted as an answer to the current onboarding conundrum. However, regulatory demands go well beyond capturing clean, new information about clients. A utility will not absolve a market participant from having to look across the enterprise for other data, bilateral communications with current clients and any contrary evidence that should be reviewed as part of the regulatory mandate. Innovative solutions providing a quantum leap in the front office have not translated to middle and back offices still relying primarily on existing (and less sophisticated) workflow tools and lower-cost labor.

These challenges beg the question: Can human operations and streamlined workflow processes and tools alone really meet the escalating client onboarding (and regulatory) challenges?

The imperatives *(continued)*

A next-generation approach to client onboarding

Going forward, in order to enhance onboarding capabilities, improve the client experience and advisor productivity, and overcome internal processing constraints, financial institutions will need a blending of a big data technology platform with highly automated business process operations.

That next-generation approach is designed to deliver significant cost savings, as well as faster, more complete, more accurate, more sustainable, and more defensible (from a regulatory perspective) onboarding processes than anything in place today.

Doing so will allow institutions to create competitive advantage and build customer loyalty in a crowded market place. A next-generation technology platform must be capable of ingesting petabytes of structured and unstructured data across the enterprise into an advanced "NoSQL" (a nonstructured query logic) database, and then intelligently extract reference data in context from the unstructured data. A NoSqL database differs from a traditional, structured query logic (SQL) database in that that SQL is used where there are sets of structured data—in columns and rows, for example.

A NoSQL database represents a major advance in that it manages all sorts of data, including unstructured data. A big data technology platform will enable an organization to intelligently extract reference data in context from the unstructured data, using a "content enrichment" capability that provides a score relating to the reliability of the client information. In that way, an organization can determine its level of confidence about the information it needs to assess counterparty risk.

A key element in a next-generation technology platform is an organization's ability to model all of its policies for complying with regulations, using metadata. A "policy engine" permits the institution to examine all of the data—structured and unstructured—against its policies using a computer instead of a person. When data is run through the policy model, it either passes or fails, creating not only an electronic audit trail of every policy executed and every data source checked but also a straight-through process that saves times and allows an evaluation of a confidence level.

Getting started

As with any significant change in an operation, a key enabler is the ability to modify an existing culture within an organization. In addition, it is essential that the organization adopt a strong governance structure that allows change to stick.

Creating and deploying a new technology platform that addresses the challenges and opportunities in onboarding will certainly test the limits of an organization's ability to change and adapt. Clear, concise communication—from the front office to middle office to the back office—about why and how each step of the traditional onboarding process needs to change is a must. Without it, the silos that have created parochialism inside businesses will not come down.

Leveraging a central, highly automated big data platform and associated managed services gives organizations a natural way to create consistency and operational excellence across business units and geographic silos.

Questions the C-suite are asking about client onboarding

- **CEO:** Do we have a consistent way to ensure business strategies are incorporated into our client monitoring and selection?
- **CFO:** Can we substantially reduce the cost of manual, paper-based processing required to validate and maintain regulatory compliance?
- **Audit Committee:** Are we satisfied that important processes are effective in ensuring efficient and compliant operations?
- **Risk Committee and Chief Risk Officer:** Are processes in place whereby issues affecting overall risk – including reputation risk – are getting the attention at the highest levels of the organization?
- **Chief Compliance Officer:** Are our compliance and risk management governance programs robust enough for this era of heightened regulatory scrutiny?
- **Chief Information Officer:** Are we positioned to leverage the vast technological advantage we have stored in our client and reference data?

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